Table 238: Listing of Subjects Liver Function Tests (ALT, AST) ≥3 × ULN at Any Post-Baseline Visits – Part I (Placebo-Controlled Period)

Listing of subjects liver function tests (ALT, AST) >=3x ULN at any post-baseline visits
-Part I (placebo-controlled period)
Treatment group: Placebo
Page 1 of 7

Subject Sex Weight	Study Day (a)	Collection Date	Visit	Total Bilirubin (umol/L) (b)	Alkaline Phosphatase (U/L) (c)	ALT (SGPT) (U/L) (c)	AST (SGOT) (U/L) (c)	Serum GGT (U/L) (c)
358* F 52.2 kg	-9	2014-06-09	SCREENING	8	42	9	16	10
	1	2014-06-18	BASELINE DAY 1	9	45	8	17	9
	29	2014-07-16	WEEK 4	13	37	8	16	7
	55	2014-08-11	WEEK 8	7	48	10	18	8
	85	2014-09-10	WEEK 12	13	41	8	19	9
	111	2014-10-06	WEEK 16	12	47	9	17	13
	146	2014-11-10	WEEK 20	12	50	36 (*)	37 (*)	14
	174	2014-12-08	BASELINE WEEK 24	9	51	119 (**)	72 (*)	19
371* M 65.4 kg	-29	2013-09-09	SCREENING	4	92	20		20
	-10	2013-09-28	UNSCHEDULED	13	81	16	20	21
	-1	2013-10-07	BASELINE DAY 1	6	73	17	19	21
	30	2013-11-06	WEEK 4	8	80	17	21	21
	56	2013-12-02	WEEK 8	6	77	17	21	20
	57	2013-12-03	UNSCHED RELAPSE1	6	89	19	23	21

NOTE: (a) #=On or after the subject switched to alternate MS medication.
(b) * >1-1.5xULN, ** >1.5-2xULN, *** >2xULN. The ULN for Bilirubin is 21 umol/L.
(c) * >1-<3xULN, ** >=3-5xULN, *** >=5-10xULN, **** >=10-20xULN, ***** >=20xULN.

SOURCE: BG12MS/109MS305/PART1/L-BCABN.SAS DATE: 25SEP2015

＊新薬承認情報提供時に置換えた

Listing of subjects liver function tests (ALT, AST) >=3x ULN at any post-baseline visits
-Part I (placebo-controlled period)
Treatment group: Placebo
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Subject Sex Weight	Study Day (a)	Collection Date	Visit	Total Bilirubin (umol/L) (b)	Alkaline Phosphatase (U/L) (c)	ALT (SGPT) (U/L) (c)	AST (SGOT) (U/L) (c)	Serum GGT (U/L) (c)
371* M 65.4 kg	80	2013-12-26	WEEK 12	5	85	19	18	20
	112	2014-01-27	WEEK 16	6	88	31	28	17
	140	2014-02-24	WEEK 20	7	97	166 (**)	78 (*)	35
	159	2014-03-15	UNSCHEDULED	14	89	231 (***)	105 (*)	40
	168	2014-03-24	UNSCHEDULED	8	115	245 (***)	117 (**)	50
	184	2014-04-09	FU VISIT 1 - PART I	14	93	121 (*)	65 (*)	43
	218	2014-05-13	FU VISIT 2 - PART I	11	100	31	32	28
	245	2014-06-09	FU VISIT 3 - PART I	8	91	20	23	23
[redacted] F 75 kg	-13	2014-09-10	SCREENING	6	52	15	16	23
	1	2014-09-23	BASELINE DAY 1	6	54	25	21	36
	29	2014-10-21	WEEK 4	10	52	15	13	30

NOTE: (a) #=On or after the subject switched to alternate MS medication.
(b) * >1-1.5xULN, ** >1.5-2xULN, *** >2xULN. The ULN for Bilirubin is 21 umol/L.
(c) * >1-<3xULN, ** >=3-5xULN, *** >=5-10xULN, **** >=10-20xULN, ***** >=20xULN.

SOURCE: BG12MS/109MS305/PART1/L-BCABN.SAS DATE: 25SEP2015

＊新薬承認情報提供時に置換えた

Listing of subjects liver function tests (ALT, AST) >=3x ULN at any post-baseline visits
-Part I (placebo-controlled period)
Treatment group: Placebo
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Subject Sex Weight	Study Day (a)	Collection Date	Visit	Total Bilirubin (umol/L) (b)	Alkaline Phosphatase (U/L) (c)	ALT (SGPT) (U/L) (c)	AST (SGOT) (U/L) (c)	Serum GGT (U/L) (c)
[redacted] F 75 kg	59	2014-11-20	WEEK 8	4	114 (*)	121 (**)	38 (*)	160 (**)
	71	2014-12-02	UNSCHEDULED	10	68	24	16	72 (*)
	87	2014-12-18	WEEK 12	10	58	15	14	36
	115	2015-01-15	WEEK 16	9	59	16	12	38
	141	2015-02-10	WEEK 20	8	58	17	12	37
	164	2015-03-05	BASELINE WEEK 24	8	56	13	11	34

NOTE: (a) #=On or after the subject switched to alternate MS medication.
(b) * >1-1.5xULN, ** >1.5-2xULN, *** >2xULN. The ULN for Bilirubin is 21 umol/L.
(c) * >1-<3xULN, ** >=3-5xULN, *** >=5-10xULN, **** >=10-20xULN, ***** >=20xULN.

SOURCE: BG12MS/109MS305/PART1/L-BCABN.SAS DATE: 25SEP2015

Listing of subjects liver function tests (ALT, AST) >=3x ULN at any post-baseline visits
-Part I (placebo-controlled period)
Treatment group: BG00012 240 mg BID
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Subject Sex Weight	Study Day (a)	Collection Date	Visit	Total Bilirubin (umol/L) (b)	Alkaline Phosphatase (U/L) (c)	ALT (SGPT) (U/L) (c)	AST (SGOT) (U/L) (c)	Serum GGT (U/L) (c)
[redacted] F 52.5 kg	-22	2013-08-26	SCREENING	6	75	13	19	19
	1	2013-09-17	BASELINE DAY 1	5	70	13	18	16
	30	2013-10-16	WEEK 4	6	75	17	18	17
	46	2013-11-01	UNSCHED RELAPSE1	6	72	25	25	16
	58	2013-11-13	WEEK 8	5	84	84 (*)	57 (*)	26
	86	2013-12-11	WEEK 12	5	85	108 (**)	69 (*)	36
	100	2013-12-25	UNSCHEDULED	5	89	66 (*)	44 (*)	33
	114	2014-01-08	WEEK 16	5	91	51 (*)	42 (*)	31
	142	2014-02-05	WEEK 20	9	74	30	32	31
	170	2014-03-05	BASELINE WEEK 24	7	77	32	32	34
[redacted] M 85.5 kg	-22	2014-07-28	SCREENING	11	52	58 (*)	43 (*)	21
	1	2014-08-19	BASELINE DAY 1	10	55	53 (*)	21	25
	29	2014-09-16	WEEK 4	8	57	137 (**)	49 (*)	33
	35	2014-09-22	UNSCHEDULED	10	59	106 (*)	47 (*)	30

NOTE: (a) #=On or after the subject switched to alternate MS medication.
(b) * >1-1.5xULN, ** >1.5-2xULN, *** >2xULN. The ULN for Bilirubin is 21 umol/L.
(c) * >1-<3xULN, ** >=3-5xULN, *** >=5-10xULN, **** >=10-20xULN, ***** >=20xULN.

SOURCE: BG12MS/109MS305/PART1/L-BCABN.SAS DATE: 25SEP2015

Listing of subjects liver function tests (ALT, AST) >=3x ULN at any post-baseline visits
-Part I (placebo-controlled period)
Treatment group: BG00012 240 mg BID
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Subject Sex Weight	Study Day (a)	Collection Date	Visit	Total Bilirubin (umol/L) (b)	Alkaline Phosphatase (U/L) (c)	ALT (SGPT) (U/L) (c)	AST (SGOT) (U/L) (c)	Serum GGT (U/L) (c)
[redacted] M 85.5 kg	57	2014-10-14	WEEK 8	9	53	57 (*)	26	28
	81	2014-11-07	WEEK 12	12	50	52 (*)	25	26
	113	2014-12-09	WEEK 16	8	58	52 (*)	25	26
	141	2015-01-06	WEEK 20	11	51	54 (*)	26	31
	168	2015-02-02	BASELINE WEEK 24	9	52	40	21	25
[redacted] F 65.6 kg	-25	2013-04-16	SCREENING	12	58	12	16	19
	-1	2013-05-10	BASELINE DAY 1	13	49	12	16	17
	25	2013-06-04	WEEK 4	7	72	118 (**)	68 (*)	72 (*)
	31	2013-06-10	UNSCHEDULED	12	93	111 (**)	75 (*)	135 (*)
	43	2013-06-22	UNSCHEDULED	21	61	22	19	61 (*)
	53	2013-07-02	WEEK 8	18	58	12	16	37
	84	2013-08-02	WEEK 12	15	44	12	17	18
	116	2013-09-03	WEEK 16	8	47	14	21	20
	141	2013-09-28	WEEK 20	10	45	9	15	21

NOTE: (a) #=On or after the subject switched to alternate MS medication.
(b) * >1-1.5xULN, ** >1.5-2xULN, *** >2xULN. The ULN for Bilirubin is 21 umol/L.
(c) * >1-<3xULN, ** >=3-5xULN, *** >=5-10xULN, **** >=10-20xULN, ***** >=20xULN.

SOURCE: BG12MS/109MS305/PART1/L-BCABN.SAS DATE: 25SEP2015

Listing of subjects liver function tests (ALT, AST) >=3x ULN at any post-baseline visits
-Part I (placebo-controlled period)
Treatment group: BG00012 240 mg BID
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Subject Sex Weight	Study Day (a)	Collection Date	Visit	Total Bilirubin (umol/L) (b)	Alkaline Phosphatase (U/L) (c)	ALT (SGPT) (U/L) (c)	AST (SGOT) (U/L) (c)	Serum GGT (U/L) (c)
[redacted] F 65.6 kg	172	2013-10-29	BASELINE WEEK 24	11	47	14	18	21
372* F 50.7 kg	-28	2013-07-10	SCREENING	8	33	47 (*)	34	11
	1	2013-08-07	BASELINE DAY 1	9	34	458 (****)	331 (***)	28
	6	2013-08-12	UNSCHEDULED	8	48	781 (*****)	447 (****)	59 (*)
	15	2013-08-21	UNSCHEDULED	10	56	755 (*****)	436 (****)	82 (*)
	29	2013-09-04	WEEK 4	11	48	336 (***)	177 (***)	52 (*)
	36	2013-09-11	UNSCHEDULED	6	53	186 (***)	95 (*)	45
	85	2013-10-30	FU VISIT 1 - PART I	9	39	18	24	21
	105	2013-11-19	FU VISIT 3 - PART I	8	36	24	27	21

NOTE: (a) #=On or after the subject switched to alternate MS medication.
(b) * >1-1.5xULN, ** >1.5-2xULN, *** >2xULN. The ULN for Bilirubin is 21 umol/L.
(c) * >1-<3xULN, ** >=3-5xULN, *** >=5-10xULN, **** >=10-20xULN, ***** >=20xULN.

SOURCE: BG12MS/109MS305/PART1/L-BCABN.SAS DATE: 25SEP2015

＊新薬承認情報提供時に置換えた

Listing of subjects liver function tests (ALT, AST) >=3x ULN at any post-baseline visits
-Part I (placebo-controlled period)
Treatment group: BG00012 240 mg BID
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Subject Sex Weight	Study Day (a)	Collection Date	Visit	Total Bilirubin (umol/L) (b)	Alkaline Phosphatase (U/L) (c)	ALT (SGPT) (U/L) (c)	AST (SGOT) (U/L) (c)	Serum GGT (U/L) (c)
[redacted] M 74.3 kg	-18	2014-07-17	SCREENING	8	107	44 (*)	32	80 (*)
	1	2014-08-04	BASELINE DAY 1	10	96	36	23	71 (*)
	25	2014-08-28	WEEK 4	7	104	77 (*)	57 (*)	97 (*)
	57	2014-09-29	WEEK 8	7	103	47 (*)	25	102 (*)
	88	2014-10-30	WEEK 12	14	120	69 (*)	47 (*)	131 (*)
	113	2014-11-24	WEEK 16	8	112	48 (*)	28	115 (*)
	138	2014-12-19	WEEK 20	15	108	169 (**)	64 (*)	324 (***)
	148	2014-12-29	UNSCHEDULED	10	120	87 (*)	42 (*)	292 (**)
	169	2015-01-19	BASELINE WEEK 24	17	118	73 (*)	40 (*)	182 (*)

NOTE: (a) #=On or after the subject switched to alternate MS medication.
(b) * >1-1.5xULN, ** >1.5-2xULN, *** >2xULN. The ULN for Bilirubin is 21 umol/L.
(c) * >1-<3xULN, ** >=3-5xULN, *** >=5-10xULN, **** >=10-20xULN, ***** >=20xULN.

SOURCE: BG12MS/109MS305/PART1/L-BCABN.SAS DATE: 25SEP2015

Table 239: Summary of Blood Chemistry Laboratory Parameters - Change From Baseline by Visit: Studies 109MS301 and 109MS302

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	752	730	727	1457	335
Mean	0.42	11.27	14.70	12.98	-0.40
SD	13.948	21.221	30.134	26.100	12.793
Median	0.00	6.00	7.00	7.00	0.00
Min, Max	-74.0, 225.0	-140.0, 250.0	-128.0, 325.0	-140.0, 325.0	-66.0, 106.0
Week 8					
n	728	699	678	1377	326
Mean	1.93	6.54	7.39	6.96	-0.10
SD	30.578	19.128	18.007	18.583	14.777
Median	0.00	3.00	4.00	4.00	0.00
Min, Max	-93.0, 492.0	-180.0, 199.0	-140.0, 119.0	-180.0, 199.0	-113.0, 92.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	718	689	668	1357	322
Mean	1.05	3.83	5.09	4.45	0.12
SD	25.085	14.799	16.949	15.901	19.374
Median	0.00	2.00	3.00	3.00	0.00
Min, Max	-66.0, 573.0	-185.0, 119.0	-158.0, 96.0	-185.0, 119.0	-147.0, 129.0
Week 16					
n	707	660	646	1306	313
Mean	0.44	3.40	3.33	3.36	0.56
SD	14.334	15.435	16.476	15.952	27.044
Median	0.00	2.00	2.00	2.00	0.00
Min, Max	-69.0, 176.0	-183.0, 92.0	-156.0, 124.0	-183.0, 124.0	-155.0, 364.0
Week 20					
n	690	641	632	1273	310
Mean	-0.40	2.39	2.41	2.40	-1.30
SD	10.940	15.983	15.424	15.702	16.052
Median	0.00	1.00	2.00	2.00	-0.50
Min, Max	-75.0, 124.0	-187.0, 158.0	-151.0, 84.0	-187.0, 158.0	-157.0, 59.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	680	655	629	1284	315
Mean	0.13	1.71	2.09	1.90	-0.28
SD	11.866	16.563	16.155	16.359	19.429
Median	0.00	1.00	1.00	1.00	0.00
Min, Max	-53.0, 131.0	-187.0, 170.0	-143.0, 95.0	-187.0, 170.0	-165.0, 135.0
Week 28					
n	660	621	601	1222	296
Mean	0.23	0.98	1.55	1.26	0.66
SD	13.272	18.736	18.624	18.676	20.794
Median	0.00	1.00	1.00	1.00	0.00
Min, Max	-82.0, 122.0	-191.0, 332.0	-141.0, 203.0	-191.0, 332.0	-58.0, 242.0
Week 32					
n	641	621	601	1222	298
Mean	0.41	0.61	0.52	0.57	2.07
SD	20.122	13.821	16.513	15.198	25.736
Median	-0.50	1.00	1.00	1.00	-1.00
Min, Max	-55.0, 398.0	-193.0, 75.0	-155.0, 191.0	-193.0, 191.0	-63.0, 256.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	651	626	614	1240	306
Mean	-0.17	0.73	0.91	0.82	0.80
SD	10.535	14.509	14.365	14.432	18.739
Median	0.00	1.00	1.00	1.00	-0.50
Min, Max	-72.0, 64.0	-189.0, 99.0	-155.0, 74.0	-189.0, 99.0	-77.0, 142.0
Week 40					
n	628	605	597	1202	294
Mean	0.99	0.79	-0.17	0.32	0.83
SD	20.301	18.449	14.315	16.526	29.314
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-77.0, 297.0	-185.0, 283.0	-155.0, 73.0	-185.0, 283.0	-63.0, 425.0
Week 44					
n	606	584	590	1174	295
Mean	1.76	-0.04	0.69	0.33	0.13
SD	36.802	13.299	17.034	15.289	32.421
Median	-1.00	0.00	1.00	0.00	-1.00
Min, Max	-80.0, 769.0	-188.0, 61.0	-148.0, 179.0	-188.0, 179.0	-63.0, 500.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	598	598	602	1200	295
Mean	-0.14	0.35	1.36	0.86	0.80
SD	11.778	14.934	17.591	16.322	26.319
Median	0.00	0.00	1.00	1.00	-1.00
Min, Max	-68.0, 116.0	-191.0, 177.0	-159.0, 176.0	-191.0, 177.0	-67.0, 382.0
Week 52					
n	557	575	570	1145	286
Mean	-0.56	-0.01	1.34	0.66	0.99
SD	10.674	15.062	22.639	19.215	24.697
Median	0.00	0.00	1.00	0.00	-1.00
Min, Max	-66.0, 65.0	-187.0, 135.0	-157.0, 377.0	-187.0, 377.0	-71.0, 254.0
Week 56					
n	565	557	562	1119	282
Mean	0.09	0.16	0.35	0.26	0.02
SD	14.517	13.745	16.110	14.973	17.227
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-70.0, 167.0	-189.0, 87.0	-157.0, 102.0	-189.0, 102.0	-75.0, 138.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	559	576	585	1161	287
Mean	0.75	0.10	0.74	0.42	-1.18
SD	15.996	15.295	16.306	15.809	12.668
Median	0.00	0.00	1.00	0.00	0.00
Min, Max	-50.0, 176.0	-191.0, 161.0	-156.0, 106.0	-191.0, 161.0	-58.0, 91.0
Week 64					
n	538	562	548	1110	267
Mean	0.48	2.17	0.07	1.14	-2.03
SD	26.920	54.629	16.154	40.490	12.003
Median	-1.00	0.00	0.00	0.00	-1.00
Min, Max	-79.0, 569.0	-188.0, 1250.0	-150.0, 155.0	-188.0, 1250.0	-66.0, 45.0
Week 68					
n	524	551	547	1098	276
Mean	2.14	-0.42	-0.53	-0.47	-1.60
SD	32.412	13.851	15.135	14.499	11.306
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-75.0, 443.0	-188.0, 84.0	-151.0, 61.0	-188.0, 84.0	-53.0, 69.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	521	564	564	1128	274
Mean	-0.05	-0.14	0.04	-0.05	-0.32
SD	11.482	13.611	15.281	14.464	14.152
Median	0.00	0.00	1.00	0.00	0.00
Min, Max	-51.0, 134.0	-192.0, 75.0	-150.0, 113.0	-192.0, 113.0	-67.0, 86.0
Week 76					
n	507	544	543	1087	265
Mean	-0.21	-0.08	-0.28	-0.18	-1.98
SD	11.698	13.693	15.318	14.521	11.486
Median	-1.00	0.00	0.00	0.00	-1.00
Min, Max	-51.0, 115.0	-182.0, 73.0	-158.0, 85.0	-182.0, 85.0	-65.0, 41.0
Week 80					
n	505	533	530	1063	265
Mean	-0.73	0.06	0.13	0.10	-1.46
SD	11.308	12.447	15.329	13.952	12.614
Median	-1.00	0.00	0.00	0.00	-1.00
Min, Max	-74.0, 115.0	-76.0, 99.0	-149.0, 74.0	-149.0, 99.0	-70.0, 64.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	513	550	551	1101	271
Mean	0.38	0.02	-0.33	-0.16	-2.21
SD	13.386	14.804	14.813	14.803	11.082
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-72.0, 145.0	-190.0, 94.0	-149.0, 62.0	-190.0, 94.0	-72.0, 28.0
Week 88					
n	499	531	529	1060	259
Mean	0.05	-0.15	0.03	-0.06	-2.34
SD	11.771	16.173	17.041	16.604	12.814
Median	0.00	-1.00	0.00	0.00	-1.00
Min, Max	-49.0, 96.0	-191.0, 136.0	-155.0, 138.0	-191.0, 138.0	-70.0, 65.0
Week 92					
n	486	518	516	1034	257
Mean	0.29	-0.54	-0.48	-0.51	-2.00
SD	17.799	15.004	16.274	15.643	12.324
Median	-1.00	-1.00	0.00	0.00	-1.00
Min, Max	-59.0, 291.0	-195.0, 80.0	-157.0, 93.0	-195.0, 93.0	-69.0, 66.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	484	531	517	1048	260
Mean	0.51	0.01	-0.81	-0.40	-1.50
SD	13.456	16.057	15.205	15.640	14.725
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-66.0, 122.0	-192.0, 156.0	-158.0, 56.0	-192.0, 156.0	-104.0, 96.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	746	726	722	1448	334
Mean	-0.02	4.77	6.03	5.40	-0.07
SD	7.152	11.905	15.761	13.971	6.989
Median	0.00	3.00	3.00	3.00	0.00
Min, Max	-38.0, 103.0	-46.0, 160.0	-88.0, 143.0	-88.0, 160.0	-34.0, 48.0
Week 8					
n	723	695	675	1370	324
Mean	0.69	2.32	2.95	2.63	0.23
SD	17.398	9.312	9.980	9.649	7.444
Median	0.00	1.00	2.00	2.00	0.00
Min, Max	-48.0, 361.0	-56.0, 90.0	-90.0, 72.0	-90.0, 90.0	-38.0, 62.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	712	686	666	1352	320
Mean	0.07	1.03	1.70	1.36	0.01
SD	11.392	7.324	9.098	8.249	9.462
Median	0.00	1.00	1.00	1.00	0.00
Min, Max	-31.0, 250.0	-54.0, 42.0	-84.0, 51.0	-84.0, 51.0	-54.0, 68.0
Week 16					
n	702	659	645	1304	309
Mean	-0.06	0.84	1.28	1.06	0.74
SD	7.662	7.763	15.901	12.468	18.686
Median	0.00	0.00	1.00	1.00	0.00
Min, Max	-29.0, 74.0	-59.0, 42.0	-84.0, 340.0	-84.0, 340.0	-59.0, 295.0
Week 20					
n	685	638	624	1262	308
Mean	-0.98	0.46	0.54	0.50	-0.81
SD	5.649	8.734	7.678	8.226	7.998
Median	-1.00	0.00	0.00	0.00	-1.00
Min, Max	-34.0, 48.0	-59.0, 96.0	-67.0, 47.0	-67.0, 96.0	-57.0, 59.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	677	653	620	1273	311
Mean	-0.60	0.16	0.27	0.21	0.95
SD	6.508	8.393	8.858	8.620	17.650
Median	-1.00	0.00	0.00	0.00	0.00
Min, Max	-31.0, 58.0	-58.0, 114.0	-88.0, 81.0	-88.0, 114.0	-62.0, 258.0
Week 28					
n	657	613	595	1208	295
Mean	-0.31	0.22	-0.35	-0.06	0.38
SD	10.123	16.255	10.195	13.609	9.322
Median	-1.00	0.00	0.00	0.00	0.00
Min, Max	-35.0, 191.0	-60.0, 368.0	-88.0, 146.0	-88.0, 368.0	-30.0, 109.0
Week 32					
n	633	615	599	1214	295
Mean	0.53	-0.33	-0.57	-0.45	0.88
SD	31.456	7.205	8.536	7.887	12.803
Median	-1.00	0.00	0.00	0.00	0.00
Min, Max	-33.0, 774.0	-61.0, 60.0	-77.0, 68.0	-77.0, 68.0	-30.0, 148.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	645	618	612	1230	305
Mean	-0.54	-0.46	-0.50	-0.48	0.42
SD	5.669	8.131	8.458	8.292	8.509
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-34.0, 44.0	-59.0, 107.0	-77.0, 78.0	-77.0, 107.0	-34.0, 76.0
Week 40					
n	623	601	593	1194	292
Mean	-0.36	-0.51	-1.06	-0.78	0.37
SD	8.836	8.664	7.972	8.328	13.316
Median	0.00	-1.00	-1.00	-1.00	-1.00
Min, Max	-33.0, 136.0	-59.0, 116.0	-86.0, 34.0	-86.0, 116.0	-29.0, 179.0
Week 44					
n	602	579	587	1166	293
Mean	0.09	-0.98	-0.07	-0.52	0.28
SD	16.892	6.393	23.403	17.204	14.774
Median	-1.00	-1.00	-1.00	-1.00	0.00
Min, Max	-32.0, 367.0	-57.0, 30.0	-86.0, 530.0	-86.0, 530.0	-35.0, 216.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	593	595	599	1194	294
Mean	-0.64	-0.86	-0.43	-0.65	0.35
SD	6.584	7.140	8.799	8.015	10.380
Median	-1.00	-1.00	-1.00	-1.00	0.00
Min, Max	-29.0, 65.0	-62.0, 49.0	-86.0, 55.0	-86.0, 55.0	-33.0, 121.0
Week 52					
n	553	572	570	1142	285
Mean	-0.46	-1.03	-0.31	-0.67	0.80
SD	10.453	7.328	11.993	9.936	15.192
Median	-1.00	-1.00	-1.00	-1.00	0.00
Min, Max	-26.0, 207.0	-58.0, 76.0	-84.0, 192.0	-84.0, 192.0	-38.0, 209.0
Week 56					
n	557	553	559	1112	280
Mean	-0.19	-0.82	-0.90	-0.86	0.51
SD	15.730	7.296	8.538	7.941	9.357
Median	-1.00	0.00	-1.00	-1.00	0.00
Min, Max	-27.0, 332.0	-62.0, 70.0	-85.0, 36.0	-85.0, 70.0	-38.0, 90.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	553	569	579	1148	286
Mean	-0.21	-0.84	-0.59	-0.71	-0.35
SD	8.003	8.371	7.799	8.085	6.365
Median	-1.00	-1.00	-1.00	-1.00	0.00
Min, Max	-27.0, 65.0	-60.0, 115.0	-70.0, 61.0	-70.0, 115.0	-27.0, 37.0
Week 64					
n	533	560	544	1104	267
Mean	-0.29	0.68	-1.27	-0.28	-0.92
SD	12.395	34.675	7.820	25.306	6.446
Median	-1.00	0.00	-1.00	0.00	0.00
Min, Max	-32.0, 242.0	-62.0, 799.0	-78.0, 49.0	-78.0, 799.0	-35.0, 21.0
Week 68					
n	521	545	544	1089	273
Mean	1.21	-1.25	-1.34	-1.29	-0.69
SD	22.998	7.460	7.806	7.632	6.115
Median	0.00	-1.00	-1.00	-1.00	-1.00
Min, Max	-30.0, 316.0	-62.0, 59.0	-70.0, 23.0	-70.0, 59.0	-30.0, 28.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	517	558	559	1117	272
Mean	-0.75	-1.01	-1.00	-1.01	0.29
SD	6.510	6.740	8.591	7.719	9.399
Median	-1.00	-1.00	0.00	-1.00	0.00
Min, Max	-30.0, 83.0	-61.0, 30.0	-83.0, 82.0	-83.0, 82.0	-33.0, 85.0
Week 76					
n	502	540	543	1083	264
Mean	-0.80	-1.01	-1.16	-1.08	-0.85
SD	6.469	7.176	8.103	7.652	5.839
Median	-1.00	-1.00	-1.00	-1.00	0.00
Min, Max	-26.0, 72.0	-56.0, 72.0	-78.0, 31.0	-78.0, 72.0	-33.0, 17.0
Week 80					
n	502	531	530	1061	260
Mean	-1.04	-1.04	-1.03	-1.03	-0.28
SD	5.895	6.021	8.343	7.271	7.320
Median	-1.00	-1.00	-0.50	-1.00	0.00
Min, Max	-30.0, 56.0	-34.0, 35.0	-88.0, 43.0	-88.0, 43.0	-32.0, 56.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	507	545	550	1095	270
Mean	-0.68	-0.96	-1.35	-1.16	-0.99
SD	6.319	7.360	8.351	7.872	6.578
Median	-1.00	-1.00	-1.00	-1.00	0.00
Min, Max	-31.0, 39.0	-55.0, 53.0	-85.0, 46.0	-85.0, 53.0	-35.0, 15.0
Week 88					
n	494	528	528	1056	257
Mean	-0.58	-0.80	-0.97	-0.89	-0.99
SD	6.532	8.286	9.587	8.956	6.735
Median	-1.00	-1.00	-1.00	-1.00	0.00
Min, Max	-28.0, 44.0	-60.0, 93.0	-84.0, 107.0	-84.0, 107.0	-32.0, 30.0
Week 92					
n	480	511	513	1024	257
Mean	-0.73	-1.04	-1.31	-1.17	-0.59
SD	6.043	8.174	8.462	8.317	6.662
Median	-1.00	-1.00	-1.00	-1.00	0.00
Min, Max	-27.0, 29.0	-60.0, 71.0	-89.0, 34.0	-89.0, 71.0	-35.0, 27.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	482	526	513	1039	260
Mean	-0.26	-0.62	-1.28	-0.95	-0.12
SD	7.345	8.644	8.254	8.456	8.997
Median	-1.00	-1.00	-1.00	-1.00	0.00
Min, Max	-30.0, 60.0	-62.0, 120.0	-87.0, 29.0	-87.0, 120.0	-52.0, 87.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	732	732	1464	340
Mean	-0.55	-3.20	-3.26	-3.23	2.41
SD	7.963	8.451	10.143	9.332	8.698
Median	0.00	-3.00	-4.00	-3.00	2.00
Min, Max	-72.0, 41.0	-49.0, 42.0	-54.0, 73.0	-54.0, 73.0	-22.0, 63.0
Week 8					
n	732	706	683	1389	328
Mean	-0.12	-3.38	-4.68	-4.02	3.30
SD	10.266	16.841	9.501	13.742	10.421
Median	0.00	-3.00	-4.00	-4.00	2.00
Min, Max	-59.0, 141.0	-60.0, 382.0	-88.0, 46.0	-88.0, 382.0	-30.0, 76.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	0.21	-3.67	-4.49	-4.07	2.80
SD	9.471	9.317	12.920	11.241	10.014
Median	0.00	-3.00	-4.00	-4.00	2.00
Min, Max	-59.0, 37.0	-46.0, 87.0	-91.0, 186.0	-91.0, 186.0	-26.0, 52.0
Week 16					
n	708	663	651	1314	317
Mean	-0.80	-3.72	-4.71	-4.21	2.47
SD	9.784	9.281	11.359	10.370	11.834
Median	-1.00	-3.00	-5.00	-4.00	2.00
Min, Max	-43.0, 58.0	-52.0, 50.0	-92.0, 77.0	-92.0, 77.0	-38.0, 129.0
Week 20					
n	692	651	637	1288	313
Mean	-0.77	-3.65	-4.93	-4.28	2.36
SD	10.391	10.755	11.233	11.008	9.882
Median	-1.00	-3.00	-5.00	-4.00	2.00
Min, Max	-64.0, 62.0	-58.0, 133.0	-86.0, 62.0	-86.0, 133.0	-37.0, 48.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	682	658	637	1295	316
Mean	-0.17	-3.57	-4.31	-3.93	1.92
SD	10.596	10.465	10.821	10.644	10.376
Median	0.00	-3.00	-4.00	-4.00	2.00
Min, Max	-45.0, 63.0	-53.0, 88.0	-94.0, 39.0	-94.0, 88.0	-41.0, 47.0
Week 28					
n	667	627	609	1236	299
Mean	-0.30	-3.44	-4.70	-4.06	1.99
SD	12.009	16.272	11.893	14.292	10.838
Median	-1.00	-4.00	-4.00	-4.00	2.00
Min, Max	-70.0, 90.0	-58.0, 319.0	-95.0, 55.0	-95.0, 319.0	-57.0, 56.0
Week 32					
n	647	625	604	1229	300
Mean	-0.20	-3.48	-4.95	-4.21	2.25
SD	13.578	10.546	11.654	11.124	11.122
Median	-1.00	-3.00	-4.00	-4.00	2.00
Min, Max	-63.0, 175.0	-52.0, 37.0	-98.0, 69.0	-98.0, 69.0	-51.0, 30.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	630	619	1249	309
Mean	-0.31	-2.92	-4.46	-3.68	2.19
SD	11.559	13.725	11.420	12.654	10.356
Median	0.00	-3.00	-3.00	-3.00	2.00
Min, Max	-60.0, 64.0	-52.0, 223.0	-90.0, 41.0	-90.0, 223.0	-46.0, 34.0
Week 40					
n	631	606	601	1207	297
Mean	-0.57	-3.77	-4.67	-4.22	2.05
SD	12.635	10.764	11.723	11.256	10.655
Median	-1.00	-4.00	-4.00	-4.00	2.00
Min, Max	-78.0, 109.0	-55.0, 47.0	-95.0, 58.0	-95.0, 58.0	-46.0, 42.0
Week 44					
n	609	592	595	1187	296
Mean	0.10	-4.05	-4.17	-4.11	1.31
SD	12.361	10.237	12.944	11.668	10.094
Median	0.00	-4.00	-4.00	-4.00	1.00
Min, Max	-77.0, 70.0	-59.0, 37.0	-94.0, 71.0	-94.0, 71.0	-49.0, 35.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	603	608	1211	296
Mean	0.55	-3.35	-3.67	-3.51	1.83
SD	11.438	10.356	11.626	11.009	11.219
Median	1.00	-3.00	-3.00	-3.00	2.00
Min, Max	-77.0, 47.0	-50.0, 33.0	-86.0, 60.0	-86.0, 60.0	-47.0, 89.0
Week 52					
n	566	577	576	1153	288
Mean	-0.95	-4.00	-3.73	-3.86	1.73
SD	13.481	10.574	12.863	11.769	10.441
Median	-1.00	-3.00	-4.00	-4.00	1.00
Min, Max	-77.0, 68.0	-50.0, 24.0	-84.0, 132.0	-84.0, 132.0	-46.0, 54.0
Week 56					
n	570	565	569	1134	284
Mean	-0.50	-3.83	-3.95	-3.89	1.95
SD	12.180	11.296	15.406	13.510	11.015
Median	0.00	-3.00	-3.00	-3.00	1.25
Min, Max	-73.0, 48.0	-57.0, 42.0	-91.0, 232.0	-91.0, 232.0	-50.0, 43.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	562	579	588	1167	291
Mean	-0.57	-3.37	-3.61	-3.49	1.12
SD	13.228	11.274	13.724	12.564	11.031
Median	0.00	-3.00	-4.00	-3.00	1.00
Min, Max	-80.0, 83.0	-57.0, 92.0	-97.0, 141.0	-97.0, 141.0	-48.0, 64.0
Week 64					
n	542	566	559	1125	271
Mean	-0.99	-3.93	-3.84	-3.89	0.19
SD	12.402	10.923	15.278	13.261	10.567
Median	-1.00	-4.00	-4.00	-4.00	0.00
Min, Max	-69.0, 69.0	-58.0, 40.0	-98.0, 185.0	-98.0, 185.0	-43.0, 35.0
Week 68					
n	525	556	552	1108	278
Mean	-0.64	-3.68	-4.54	-4.11	1.32
SD	13.487	11.196	13.265	12.272	11.842
Median	0.00	-3.50	-4.00	-4.00	1.00
Min, Max	-77.0, 73.0	-52.0, 42.0	-95.0, 113.0	-95.0, 113.0	-49.0, 56.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	568	567	1135	276
Mean	-0.35	-3.30	-3.85	-3.57	1.48
SD	14.161	12.447	12.907	12.676	12.932
Median	0.00	-3.00	-3.00	-3.00	1.00
Min, Max	-75.0, 154.0	-61.0, 105.0	-98.0, 84.0	-98.0, 105.0	-43.0, 84.0
Week 76					
n	511	546	547	1093	266
Mean	-1.00	-3.93	-4.13	-4.03	0.79
SD	12.181	11.746	12.209	11.975	12.962
Median	-1.00	-4.00	-4.00	-4.00	0.00
Min, Max	-83.0, 58.0	-52.0, 47.0	-86.0, 43.0	-86.0, 47.0	-44.0, 60.0
Week 80					
n	508	540	533	1073	268
Mean	-1.32	-4.47	-4.06	-4.26	1.25
SD	13.530	11.270	13.498	12.423	14.364
Median	-1.00	-4.00	-4.00	-4.00	0.50
Min, Max	-81.0, 55.0	-59.0, 53.0	-96.0, 82.0	-96.0, 82.0	-52.0, 86.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	555	556	1111	271
Mean	-0.82	-3.48	-4.03	-3.76	0.63
SD	12.609	12.264	12.525	12.393	12.044
Median	-0.50	-3.00	-3.00	-3.00	1.00
Min, Max	-67.0, 67.0	-49.0, 111.0	-94.0, 44.0	-94.0, 111.0	-59.0, 38.0
Week 88					
n	503	532	534	1066	261
Mean	-0.93	-4.14	-3.88	-4.01	1.28
SD	13.530	12.134	12.869	12.503	11.677
Median	-1.00	-3.00	-3.00	-3.00	1.00
Min, Max	-69.0, 106.0	-55.0, 76.0	-96.0, 49.0	-96.0, 76.0	-48.0, 49.0
Week 92					
n	489	523	523	1046	258
Mean	-0.98	-4.65	-4.24	-4.44	0.61
SD	12.230	11.501	13.855	12.728	10.777
Median	-1.00	-4.00	-4.00	-4.00	1.00
Min, Max	-86.0, 46.0	-56.0, 35.0	-94.0, 129.0	-94.0, 129.0	-50.0, 37.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	534	522	1056	262
Mean	0.18	-3.35	-3.94	-3.64	0.70
SD	14.502	12.473	12.588	12.528	11.969
Median	1.00	-3.00	-3.00	-3.00	1.00
Min, Max	-80.0, 94.0	-53.0, 50.0	-91.0, 55.0	-91.0, 55.0	-42.0, 42.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	752	732	727	1459	335
Mean	0.04	-0.66	-0.90	-0.78	-0.76
SD	3.356	3.341	3.693	3.521	3.777
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-19.0, 35.0	-20.0, 20.5	-23.0, 12.0	-23.0, 20.5	-36.0, 18.8
Week 8					
n	730	701	679	1380	327
Mean	0.25	-0.31	-0.76	-0.53	-0.95
SD	3.878	3.408	3.703	3.562	3.729
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-14.0, 41.0	-16.0, 20.5	-22.0, 17.0	-22.0, 20.5	-25.0, 15.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	718	690	669	1359	322
Mean	0.07	-0.10	-0.49	-0.29	-0.92
SD	3.743	3.557	3.913	3.740	3.270
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-23.0, 39.0	-24.0, 24.0	-25.0, 32.0	-25.0, 32.0	-17.0, 13.0
Week 16					
n	707	661	647	1308	314
Mean	0.10	-0.12	-0.32	-0.22	-0.90
SD	3.407	3.689	4.054	3.874	3.389
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-20.0, 19.0	-15.0, 31.0	-21.0, 27.0	-21.0, 31.0	-14.0, 12.0
Week 20					
n	690	644	632	1276	311
Mean	0.18	0.24	-0.11	0.06	-0.77
SD	3.265	3.891	3.661	3.781	3.710
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-16.0, 18.0	-23.0, 30.0	-17.0, 17.0	-23.0, 30.0	-15.0, 23.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	682	655	631	1286	315
Mean	0.09	0.28	-0.27	0.01	-0.82
SD	3.433	3.948	3.972	3.968	3.453
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-17.0, 31.0	-16.0, 32.0	-17.0, 17.0	-17.0, 32.0	-18.0, 10.3
Week 28					
n	662	625	601	1226	297
Mean	0.24	0.20	-0.16	0.02	-0.74
SD	3.726	3.716	3.871	3.796	3.513
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-16.0, 28.0	-25.0, 19.0	-28.0, 15.0	-28.0, 19.0	-19.0, 18.0
Week 32					
n	642	624	602	1226	299
Mean	0.36	0.16	-0.30	-0.07	-0.72
SD	3.467	3.659	3.718	3.694	3.625
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-10.3, 26.0	-14.0, 21.0	-17.0, 25.0	-17.0, 25.0	-23.0, 15.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	651	627	615	1242	306
Mean	0.12	0.08	-0.06	0.01	-0.88
SD	3.464	3.482	3.991	3.742	3.739
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-15.0, 17.0	-19.0, 18.0	-20.0, 31.0	-20.0, 31.0	-19.0, 13.0
Week 40					
n	628	605	599	1204	295
Mean	0.11	0.29	-0.11	0.09	-0.67
SD	3.769	4.124	3.747	3.944	3.774
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-15.4, 30.0	-22.0, 24.0	-17.0, 15.0	-22.0, 24.0	-18.0, 8.6
Week 44					
n	608	584	591	1175	295
Mean	0.18	0.28	-0.25	0.01	-0.69
SD	3.717	3.632	3.762	3.706	3.485
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-12.0, 27.0	-21.0, 19.0	-18.0, 20.0	-21.0, 20.0	-13.0, 10.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	602	600	604	1204	296
Mean	0.28	0.18	-0.19	-0.01	-1.04
SD	4.106	3.465	3.628	3.551	3.809
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-12.0, 45.0	-11.0, 16.0	-16.0, 20.0	-16.0, 20.0	-18.0, 14.0
Week 52					
n	559	575	572	1147	286
Mean	0.28	0.12	-0.06	0.03	-0.97
SD	3.593	3.899	4.185	4.043	3.620
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-12.0, 22.2	-30.0, 18.0	-22.0, 22.0	-30.0, 22.0	-17.0, 13.0
Week 56					
n	566	559	564	1123	282
Mean	0.22	0.14	-0.29	-0.07	-0.58
SD	3.489	3.370	3.831	3.614	4.037
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-12.0, 26.0	-15.0, 13.7	-19.0, 18.0	-19.0, 18.0	-21.0, 10.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	561	577	588	1165	287
Mean	0.16	-0.02	-0.16	-0.09	-0.89
SD	3.345	3.547	3.852	3.703	3.700
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-10.3, 17.0	-26.0, 23.0	-17.0, 21.0	-26.0, 23.0	-22.0, 9.0
Week 64					
n	539	564	550	1114	267
Mean	0.13	0.11	-0.36	-0.12	-0.81
SD	3.633	3.910	3.432	3.687	3.991
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-13.0, 29.0	-25.0, 33.0	-18.0, 10.0	-25.0, 33.0	-21.0, 31.0
Week 68					
n	525	554	547	1101	276
Mean	0.20	0.13	-0.19	-0.03	-0.65
SD	3.836	3.464	3.700	3.585	4.423
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-15.0, 28.0	-12.0, 20.0	-17.0, 21.0	-17.0, 21.0	-19.0, 27.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	521	565	565	1130	275
Mean	0.15	-0.04	-0.37	-0.21	-0.94
SD	3.306	3.398	3.894	3.656	3.826
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-11.0, 17.0	-20.0, 14.5	-24.0, 18.0	-24.0, 18.0	-16.0, 10.3
Week 76					
n	509	544	544	1088	266
Mean	0.31	0.09	-0.42	-0.16	-0.97
SD	3.472	3.645	3.895	3.778	3.709
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-13.0, 20.0	-18.0, 22.0	-20.0, 14.0	-20.0, 22.0	-18.0, 20.0
Week 80					
n	506	535	534	1069	265
Mean	0.26	0.19	-0.16	0.01	-1.21
SD	3.393	4.208	4.180	4.196	4.050
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-12.0, 14.0	-22.0, 28.0	-32.0, 18.0	-32.0, 28.0	-18.0, 11.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	515	552	551	1103	271
Mean	0.31	-0.27	-0.21	-0.24	-0.84
SD	3.630	3.666	4.120	3.897	4.022
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-19.0, 22.0	-20.0, 14.0	-17.0, 23.0	-20.0, 23.0	-20.0, 12.0
Week 88					
n	499	531	529	1060	260
Mean	0.06	0.15	-0.36	-0.11	-0.98
SD	3.334	3.669	4.126	3.910	3.989
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-18.0, 22.0	-12.0, 17.0	-23.0, 22.0	-23.0, 22.0	-27.0, 18.0
Week 92					
n	488	519	517	1036	257
Mean	0.23	-0.02	-0.17	-0.10	-0.85
SD	3.616	3.647	4.042	3.848	4.105
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-11.0, 36.0	-15.0, 13.5	-17.0, 20.0	-17.0, 20.0	-29.0, 13.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	488	532	518	1050	261
Mean	0.01	0.00	-0.35	-0.17	-0.67
SD	3.359	3.613	3.934	3.777	4.660
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-15.0, 18.0	-18.0, 17.0	-28.0, 21.0	-28.0, 21.0	-18.0, 33.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	732	732	1464	340
Mean	-0.42	3.24	5.69	4.47	-0.34
SD	8.505	9.823	20.591	16.173	7.744
Median	0.00	2.00	3.00	2.00	0.00
Min, Max	-87.0, 61.0	-69.0, 76.0	-118.0, 285.0	-118.0, 285.0	-32.0, 73.0
Week 8					
n	732	706	683	1389	328
Mean	0.35	2.46	3.46	2.95	-0.46
SD	14.069	11.429	12.624	12.038	9.078
Median	0.00	2.00	2.00	2.00	0.00
Min, Max	-223.0, 125.0	-95.0, 103.0	-59.0, 214.0	-95.0, 214.0	-66.0, 49.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	0.55	1.50	2.82	2.15	-0.07
SD	14.752	12.496	12.522	12.521	9.018
Median	0.00	1.00	2.00	2.00	0.00
Min, Max	-224.0, 156.0	-151.0, 182.0	-85.0, 190.0	-151.0, 190.0	-43.0, 57.0
Week 16					
n	708	663	651	1314	317
Mean	0.29	1.56	2.43	1.99	0.02
SD	13.541	11.385	14.611	13.085	14.917
Median	0.00	1.00	1.00	1.00	-1.00
Min, Max	-228.0, 118.0	-109.0, 114.0	-126.0, 221.0	-126.0, 221.0	-72.0, 169.0
Week 20					
n	692	651	637	1288	313
Mean	0.20	1.28	2.10	1.69	-0.32
SD	12.539	11.548	12.009	11.781	13.789
Median	0.00	1.00	2.00	1.00	-1.00
Min, Max	-186.0, 103.0	-162.0, 87.0	-78.0, 131.0	-162.0, 131.0	-92.0, 168.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	682	658	637	1295	316
Mean	0.65	0.90	1.88	1.38	-0.28
SD	14.823	13.256	12.051	12.682	12.047
Median	0.00	1.00	1.00	1.00	0.00
Min, Max	-185.0, 164.0	-180.0, 128.0	-111.0, 88.0	-180.0, 128.0	-105.0, 66.0
Week 28					
n	667	628	609	1237	299
Mean	0.80	0.42	2.12	1.26	0.10
SD	17.142	9.253	13.457	11.543	16.232
Median	0.00	0.50	1.00	1.00	-1.00
Min, Max	-224.0, 168.0	-43.0, 73.0	-116.0, 146.0	-116.0, 146.0	-122.0, 174.0
Week 32					
n	647	625	604	1229	301
Mean	1.10	0.96	1.60	1.28	-0.04
SD	19.862	15.752	11.952	14.012	13.646
Median	0.00	0.00	1.00	1.00	-1.00
Min, Max	-221.0, 275.0	-197.0, 222.0	-114.0, 86.0	-197.0, 222.0	-118.0, 111.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	630	619	1249	309
Mean	0.81	1.27	2.06	1.66	-0.01
SD	13.936	18.662	10.795	15.277	13.361
Median	0.00	1.00	1.00	1.00	-1.00
Min, Max	-192.0, 117.0	-205.0, 329.0	-73.0, 57.0	-205.0, 329.0	-91.0, 90.0
Week 40					
n	631	605	601	1206	297
Mean	0.49	0.40	1.49	0.94	-0.37
SD	15.063	13.597	12.295	12.971	12.225
Median	0.00	0.00	1.00	0.00	-1.00
Min, Max	-215.0, 84.0	-205.0, 107.0	-113.0, 84.0	-205.0, 107.0	-72.0, 97.0
Week 44					
n	609	592	595	1187	296
Mean	1.16	0.67	2.70	1.69	-1.11
SD	16.674	13.831	15.536	14.740	12.169
Median	0.00	0.00	1.00	1.00	-1.00
Min, Max	-184.0, 193.0	-203.0, 153.0	-112.0, 161.0	-203.0, 161.0	-125.0, 80.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	602	608	1210	296
Mean	1.54	1.02	2.37	1.70	-0.68
SD	11.766	12.176	12.657	12.433	11.981
Median	0.00	1.00	1.00	1.00	-1.00
Min, Max	-86.0, 128.0	-200.0, 51.0	-112.0, 104.0	-200.0, 104.0	-115.0, 54.0
Week 52					
n	566	577	576	1153	288
Mean	0.63	0.48	2.06	1.27	0.03
SD	19.905	17.624	12.724	15.387	14.825
Median	0.00	0.00	1.00	0.00	-1.00
Min, Max	-260.0, 201.0	-200.0, 319.0	-109.0, 116.0	-200.0, 319.0	-68.0, 140.0
Week 56					
n	570	565	569	1134	284
Mean	1.12	0.41	1.93	1.17	-0.61
SD	13.433	16.060	12.627	14.453	12.661
Median	0.00	0.00	1.00	0.00	-1.00
Min, Max	-65.0, 142.0	-189.0, 262.0	-109.0, 117.0	-189.0, 262.0	-112.0, 71.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	562	579	588	1167	291
Mean	1.49	0.45	2.19	1.32	-0.66
SD	20.939	13.299	13.412	13.379	15.779
Median	0.00	0.00	1.00	1.00	-1.00
Min, Max	-123.0, 319.0	-191.0, 119.0	-116.0, 101.0	-191.0, 119.0	-153.0, 120.0
Week 64					
n	542	566	559	1125	271
Mean	0.45	0.57	2.58	1.57	-0.94
SD	14.732	13.685	15.084	14.426	13.526
Median	0.00	0.00	1.00	1.00	-1.00
Min, Max	-85.0, 160.0	-193.0, 133.0	-100.0, 140.0	-193.0, 140.0	-123.0, 76.0
Week 68					
n	525	556	552	1108	278
Mean	1.43	0.17	2.03	1.09	0.03
SD	15.774	12.356	13.471	12.951	15.412
Median	0.00	0.00	0.00	0.00	-1.00
Min, Max	-63.0, 151.0	-187.0, 99.0	-109.0, 87.0	-187.0, 99.0	-94.0, 142.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	568	567	1135	276
Mean	1.50	0.53	2.10	1.31	0.84
SD	14.364	11.440	13.166	12.352	21.435
Median	0.00	1.00	1.00	1.00	0.00
Min, Max	-64.0, 149.0	-152.0, 91.0	-108.0, 103.0	-152.0, 103.0	-136.0, 263.0
Week 76					
n	510	544	547	1091	266
Mean	0.52	0.15	1.74	0.95	-0.33
SD	13.187	13.344	12.991	13.187	16.505
Median	0.00	0.00	1.00	1.00	-1.00
Min, Max	-76.0, 129.0	-177.0, 118.0	-114.0, 114.0	-177.0, 118.0	-143.0, 84.0
Week 80					
n	508	540	533	1073	268
Mean	0.86	0.72	1.24	0.98	-0.51
SD	15.488	13.034	12.326	12.684	13.959
Median	0.00	0.00	1.00	0.00	-1.00
Min, Max	-74.0, 167.0	-164.0, 81.0	-112.0, 80.0	-164.0, 81.0	-135.0, 67.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	555	556	1111	271
Mean	0.97	0.50	2.00	1.25	-0.77
SD	14.865	12.350	12.352	12.368	14.199
Median	0.00	1.00	1.00	1.00	-1.00
Min, Max	-70.0, 167.0	-174.0, 82.0	-106.0, 90.0	-174.0, 90.0	-152.0, 66.0
Week 88					
n	503	532	534	1066	261
Mean	0.49	0.92	1.83	1.38	-0.64
SD	14.252	14.214	14.643	14.431	13.852
Median	0.00	0.00	1.00	0.00	0.00
Min, Max	-89.0, 156.0	-140.0, 115.0	-90.0, 129.0	-140.0, 129.0	-101.0, 79.0
Week 92					
n	489	523	523	1046	258
Mean	1.35	0.11	1.67	0.89	-0.84
SD	21.393	11.911	15.018	13.570	13.106
Median	0.00	0.00	1.00	0.00	-1.00
Min, Max	-183.0, 255.0	-174.0, 46.0	-100.0, 185.0	-174.0, 185.0	-117.0, 60.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	534	522	1056	262
Mean	1.68	0.71	1.70	1.20	0.17
SD	17.531	12.443	12.547	12.498	13.269
Median	0.00	1.00	1.00	1.00	0.00
Min, Max	-157.0, 142.0	-179.0, 47.0	-108.0, 90.0	-179.0, 90.0	-107.0, 78.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	736	718	715	1433	334
Mean	-1.23	-2.81	-3.35	-3.08	0.15
SD	22.846	20.860	22.437	21.656	17.186
Median	-2.00	-3.00	-4.00	-4.00	1.00
Min, Max	-106.0, 339.0	-118.0, 123.0	-124.0, 132.0	-124.0, 132.0	-63.0, 72.0
Week 8					
n	717	691	663	1354	323
Mean	-0.82	-4.52	-6.69	-5.58	-0.46
SD	21.334	19.892	20.074	20.003	20.001
Median	-1.00	-3.00	-7.00	-5.00	0.00
Min, Max	-110.0, 210.0	-153.0, 84.0	-127.0, 68.0	-153.0, 84.0	-154.0, 98.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	708	680	657	1337	324
Mean	-0.88	-5.18	-7.63	-6.38	-1.57
SD	20.788	19.343	20.072	19.735	20.156
Median	-1.00	-4.00	-7.00	-6.00	-0.50
Min, Max	-100.0, 185.0	-115.0, 57.0	-119.0, 69.0	-119.0, 69.0	-144.0, 65.0
Week 16					
n	693	653	640	1293	312
Mean	-2.05	-6.33	-7.03	-6.68	-2.76
SD	18.370	20.662	23.766	22.247	23.067
Median	-1.00	-6.00	-7.00	-7.00	-2.00
Min, Max	-124.0, 94.0	-143.0, 98.0	-133.0, 208.0	-143.0, 208.0	-133.0, 157.0
Week 20					
n	674	636	621	1257	310
Mean	-2.46	-6.99	-9.46	-8.21	-3.97
SD	18.651	22.016	19.922	21.035	21.030
Median	-2.00	-8.00	-9.00	-9.00	-3.00
Min, Max	-119.0, 60.0	-165.5, 117.0	-108.0, 48.0	-165.5, 117.0	-128.0, 51.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	669	646	611	1257	306
Mean	-2.02	-6.37	-7.85	-7.09	-2.05
SD	21.741	30.535	20.587	26.177	26.107
Median	-3.00	-7.00	-7.00	-7.00	-2.00
Min, Max	-121.0, 202.0	-139.0, 573.0	-124.0, 71.0	-139.0, 573.0	-135.0, 205.0
Week 28					
n	656	604	596	1200	296
Mean	-2.76	-6.65	-9.95	-8.29	-3.77
SD	27.348	26.776	21.687	24.427	26.705
Median	-3.00	-8.00	-9.00	-9.00	-3.50
Min, Max	-126.0, 459.0	-135.0, 311.0	-119.0, 86.0	-135.0, 311.0	-141.0, 169.0
Week 32					
n	629	608	591	1199	293
Mean	-1.99	-10.21	-11.27	-10.73	-2.99
SD	27.322	22.604	22.915	22.754	23.376
Median	-3.00	-10.00	-11.00	-11.00	-3.00
Min, Max	-111.0, 424.0	-174.0, 121.0	-149.0, 139.0	-174.0, 139.0	-131.0, 94.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	634	615	605	1220	306
Mean	-1.59	-7.31	-9.23	-8.26	-3.14
SD	18.921	21.112	22.428	21.787	22.214
Median	-1.00	-8.00	-9.00	-9.00	-3.00
Min, Max	-75.0, 79.0	-149.0, 103.0	-131.0, 185.0	-149.0, 185.0	-131.0, 119.0
Week 40					
n	617	593	578	1171	290
Mean	-2.90	-9.30	-11.63	-10.45	-3.67
SD	21.955	24.145	21.686	22.984	24.004
Median	-3.00	-10.00	-11.00	-10.00	-3.00
Min, Max	-125.0, 162.0	-150.0, 173.0	-144.0, 53.0	-150.0, 173.0	-121.0, 127.0
Week 44					
n	590	582	584	1166	292
Mean	-3.69	-10.49	-11.56	-11.03	-3.63
SD	21.396	20.534	23.620	22.130	22.581
Median	-4.00	-11.00	-12.00	-12.00	-2.00
Min, Max	-108.0, 147.0	-147.0, 65.0	-159.0, 221.0	-159.0, 221.0	-153.0, 75.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	590	588	595	1183	293
Mean	-1.94	-9.31	-8.39	-8.85	-1.48
SD	19.412	20.375	20.672	20.522	24.102
Median	-2.00	-9.00	-8.00	-9.00	-2.00
Min, Max	-112.0, 77.0	-152.0, 57.0	-80.0, 175.0	-152.0, 175.0	-134.0, 139.0
Week 52					
n	553	567	561	1128	285
Mean	-3.82	-10.42	-12.74	-11.57	-3.93
SD	21.462	19.795	20.172	20.008	31.353
Median	-4.00	-11.00	-11.00	-11.00	-4.00
Min, Max	-108.0, 136.0	-79.0, 100.0	-126.0, 73.0	-126.0, 100.0	-121.0, 357.0
Week 56					
n	551	551	556	1107	277
Mean	-3.59	-10.40	-12.96	-11.68	-4.02
SD	22.449	20.090	20.944	20.554	23.149
Median	-4.00	-11.00	-11.00	-11.00	-4.00
Min, Max	-130.0, 110.0	-90.0, 91.0	-147.0, 46.0	-147.0, 91.0	-124.0, 128.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	551	564	570	1134	287
Mean	-3.34	-9.32	-10.10	-9.71	-3.53
SD	19.285	19.995	20.488	20.239	21.202
Median	-3.00	-10.00	-8.00	-9.00	-3.00
Min, Max	-129.0, 76.0	-70.0, 97.0	-87.0, 56.0	-87.0, 97.0	-118.0, 62.0
Week 64					
n	526	552	547	1099	268
Mean	-3.59	-10.15	-12.82	-11.48	-6.93
SD	25.194	21.442	22.588	22.050	21.533
Median	-5.00	-12.00	-12.00	-12.00	-5.00
Min, Max	-127.0, 269.0	-78.0, 126.0	-125.0, 86.0	-125.0, 126.0	-131.0, 50.0
Week 68					
n	515	543	539	1082	271
Mean	-3.25	-10.36	-11.83	-11.09	-6.46
SD	24.503	21.654	22.613	22.139	21.532
Median	-5.00	-11.00	-11.00	-11.00	-6.00
Min, Max	-118.0, 194.0	-97.0, 80.0	-116.0, 96.0	-116.0, 96.0	-102.0, 78.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	513	558	552	1110	267
Mean	-3.02	-8.02	-9.96	-8.99	-3.47
SD	20.206	20.142	20.953	20.563	26.245
Median	-3.00	-8.00	-10.00	-9.00	-5.00
Min, Max	-82.0, 72.0	-71.0, 73.0	-101.0, 63.0	-101.0, 73.0	-106.0, 179.0
Week 76					
n	498	535	539	1074	262
Mean	-4.03	-8.58	-10.41	-9.50	-5.10
SD	22.301	23.294	23.536	23.423	27.552
Median	-4.00	-10.00	-11.00	-10.00	-5.00
Min, Max	-123.0, 113.0	-89.0, 194.0	-110.0, 128.0	-110.0, 194.0	-122.0, 220.0
Week 80					
n	499	530	522	1052	260
Mean	-4.79	-9.79	-10.57	-10.18	-4.22
SD	21.643	20.157	24.099	22.193	26.027
Median	-5.00	-11.00	-11.00	-11.00	-3.00
Min, Max	-126.0, 142.0	-74.0, 62.0	-131.0, 123.0	-131.0, 123.0	-133.0, 178.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	504	545	546	1091	265
Mean	-3.25	-7.83	-9.65	-8.74	-5.27
SD	22.148	21.603	21.964	21.794	25.833
Median	-4.00	-8.00	-9.00	-9.00	-4.00
Min, Max	-107.0, 146.0	-75.0, 148.0	-145.0, 91.0	-145.0, 148.0	-135.0, 157.0
Week 88					
n	494	524	528	1052	256
Mean	-2.81	-9.75	-11.20	-10.48	-4.27
SD	22.392	24.053	23.934	23.993	23.508
Median	-4.00	-12.00	-12.00	-12.00	-4.00
Min, Max	-115.0, 76.0	-74.0, 216.0	-138.0, 176.0	-138.0, 216.0	-112.0, 85.0
Week 92					
n	477	512	510	1022	255
Mean	-3.56	-9.80	-11.62	-10.71	-7.11
SD	22.126	22.471	22.499	22.493	23.858
Median	-5.00	-10.00	-12.00	-11.00	-6.00
Min, Max	-122.0, 72.0	-82.0, 249.0	-143.0, 68.0	-143.0, 249.0	-124.0, 54.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	481	522	511	1033	255
Mean	-1.19	-7.99	-10.13	-9.05	-4.10
SD	21.412	20.772	21.583	21.194	22.687
Median	-1.00	-9.00	-10.00	-10.00	-1.00
Min, Max	-133.0, 92.0	-77.0, 104.0	-130.0, 101.0	-130.0, 104.0	-130.0, 52.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	734	732	1466	340
Mean	0.15	-0.07	-0.11	-0.09	-0.07
SD	0.956	1.101	1.079	1.090	1.148
Median	0.10	0.00	-0.10	-0.10	0.00
Min, Max	-2.8, 3.6	-5.4, 4.1	-3.4, 4.4	-5.4, 4.4	-3.9, 3.6
Week 8					
n	733	706	684	1390	329
Mean	0.10	-0.03	-0.07	-0.05	-0.01
SD	1.022	1.099	1.022	1.061	1.186
Median	0.10	0.00	-0.10	0.00	0.00
Min, Max	-3.6, 4.4	-4.7, 5.0	-3.3, 5.1	-4.7, 5.1	-6.4, 4.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	0.08	-0.03	-0.02	-0.02	-0.03
SD	1.011	1.072	1.053	1.062	1.162
Median	0.00	0.00	-0.10	0.00	0.00
Min, Max	-3.9, 2.9	-6.1, 2.9	-3.8, 6.4	-6.1, 6.4	-5.0, 3.6
Week 16					
n	708	664	652	1316	318
Mean	0.08	-0.01	0.03	0.01	-0.04
SD	1.039	1.150	1.081	1.116	1.135
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-3.1, 3.6	-5.7, 3.5	-3.0, 4.0	-5.7, 4.0	-5.0, 3.6
Week 20					
n	692	651	637	1288	314
Mean	0.09	0.05	-0.02	0.01	0.03
SD	1.072	1.182	1.082	1.134	1.202
Median	0.10	0.10	0.00	0.00	0.00
Min, Max	-3.7, 3.6	-5.7, 5.2	-3.3, 4.3	-5.7, 5.2	-4.6, 5.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	683	658	638	1296	317
Mean	0.08	0.03	-0.02	0.01	-0.03
SD	1.042	1.200	1.157	1.179	1.143
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-3.2, 3.9	-4.3, 5.0	-3.9, 4.6	-4.3, 5.0	-5.0, 3.5
Week 28					
n	667	627	609	1236	299
Mean	0.12	0.04	-0.03	0.01	-0.09
SD	1.065	1.171	1.084	1.129	1.146
Median	0.10	0.10	0.00	0.00	0.00
Min, Max	-3.2, 3.2	-6.1, 4.6	-3.7, 3.6	-6.1, 4.6	-6.8, 3.6
Week 32					
n	647	627	604	1231	302
Mean	0.14	0.09	0.00	0.04	-0.02
SD	1.081	1.153	1.114	1.135	1.056
Median	0.10	0.10	0.00	0.00	0.00
Min, Max	-3.7, 3.9	-5.7, 6.3	-3.8, 4.3	-5.7, 6.3	-3.4, 3.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	630	620	1250	309
Mean	0.13	0.03	0.03	0.03	0.03
SD	1.081	1.112	1.077	1.094	1.113
Median	0.10	0.00	0.00	0.00	0.00
Min, Max	-2.9, 5.0	-5.0, 3.6	-3.1, 5.7	-5.0, 5.7	-4.3, 3.5
Week 40					
n	631	606	600	1206	297
Mean	0.13	0.07	0.06	0.06	0.00
SD	1.103	1.172	1.196	1.184	1.166
Median	0.10	0.00	0.00	0.00	0.00
Min, Max	-2.9, 4.0	-5.4, 4.6	-4.1, 9.0	-5.4, 9.0	-5.7, 4.0
Week 44					
n	609	592	595	1187	296
Mean	0.11	0.05	0.01	0.03	0.00
SD	1.101	1.225	1.104	1.166	1.139
Median	0.10	0.00	0.00	0.00	0.00
Min, Max	-2.7, 4.1	-5.4, 5.7	-3.5, 4.6	-5.4, 5.7	-5.4, 5.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	604	608	1212	296
Mean	0.10	0.05	0.02	0.03	0.09
SD	1.061	1.166	1.111	1.138	1.124
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-3.2, 4.6	-5.5, 5.2	-3.7, 4.0	-5.5, 5.2	-4.6, 4.3
Week 52					
n	567	577	577	1154	288
Mean	0.13	0.10	0.06	0.08	0.03
SD	1.077	1.156	1.101	1.128	1.111
Median	0.10	0.10	0.10	0.10	0.10
Min, Max	-3.6, 5.1	-3.9, 3.9	-3.9, 5.0	-3.9, 5.0	-4.6, 3.6
Week 56					
n	570	564	569	1133	284
Mean	0.17	0.08	0.06	0.07	0.04
SD	1.120	1.231	1.145	1.188	1.234
Median	0.20	0.10	0.00	0.10	0.00
Min, Max	-4.6, 4.8	-5.0, 4.0	-3.4, 3.3	-5.0, 4.0	-5.0, 3.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	563	579	591	1170	291
Mean	0.15	0.16	0.13	0.14	0.01
SD	1.087	1.189	1.170	1.179	1.118
Median	0.20	0.10	0.00	0.10	0.10
Min, Max	-3.1, 5.0	-4.3, 3.9	-3.5, 3.9	-4.3, 3.9	-4.6, 3.6
Week 64					
n	542	567	559	1126	271
Mean	0.22	0.10	0.07	0.08	0.07
SD	1.086	1.130	1.166	1.147	1.200
Median	0.20	0.10	0.00	0.10	0.10
Min, Max	-3.8, 3.9	-5.0, 3.6	-4.0, 5.0	-5.0, 5.0	-5.4, 3.1
Week 68					
n	527	558	552	1110	278
Mean	0.19	0.11	-0.02	0.05	0.06
SD	1.182	1.211	1.123	1.170	1.162
Median	0.20	0.10	0.00	0.00	0.10
Min, Max	-3.6, 8.7	-6.1, 5.6	-4.0, 4.2	-6.1, 5.6	-5.0, 4.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	569	567	1136	276
Mean	0.20	0.12	0.04	0.08	0.07
SD	1.169	1.221	1.144	1.183	1.200
Median	0.20	0.10	0.00	0.00	0.00
Min, Max	-3.2, 5.0	-5.4, 5.4	-3.8, 3.7	-5.4, 5.4	-6.4, 3.9
Week 76					
n	511	546	548	1094	267
Mean	0.16	0.10	0.05	0.08	0.08
SD	1.106	1.197	1.092	1.145	1.257
Median	0.10	0.10	0.10	0.10	0.10
Min, Max	-3.7, 3.8	-5.0, 4.6	-3.8, 3.7	-5.0, 4.6	-6.1, 4.5
Week 80					
n	508	541	535	1076	268
Mean	0.21	0.14	0.13	0.14	0.13
SD	1.131	1.238	1.207	1.222	1.330
Median	0.20	0.20	0.10	0.15	0.30
Min, Max	-3.2, 5.2	-4.3, 8.8	-3.8, 3.7	-4.3, 8.8	-5.7, 3.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	556	555	1111	271
Mean	0.20	0.18	0.07	0.13	0.07
SD	1.123	1.167	1.208	1.188	1.261
Median	0.10	0.20	0.00	0.10	0.20
Min, Max	-4.0, 3.6	-4.6, 5.7	-3.3, 6.5	-4.6, 6.5	-4.2, 3.9
Week 88					
n	503	532	534	1066	262
Mean	0.23	0.14	0.09	0.11	0.03
SD	1.101	1.185	1.144	1.165	1.212
Median	0.20	0.10	0.00	0.10	0.20
Min, Max	-3.1, 5.0	-4.3, 3.9	-3.6, 2.9	-4.3, 3.9	-6.8, 3.4
Week 92					
n	489	524	524	1048	258
Mean	0.24	0.14	0.10	0.12	0.11
SD	1.129	1.149	1.123	1.136	1.242
Median	0.30	0.20	0.10	0.10	0.20
Min, Max	-3.1, 3.8	-5.0, 3.6	-6.8, 4.0	-6.8, 4.0	-5.7, 3.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	534	523	1057	263
Mean	0.23	0.08	0.06	0.07	0.17
SD	1.042	1.164	1.111	1.138	1.206
Median	0.20	0.10	0.00	0.00	0.20
Min, Max	-2.8, 3.8	-3.9, 4.7	-3.5, 4.8	-3.9, 4.8	-4.6, 3.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	734	732	1466	340
Mean	0.23	-4.50	-6.43	-5.46	-0.75
SD	6.899	9.596	7.684	8.744	7.728
Median	0.00	-5.00	-7.00	-6.00	0.00
Min, Max	-25.0, 26.5	-141.4, 60.0	-42.0, 26.5	-141.4, 60.0	-61.9, 17.7
Week 8					
n	733	706	684	1390	329
Mean	0.74	-5.05	-6.92	-5.97	-0.17
SD	9.939	9.185	7.544	8.467	11.610
Median	0.00	-5.00	-8.00	-6.00	0.00
Min, Max	-26.5, 188.0	-141.4, 39.0	-26.5, 38.0	-141.4, 39.0	-44.2, 148.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	0.51	-5.10	-6.96	-6.02	-0.11
SD	7.642	9.778	8.045	9.012	8.729
Median	0.00	-5.00	-8.00	-6.00	0.00
Min, Max	-25.0, 39.0	-141.4, 58.0	-26.5, 64.0	-141.4, 64.0	-61.9, 29.0
Week 16					
n	708	664	652	1316	318
Mean	0.62	-4.70	-6.77	-5.73	0.01
SD	7.657	12.293	8.856	10.775	8.861
Median	0.00	-5.00	-8.00	-7.00	0.00
Min, Max	-26.5, 35.4	-141.4, 188.0	-29.0, 92.0	-141.4, 188.0	-61.9, 34.0
Week 20					
n	692	651	637	1288	314
Mean	0.73	-5.37	-6.99	-6.18	-0.10
SD	7.731	9.275	7.721	8.577	9.168
Median	0.00	-6.00	-8.00	-7.00	0.00
Min, Max	-29.0, 59.0	-132.6, 40.0	-31.0, 26.0	-132.6, 40.0	-53.0, 70.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	683	658	638	1296	317
Mean	0.10	-5.34	-7.14	-6.23	-0.40
SD	7.750	8.040	8.407	8.269	9.830
Median	0.00	-5.00	-8.00	-7.00	0.00
Min, Max	-26.5, 25.0	-35.4, 23.0	-28.0, 37.0	-35.4, 37.0	-61.9, 71.0
Week 28					
n	667	627	610	1237	299
Mean	1.56	-3.46	-5.80	-4.61	0.46
SD	8.064	13.905	11.410	12.785	8.725
Median	0.00	-4.00	-7.00	-6.00	0.00
Min, Max	-17.7, 53.0	-132.6, 229.0	-29.0, 199.0	-132.6, 229.0	-61.9, 38.0
Week 32					
n	647	627	604	1231	302
Mean	1.77	-3.70	-6.18	-4.92	0.98
SD	8.299	15.749	9.241	13.025	9.129
Median	1.00	-4.00	-7.00	-5.00	0.00
Min, Max	-32.0, 56.0	-141.4, 308.0	-79.0, 52.0	-141.4, 308.0	-61.9, 36.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	629	619	1248	309
Mean	0.53	-4.31	-6.41	-5.35	0.27
SD	8.166	12.326	10.483	11.492	9.060
Median	0.00	-5.00	-8.00	-6.00	0.00
Min, Max	-26.5, 34.0	-132.6, 144.0	-33.0, 154.0	-132.6, 154.0	-61.9, 26.5
Week 40					
n	631	606	600	1206	297
Mean	1.71	-3.64	-4.86	-4.25	1.24
SD	7.707	9.684	11.126	10.440	8.933
Median	1.00	-4.00	-5.50	-5.00	1.00
Min, Max	-19.0, 29.0	-132.6, 31.0	-34.0, 170.0	-132.6, 170.0	-61.9, 42.0
Week 44					
n	609	592	595	1187	296
Mean	1.79	-3.87	-5.46	-4.67	0.77
SD	8.104	9.707	8.667	9.231	9.134
Median	1.00	-4.00	-6.00	-5.00	0.00
Min, Max	-26.5, 37.0	-141.4, 26.5	-30.0, 35.4	-141.4, 35.4	-61.9, 33.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	604	608	1212	296
Mean	0.63	-5.18	-6.52	-5.85	-0.53
SD	9.034	9.761	8.571	9.204	9.027
Median	0.00	-5.00	-7.00	-6.00	0.00
Min, Max	-26.5, 79.6	-132.6, 34.0	-35.4, 23.0	-132.6, 34.0	-70.7, 23.0
Week 52					
n	567	577	577	1154	288
Mean	2.00	-4.07	-5.50	-4.79	0.94
SD	9.007	9.836	8.664	9.292	9.532
Median	1.00	-4.00	-6.00	-5.00	1.00
Min, Max	-26.5, 97.2	-141.4, 22.0	-30.0, 31.0	-141.4, 31.0	-61.9, 21.0
Week 56					
n	570	565	569	1134	284
Mean	2.51	-3.72	-5.37	-4.55	1.04
SD	8.356	10.738	10.052	10.427	9.285
Median	2.00	-4.00	-6.00	-5.00	1.00
Min, Max	-21.0, 46.0	-141.4, 77.0	-35.0, 114.0	-141.4, 114.0	-61.9, 25.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	563	579	591	1170	291
Mean	0.91	-4.03	-5.77	-4.91	0.69
SD	8.643	9.262	8.804	9.072	8.912
Median	1.00	-5.00	-7.00	-6.00	0.00
Min, Max	-35.4, 37.0	-41.0, 52.0	-31.0, 42.0	-41.0, 52.0	-70.7, 35.4
Week 64					
n	542	567	559	1126	271
Mean	2.78	-3.69	-5.27	-4.47	1.86
SD	7.796	9.735	8.949	9.382	9.237
Median	3.00	-3.00	-6.00	-4.00	2.00
Min, Max	-29.0, 26.5	-132.6, 28.0	-31.0, 35.4	-132.6, 35.4	-53.0, 45.0
Week 68					
n	527	558	552	1110	278
Mean	3.17	-3.28	-5.69	-4.48	1.57
SD	13.058	10.467	8.068	9.424	10.367
Median	3.00	-3.00	-6.50	-4.00	2.00
Min, Max	-47.0, 226.0	-132.6, 71.0	-29.0, 26.5	-132.6, 71.0	-61.9, 26.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	569	567	1136	276
Mean	1.51	-4.16	-5.95	-5.05	0.56
SD	7.962	8.380	9.953	9.238	8.601
Median	1.00	-4.00	-7.00	-5.00	0.00
Min, Max	-35.4, 26.5	-40.0, 35.4	-34.0, 117.0	-40.0, 117.0	-53.0, 26.5
Week 76					
n	511	546	548	1094	267
Mean	3.18	-3.34	-4.81	-4.08	1.61
SD	8.353	10.323	8.809	9.618	9.743
Median	3.00	-4.00	-5.00	-4.00	1.00
Min, Max	-35.0, 35.4	-132.6, 45.0	-36.0, 27.0	-132.6, 45.0	-61.9, 26.5
Week 80					
n	508	541	535	1076	268
Mean	2.91	-2.06	-4.59	-3.32	1.59
SD	9.015	21.075	9.620	16.453	8.964
Median	3.00	-2.00	-5.00	-4.00	2.00
Min, Max	-33.0, 44.2	-132.6, 427.0	-33.0, 76.0	-132.6, 427.0	-53.0, 24.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	556	555	1111	271
Mean	2.56	-3.94	-5.82	-4.88	1.85
SD	11.519	9.914	8.559	9.305	11.537
Median	2.00	-3.00	-6.00	-5.00	1.00
Min, Max	-26.5, 185.6	-132.6, 26.5	-34.0, 34.0	-132.6, 34.0	-29.0, 146.0
Week 88					
n	503	532	535	1067	262
Mean	3.08	-2.91	-5.01	-3.96	2.08
SD	8.104	9.702	8.575	9.210	9.434
Median	3.00	-3.00	-6.00	-4.00	2.00
Min, Max	-34.0, 26.0	-123.8, 21.0	-33.0, 36.0	-123.8, 36.0	-61.9, 45.0
Week 92					
n	489	524	524	1048	258
Mean	3.07	-3.01	-5.08	-4.04	2.37
SD	8.325	10.499	8.386	9.553	9.685
Median	3.00	-2.00	-5.00	-4.00	2.00
Min, Max	-26.5, 35.4	-132.6, 44.2	-30.0, 23.0	-132.6, 44.2	-61.9, 37.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	534	523	1057	263
Mean	1.96	-3.89	-5.68	-4.77	1.79
SD	8.106	10.069	8.784	9.493	8.899
Median	1.50	-4.00	-7.00	-5.00	2.00
Min, Max	-26.5, 27.0	-132.6, 23.0	-37.0, 26.5	-132.6, 26.5	-61.9, 26.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	734	732	1466	339
Mean	-0.22	0.03	0.06	0.04	0.02
SD	2.582	2.361	2.830	2.605	2.353
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-25.0, 16.0	-10.0, 11.0	-39.0, 9.0	-39.0, 11.0	-9.0, 11.0
Week 8					
n	732	705	684	1389	329
Mean	-0.16	-0.10	-0.09	-0.10	-0.19
SD	2.482	2.439	2.640	2.539	2.456
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-19.0, 15.0	-13.0, 13.0	-30.0, 9.0	-30.0, 13.0	-9.0, 9.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	-0.21	-0.10	-0.07	-0.09	0.17
SD	2.620	2.435	2.442	2.437	2.639
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-23.0, 16.0	-10.0, 13.0	-9.0, 11.0	-10.0, 13.0	-10.0, 14.0
Week 16					
n	707	664	652	1316	317
Mean	-0.29	-0.11	-0.09	-0.10	-0.14
SD	2.518	2.330	2.548	2.440	2.715
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-24.0, 8.0	-9.0, 9.0	-10.0, 14.0	-10.0, 14.0	-10.0, 15.0
Week 20					
n	691	651	637	1288	314
Mean	-0.23	-0.30	-0.23	-0.27	-0.18
SD	2.758	2.456	2.483	2.468	2.331
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-22.0, 16.0	-12.0, 9.0	-8.0, 9.0	-12.0, 9.0	-8.0, 9.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	683	658	638	1296	316
Mean	-0.13	-0.16	0.00	-0.08	-0.02
SD	2.498	2.342	2.600	2.473	2.575
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-11.0, 10.0	-8.0, 12.0	-8.0, 15.0	-8.0, 15.0	-8.0, 12.0
Week 28					
n	667	628	610	1238	299
Mean	-0.34	-0.23	-0.07	-0.15	-0.15
SD	2.538	2.590	2.553	2.572	2.669
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-13.0, 7.0	-11.0, 8.0	-11.0, 11.0	-11.0, 11.0	-9.0, 9.0
Week 32					
n	646	626	603	1229	302
Mean	-0.18	-0.29	-0.20	-0.25	-0.26
SD	2.629	2.576	2.656	2.615	2.760
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.0, 14.0	-11.0, 9.0	-20.0, 12.0	-20.0, 12.0	-10.0, 10.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	629	619	1248	309
Mean	-0.35	-0.28	-0.20	-0.24	-0.04
SD	2.674	2.311	2.499	2.406	2.494
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-32.0, 8.0	-9.0, 7.0	-10.0, 11.0	-10.0, 11.0	-10.0, 9.0
Week 40					
n	631	606	600	1206	297
Mean	-0.21	-0.18	-0.11	-0.15	-0.46
SD	2.606	2.665	2.524	2.595	2.815
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-10.0, 10.0	-10.0, 10.0	-9.0, 9.0	-10.0, 10.0	-16.0, 6.0
Week 44					
n	608	589	595	1184	296
Mean	-0.27	-0.32	0.02	-0.15	-0.51
SD	2.710	2.632	2.584	2.613	2.567
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-16.0, 12.0	-10.0, 10.0	-7.0, 12.0	-10.0, 12.0	-9.0, 7.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	604	608	1212	296
Mean	-0.39	-0.20	-0.09	-0.14	-0.36
SD	2.453	2.973	2.650	2.815	2.358
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-14.0, 11.0	-42.0, 15.0	-10.0, 14.0	-42.0, 15.0	-9.0, 5.0
Week 52					
n	567	577	576	1153	288
Mean	-0.25	-0.31	-0.19	-0.25	-0.20
SD	2.619	2.465	2.506	2.485	2.662
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-11.0, 13.0	-10.0, 8.0	-7.0, 11.0	-10.0, 11.0	-9.0, 6.5
Week 56					
n	570	564	569	1133	284
Mean	-0.29	-0.22	-0.16	-0.19	-0.33
SD	2.608	2.427	2.621	2.525	2.588
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.0, 9.0	-7.0, 9.0	-7.0, 9.0	-7.0, 9.0	-8.0, 9.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	563	579	589	1168	291
Mean	-0.43	-0.29	-0.14	-0.21	-0.31
SD	2.605	2.412	2.586	2.501	2.539
Median	-0.50	0.00	0.00	0.00	0.00
Min, Max	-19.0, 7.0	-8.0, 10.0	-12.0, 12.0	-12.0, 12.0	-9.0, 12.0
Week 64					
n	542	567	558	1125	271
Mean	-0.24	-0.18	-0.24	-0.21	-0.12
SD	2.613	2.542	2.503	2.522	2.723
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.0, 12.0	-11.0, 8.0	-7.0, 9.0	-11.0, 9.0	-9.0, 15.0
Week 68					
n	527	558	551	1109	278
Mean	-0.27	-0.30	-0.37	-0.34	-0.27
SD	2.529	2.501	2.798	2.652	2.699
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.0, 12.0	-10.0, 10.0	-10.0, 26.0	-10.0, 26.0	-10.0, 11.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	568	567	1135	276
Mean	-0.26	-0.12	-0.32	-0.22	-0.05
SD	2.507	2.511	2.428	2.471	2.749
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.0, 13.0	-10.0, 12.0	-9.0, 8.0	-10.0, 12.0	-12.0, 12.0
Week 76					
n	511	544	548	1092	265
Mean	-0.29	-0.36	-0.18	-0.27	-0.32
SD	2.430	2.488	2.729	2.612	2.534
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.0, 8.0	-12.0, 7.0	-12.0, 12.0	-12.0, 12.0	-11.0, 6.0
Week 80					
n	508	541	534	1075	268
Mean	-0.36	-0.40	-0.28	-0.34	-0.24
SD	2.572	2.705	2.679	2.692	2.366
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-10.0, 16.0	-12.0, 17.0	-13.0, 12.0	-13.0, 17.0	-8.0, 6.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	556	556	1112	271
Mean	-0.24	-0.28	-0.31	-0.30	0.09
SD	2.460	2.416	2.571	2.494	2.885
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-7.0, 10.0	-8.0, 9.0	-13.0, 7.0	-13.0, 9.0	-9.0, 15.0
Week 88					
n	503	532	534	1066	262
Mean	-0.24	-0.41	-0.20	-0.30	-0.37
SD	2.440	2.599	2.582	2.591	2.659
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.0, 9.0	-10.0, 13.0	-12.0, 11.0	-12.0, 13.0	-9.0, 10.0
Week 92					
n	489	523	524	1047	258
Mean	-0.54	-0.46	-0.22	-0.34	-0.29
SD	2.455	2.599	2.611	2.607	2.807
Median	0.00	-1.00	0.00	0.00	0.00
Min, Max	-10.0, 7.0	-12.0, 8.0	-14.0, 9.0	-14.0, 9.0	-10.0, 11.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	533	523	1056	263
Mean	-0.10	-0.12	-0.14	-0.13	-0.24
SD	2.499	2.491	2.539	2.514	2.724
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.0, 13.0	-10.0, 16.0	-9.0, 7.0	-10.0, 16.0	-9.0, 12.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	752	730	729	1459	339
Mean	0.02	0.07	0.05	0.06	0.00
SD	0.387	0.400	0.391	0.396	0.428
Median	0.00	0.10	0.10	0.10	0.00
Min, Max	-1.4, 1.6	-1.6, 2.2	-1.3, 1.3	-1.6, 2.2	-1.7, 1.4
Week 8					
n	730	703	682	1385	328
Mean	0.01	0.06	0.04	0.05	0.03
SD	0.453	0.399	0.421	0.410	0.398
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.7, 6.6	-1.2, 2.1	-1.6, 1.7	-1.6, 2.1	-1.4, 1.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	690	670	1360	328
Mean	0.01	0.06	0.03	0.05	0.03
SD	0.405	0.419	0.412	0.415	0.414
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.6, 2.4	-1.4, 1.4	-1.2, 2.0	-1.4, 2.0	-1.6, 1.3
Week 16					
n	707	663	649	1312	316
Mean	0.04	0.08	0.06	0.07	0.05
SD	0.408	0.398	0.433	0.415	0.429
Median	0.00	0.10	0.00	0.00	0.00
Min, Max	-1.6, 1.6	-1.0, 1.7	-1.4, 1.9	-1.4, 1.9	-1.1, 1.9
Week 20					
n	689	646	635	1281	313
Mean	0.04	0.05	0.03	0.04	0.06
SD	0.411	0.402	0.421	0.411	0.431
Median	0.00	0.00	0.00	0.00	0.10
Min, Max	-1.7, 1.4	-1.5, 1.7	-1.4, 1.6	-1.5, 1.7	-1.8, 1.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	680	657	634	1291	314
Mean	0.02	0.07	0.05	0.06	0.02
SD	0.405	0.401	0.416	0.409	0.445
Median	0.00	0.10	0.00	0.00	0.00
Min, Max	-1.4, 1.5	-1.0, 1.5	-1.1, 1.3	-1.1, 1.5	-1.8, 1.6
Week 28					
n	665	623	609	1232	297
Mean	0.01	0.08	0.03	0.06	0.03
SD	0.478	0.416	0.500	0.460	0.453
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.2, 6.1	-1.0, 1.5	-1.9, 6.3	-1.9, 6.3	-1.3, 1.8
Week 32					
n	645	620	603	1223	297
Mean	-0.02	0.04	0.02	0.03	0.03
SD	0.429	0.445	0.496	0.471	0.497
Median	-0.10	0.00	0.00	0.00	0.00
Min, Max	-1.4, 1.6	-1.5, 1.7	-1.3, 6.3	-1.5, 6.3	-1.2, 2.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	652	626	618	1244	309
Mean	0.03	0.06	0.05	0.05	0.04
SD	0.414	0.404	0.414	0.409	0.418
Median	0.00	0.10	0.00	0.00	0.00
Min, Max	-1.3, 1.6	-1.3, 1.4	-1.2, 1.6	-1.3, 1.6	-1.0, 1.4
Week 40					
n	631	605	595	1200	296
Mean	-0.03	0.04	0.02	0.03	0.04
SD	0.412	0.429	0.416	0.422	0.437
Median	-0.10	0.00	0.00	0.00	0.00
Min, Max	-1.6, 1.3	-1.1, 1.4	-1.2, 1.9	-1.2, 1.9	-1.5, 1.5
Week 44					
n	605	589	593	1182	294
Mean	-0.01	0.02	0.03	0.03	-0.01
SD	0.417	0.442	0.433	0.437	0.454
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.6, 1.5	-1.8, 1.5	-1.4, 1.5	-1.8, 1.5	-1.2, 1.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	600	601	606	1207	295
Mean	-0.03	0.01	-0.01	0.00	-0.03
SD	0.470	0.391	0.387	0.389	0.418
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.5, 6.3	-1.6, 1.3	-1.3, 1.7	-1.6, 1.7	-2.1, 1.2
Week 52					
n	561	576	573	1149	287
Mean	-0.01	0.02	0.03	0.02	0.00
SD	0.417	0.431	0.434	0.432	0.485
Median	0.00	0.00	0.00	0.00	-0.10
Min, Max	-1.2, 1.2	-1.3, 1.4	-1.4, 1.7	-1.4, 1.7	-1.5, 2.3
Week 56					
n	568	562	566	1128	281
Mean	-0.04	0.05	-0.01	0.02	0.01
SD	0.418	0.442	0.442	0.443	0.434
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.4, 1.6	-1.7, 1.7	-2.0, 1.5	-2.0, 1.7	-1.5, 1.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	561	577	586	1163	290
Mean	0.01	0.06	0.07	0.06	0.04
SD	0.424	0.410	0.437	0.424	0.450
Median	0.00	0.10	0.00	0.00	0.00
Min, Max	-1.2, 1.4	-1.3, 1.5	-1.3, 1.8	-1.3, 1.8	-1.3, 1.9
Week 64					
n	539	563	555	1118	270
Mean	-0.03	0.05	0.00	0.02	0.02
SD	0.431	0.412	0.437	0.425	0.445
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.7, 1.4	-1.2, 1.3	-1.6, 1.5	-1.6, 1.5	-1.4, 1.2
Week 68					
n	524	551	550	1101	277
Mean	-0.05	0.04	0.02	0.03	0.05
SD	0.453	0.422	0.439	0.430	0.510
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.7, 1.4	-1.1, 1.6	-1.5, 1.7	-1.5, 1.7	-1.4, 2.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	567	564	1131	275
Mean	-0.03	0.06	0.03	0.04	0.04
SD	0.406	0.403	0.418	0.411	0.472
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.4, 1.8	-1.1, 1.5	-1.7, 2.0	-1.7, 2.0	-1.9, 2.0
Week 76					
n	509	542	546	1088	262
Mean	-0.04	0.04	0.03	0.03	0.02
SD	0.438	0.430	0.430	0.430	0.459
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.5, 1.4	-1.1, 1.5	-1.7, 1.5	-1.7, 1.5	-1.2, 1.7
Week 80					
n	507	539	529	1068	268
Mean	-0.04	0.02	0.01	0.01	0.02
SD	0.431	0.460	0.452	0.456	0.514
Median	-0.10	0.00	0.00	0.00	0.00
Min, Max	-1.5, 1.2	-1.2, 1.9	-1.4, 1.8	-1.4, 1.9	-1.2, 2.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	514	552	555	1107	271
Mean	0.01	0.08	0.04	0.06	0.07
SD	0.430	0.423	0.428	0.426	0.446
Median	0.00	0.10	0.00	0.10	0.00
Min, Max	-1.5, 1.6	-1.3, 1.6	-2.1, 1.7	-2.1, 1.7	-1.4, 1.5
Week 88					
n	502	531	534	1065	260
Mean	-0.03	0.04	0.00	0.02	0.03
SD	0.429	0.436	0.431	0.434	0.447
Median	-0.10	0.00	0.00	0.00	0.00
Min, Max	-1.5, 1.9	-1.6, 1.4	-1.9, 1.8	-1.9, 1.8	-1.4, 2.0
Week 92					
n	487	521	523	1044	257
Mean	-0.03	0.04	0.03	0.03	0.03
SD	0.430	0.455	0.462	0.458	0.483
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.4, 1.3	-1.3, 1.9	-1.9, 1.9	-1.9, 1.9	-1.3, 1.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	486	530	522	1052	262
Mean	-0.04	0.03	-0.02	0.01	-0.04
SD	0.408	0.403	0.419	0.411	0.431
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.3, 1.6	-1.1, 1.4	-1.4, 1.4	-1.4, 1.4	-1.3, 1.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	734	732	1466	339
Mean	0.11	-0.05	-0.12	-0.08	0.13
SD	2.459	2.293	2.580	2.440	2.182
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-20.0, 18.0	-7.0, 8.0	-28.0, 8.0	-28.0, 8.0	-9.0, 8.0
Week 8					
n	732	705	684	1389	329
Mean	0.16	-0.27	-0.19	-0.23	0.24
SD	2.346	2.353	2.503	2.428	2.505
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-17.0, 10.0	-10.0, 8.0	-25.0, 7.0	-25.0, 8.0	-6.0, 10.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	0.12	-0.33	-0.17	-0.25	0.44
SD	2.475	2.339	2.346	2.343	2.412
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-19.0, 9.0	-9.0, 12.0	-7.0, 14.0	-9.0, 14.0	-7.0, 13.0
Week 16					
n	707	664	652	1316	317
Mean	0.09	-0.32	-0.29	-0.30	0.22
SD	2.387	2.320	2.320	2.319	2.404
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-21.0, 8.0	-9.0, 8.0	-7.0, 12.0	-9.0, 12.0	-6.0, 8.0
Week 20					
n	691	651	637	1288	314
Mean	0.12	-0.40	-0.36	-0.38	0.09
SD	2.736	2.461	2.312	2.387	2.233
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-19.0, 13.0	-8.0, 9.0	-8.0, 7.0	-8.0, 9.0	-7.0, 7.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	683	658	638	1296	316
Mean	0.15	-0.32	-0.28	-0.30	0.32
SD	2.383	2.472	2.437	2.454	2.509
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.0, 10.0	-9.0, 11.0	-10.0, 14.0	-10.0, 14.0	-7.0, 12.0
Week 28					
n	667	628	610	1238	299
Mean	-0.01	-0.47	-0.44	-0.46	0.19
SD	2.384	2.557	2.279	2.423	2.549
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-10.0, 8.0	-8.0, 10.0	-8.0, 9.0	-8.0, 10.0	-8.0, 7.0
Week 32					
n	646	626	604	1230	302
Mean	0.02	-0.61	-0.41	-0.51	0.06
SD	2.490	2.471	2.516	2.494	2.545
Median	0.00	-1.00	0.00	0.00	0.00
Min, Max	-10.0, 14.5	-8.0, 6.0	-13.0, 14.0	-13.0, 14.0	-8.0, 7.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	629	620	1249	309
Mean	-0.08	-0.52	-0.36	-0.44	0.28
SD	2.476	2.328	2.284	2.307	2.245
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-23.0, 9.0	-7.0, 7.0	-9.0, 10.0	-9.0, 10.0	-6.0, 7.0
Week 40					
n	631	606	600	1206	297
Mean	-0.15	-0.46	-0.36	-0.41	-0.06
SD	2.458	2.448	2.354	2.401	2.632
Median	0.00	-1.00	0.00	0.00	0.00
Min, Max	-10.0, 8.0	-10.0, 9.0	-8.0, 8.0	-10.0, 9.0	-12.0, 8.0
Week 44					
n	609	590	595	1185	296
Mean	-0.02	-0.52	-0.32	-0.42	0.06
SD	2.598	2.469	2.482	2.476	2.364
Median	0.00	-1.00	0.00	0.00	0.00
Min, Max	-14.0, 11.0	-9.0, 8.0	-8.0, 9.0	-9.0, 9.0	-8.0, 8.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	604	608	1212	296
Mean	-0.22	-0.55	-0.39	-0.47	0.16
SD	2.521	2.745	2.531	2.640	2.212
Median	0.00	-1.00	0.00	0.00	0.00
Min, Max	-15.0, 10.0	-33.0, 8.0	-10.0, 13.0	-33.0, 13.0	-8.0, 6.0
Week 52					
n	567	577	576	1153	288
Mean	-0.01	-0.46	-0.42	-0.44	0.29
SD	2.486	2.600	2.293	2.450	2.427
Median	0.00	0.00	0.00	0.00	1.00
Min, Max	-11.0, 7.0	-9.0, 10.0	-9.0, 11.0	-9.0, 11.0	-6.0, 8.0
Week 56					
n	570	564	569	1133	284
Mean	-0.16	-0.43	-0.37	-0.40	0.17
SD	2.550	2.515	2.552	2.533	2.326
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-10.0, 7.0	-9.0, 12.0	-11.0, 9.0	-11.0, 12.0	-6.0, 7.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	563	579	589	1168	291
Mean	-0.06	-0.22	-0.22	-0.22	0.28
SD	2.633	2.358	2.468	2.413	2.457
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-14.0, 10.0	-8.0, 7.0	-8.0, 8.0	-8.0, 8.0	-7.0, 12.0
Week 64					
n	542	567	558	1125	271
Mean	-0.01	-0.40	-0.51	-0.46	0.16
SD	2.687	2.509	2.560	2.534	2.492
Median	0.00	0.00	-1.00	0.00	0.00
Min, Max	-11.0, 15.0	-9.0, 9.0	-7.0, 8.0	-9.0, 9.0	-5.0, 11.0
Week 68					
n	527	558	551	1109	278
Mean	-0.13	-0.50	-0.50	-0.50	0.07
SD	2.493	2.512	2.554	2.532	2.371
Median	0.00	0.00	-1.00	-1.00	0.00
Min, Max	-8.0, 8.0	-9.0, 8.0	-10.0, 19.0	-10.0, 19.0	-6.0, 9.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	568	567	1135	276
Mean	-0.02	-0.35	-0.30	-0.33	0.26
SD	2.580	2.359	2.390	2.374	2.517
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.0, 13.0	-7.0, 11.0	-8.0, 7.0	-8.0, 11.0	-8.0, 9.0
Week 76					
n	510	544	548	1092	265
Mean	-0.09	-0.53	-0.44	-0.48	-0.05
SD	2.500	2.529	2.510	2.519	2.472
Median	0.00	-0.75	0.00	0.00	0.00
Min, Max	-8.0, 8.0	-12.0, 8.0	-12.0, 7.0	-12.0, 8.0	-8.0, 7.0
Week 80					
n	508	541	534	1075	268
Mean	-0.04	-0.43	-0.40	-0.42	0.14
SD	2.447	2.606	2.550	2.577	2.453
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.0, 9.0	-12.0, 12.0	-12.0, 9.0	-12.0, 12.0	-9.0, 8.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	556	556	1112	271
Mean	0.05	-0.22	-0.28	-0.25	0.40
SD	2.537	2.464	2.519	2.491	2.435
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-10.0, 12.0	-8.0, 9.0	-13.0, 9.0	-13.0, 9.0	-6.0, 8.0
Week 88					
n	503	532	534	1066	262
Mean	0.06	-0.38	-0.26	-0.32	0.08
SD	2.535	2.568	2.584	2.576	2.429
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.0, 10.0	-9.0, 11.0	-10.0, 12.0	-10.0, 12.0	-8.0, 7.0
Week 92					
n	489	523	524	1047	258
Mean	-0.30	-0.48	-0.37	-0.43	0.00
SD	2.450	2.527	2.481	2.504	2.578
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-10.0, 7.0	-10.0, 9.0	-13.0, 12.0	-13.0, 12.0	-11.0, 9.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	533	523	1056	263
Mean	-0.03	-0.29	-0.25	-0.27	-0.09
SD	2.516	2.527	2.441	2.483	2.260
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.0, 13.0	-10.0, 12.0	-9.0, 8.0	-10.0, 12.0	-7.0, 10.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	752	731	727	1458	335
Mean	0.17	0.53	0.52	0.53	0.16
SD	2.621	2.751	2.719	2.735	2.882
Median	0.20	0.50	0.60	0.50	0.20
Min, Max	-9.7, 8.5	-10.7, 10.3	-8.3, 8.3	-10.7, 10.3	-8.0, 9.3
Week 8					
n	730	701	679	1380	327
Mean	0.09	0.59	0.46	0.53	0.07
SD	2.743	2.675	2.765	2.719	2.707
Median	0.20	0.60	0.40	0.50	0.10
Min, Max	-10.1, 10.9	-8.6, 9.2	-8.1, 10.1	-8.6, 10.1	-7.5, 7.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	718	689	668	1357	322
Mean	0.13	0.49	0.40	0.44	0.11
SD	2.794	2.825	2.881	2.852	2.949
Median	0.15	0.50	0.50	0.50	0.20
Min, Max	-13.9, 9.9	-10.8, 10.4	-11.1, 8.9	-11.1, 10.4	-9.2, 10.0
Week 16					
n	706	659	646	1305	313
Mean	0.29	0.58	0.56	0.57	0.44
SD	2.887	2.812	2.817	2.813	2.903
Median	0.40	0.60	0.85	0.70	0.50
Min, Max	-9.9, 10.4	-8.9, 11.5	-10.4, 9.3	-10.4, 11.5	-9.6, 8.8
Week 20					
n	688	643	632	1275	311
Mean	0.45	0.54	0.65	0.60	0.26
SD	2.757	2.878	2.796	2.837	2.933
Median	0.50	0.70	0.75	0.70	0.50
Min, Max	-8.7, 8.3	-18.7, 12.3	-10.4, 10.3	-18.7, 12.3	-9.7, 7.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	680	654	631	1285	315
Mean	0.11	0.55	0.71	0.63	0.23
SD	2.883	2.930	2.926	2.928	2.884
Median	0.10	0.60	0.70	0.60	0.20
Min, Max	-12.2, 8.1	-10.1, 10.4	-9.1, 10.7	-10.1, 10.7	-9.1, 8.0
Week 28					
n	661	622	601	1223	297
Mean	-1.45	-1.19	-1.25	-1.22	-1.54
SD	3.093	3.127	3.190	3.157	2.840
Median	-1.50	-1.30	-1.50	-1.40	-1.70
Min, Max	-10.9, 9.2	-13.4, 12.5	-11.5, 8.2	-13.4, 12.5	-10.7, 9.5
Week 32					
n	641	623	602	1225	297
Mean	-1.66	-1.12	-1.10	-1.11	-1.50
SD	3.096	3.215	3.041	3.129	3.087
Median	-1.80	-1.30	-1.35	-1.30	-1.70
Min, Max	-12.7, 8.4	-10.1, 10.0	-8.2, 10.0	-10.1, 10.0	-13.5, 10.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	650	626	614	1240	306
Mean	0.11	0.45	0.55	0.50	0.47
SD	3.050	2.990	2.966	2.977	2.775
Median	0.20	0.50	0.50	0.50	0.45
Min, Max	-10.6, 10.1	-9.3, 11.8	-8.8, 15.2	-9.3, 15.2	-7.0, 10.5
Week 40					
n	628	605	598	1203	295
Mean	-1.31	-1.20	-1.19	-1.20	-1.48
SD	3.021	3.002	3.148	3.074	3.061
Median	-1.60	-1.40	-1.20	-1.30	-1.70
Min, Max	-11.3, 9.8	-9.6, 10.0	-12.6, 8.7	-12.6, 10.0	-9.8, 11.2
Week 44					
n	608	583	591	1174	295
Mean	-1.53	-1.23	-0.98	-1.11	-1.64
SD	2.915	3.002	2.939	2.971	2.845
Median	-1.70	-1.30	-1.20	-1.20	-1.90
Min, Max	-10.6, 9.8	-10.4, 8.8	-8.8, 8.8	-10.4, 8.8	-11.3, 10.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	602	600	604	1204	296
Mean	-0.10	0.29	0.39	0.34	-0.09
SD	2.758	2.999	2.848	2.923	2.747
Median	-0.10	0.30	0.40	0.30	-0.20
Min, Max	-9.4, 8.6	-10.2, 9.8	-11.4, 10.1	-11.4, 10.1	-11.8, 9.7
Week 52					
n	557	574	572	1146	286
Mean	-1.48	-1.27	-1.08	-1.17	-1.89
SD	2.989	2.999	2.887	2.944	2.861
Median	-1.60	-1.50	-1.20	-1.30	-1.90
Min, Max	-11.1, 10.0	-9.0, 8.5	-10.5, 9.7	-10.5, 9.7	-11.3, 10.4
Week 56					
n	566	558	563	1121	282
Mean	-1.46	-1.09	-1.21	-1.15	-1.73
SD	3.015	2.954	3.093	3.024	2.777
Median	-1.50	-1.25	-1.30	-1.30	-1.80
Min, Max	-10.6, 9.8	-9.2, 10.8	-11.1, 8.1	-11.1, 10.8	-8.5, 9.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	561	577	587	1164	287
Mean	0.13	0.29	0.22	0.25	-0.19
SD	2.985	2.901	2.963	2.932	3.109
Median	0.20	0.30	0.40	0.30	0.00
Min, Max	-9.9, 9.4	-8.9, 9.6	-10.4, 9.8	-10.4, 9.8	-10.2, 7.3
Week 64					
n	538	562	549	1111	267
Mean	-1.50	-1.21	-1.23	-1.22	-1.56
SD	2.980	2.745	2.944	2.843	3.059
Median	-1.60	-1.30	-1.30	-1.30	-1.80
Min, Max	-10.0, 8.6	-8.3, 9.0	-9.6, 10.0	-9.6, 10.0	-12.2, 10.5
Week 68					
n	526	554	546	1100	276
Mean	-1.62	-1.28	-1.27	-1.28	-1.58
SD	2.964	2.948	3.118	3.032	2.966
Median	-1.60	-1.50	-1.30	-1.40	-1.90
Min, Max	-10.5, 7.8	-8.5, 12.4	-12.1, 9.0	-12.1, 12.4	-10.4, 7.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	521	564	565	1129	275
Mean	-0.10	0.27	0.13	0.20	-0.06
SD	2.861	2.971	2.892	2.931	2.898
Median	-0.10	0.40	0.20	0.30	0.00
Min, Max	-10.2, 8.7	-11.1, 10.0	-10.8, 7.9	-11.1, 10.0	-8.8, 8.6
Week 76					
n	509	544	544	1088	266
Mean	-1.72	-1.49	-1.58	-1.53	-1.74
SD	2.957	2.957	3.135	3.047	3.097
Median	-1.70	-1.60	-1.70	-1.60	-1.80
Min, Max	-12.0, 7.5	-9.9, 10.0	-12.0, 9.1	-12.0, 10.0	-11.7, 8.3
Week 80					
n	506	533	531	1064	265
Mean	-1.95	-1.63	-1.46	-1.55	-1.68
SD	3.025	3.082	3.110	3.096	3.060
Median	-2.10	-1.70	-1.40	-1.60	-1.60
Min, Max	-9.2, 8.9	-10.5, 9.4	-11.3, 8.9	-11.3, 9.4	-8.1, 8.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	515	551	550	1101	269
Mean	-0.18	0.09	0.22	0.15	0.08
SD	2.914	2.896	2.912	2.903	2.924
Median	-0.10	0.10	0.10	0.10	-0.10
Min, Max	-11.3, 8.2	-10.1, 10.3	-9.2, 8.0	-10.1, 10.3	-10.1, 9.2
Week 88					
n	499	531	529	1060	259
Mean	-1.90	-1.55	-1.40	-1.48	-1.79
SD	2.959	3.036	3.203	3.120	3.043
Median	-2.10	-1.70	-1.40	-1.60	-1.80
Min, Max	-19.1, 8.5	-13.2, 9.4	-9.7, 7.5	-13.2, 9.4	-9.6, 9.6
Week 92					
n	488	519	516	1035	257
Mean	-1.61	-1.45	-1.44	-1.44	-1.65
SD	2.994	2.999	2.979	2.988	2.966
Median	-1.80	-1.80	-1.50	-1.60	-1.70
Min, Max	-11.3, 8.1	-13.8, 10.8	-11.3, 7.1	-13.8, 10.8	-8.4, 6.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	488	531	516	1047	259
Mean	-0.29	-0.01	-0.06	-0.03	-0.25
SD	2.887	2.986	2.949	2.967	3.001
Median	-0.30	0.10	0.10	0.10	-0.60
Min, Max	-10.8, 9.3	-17.1, 9.5	-10.7, 7.4	-17.1, 9.5	-10.3, 9.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	726	712	711	1423	336
Mean	-0.01	0.00	-0.01	0.00	-0.02
SD	0.089	0.092	0.091	0.091	0.094
Median	-0.01	0.00	-0.01	0.00	-0.02
Min, Max	-0.4, 0.4	-0.3, 0.4	-0.3, 0.3	-0.3, 0.4	-0.3, 0.3
Week 8					
n	707	687	666	1353	325
Mean	-0.01	0.00	0.00	0.00	-0.03
SD	0.091	0.090	0.092	0.091	0.095
Median	-0.01	0.00	0.00	0.00	-0.03
Min, Max	-0.4, 0.4	-0.3, 0.4	-0.2, 0.4	-0.3, 0.4	-0.3, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	695	671	654	1325	325
Mean	-0.01	0.01	0.01	0.01	-0.02
SD	0.090	0.088	0.096	0.092	0.097
Median	-0.01	0.01	0.00	0.00	-0.03
Min, Max	-0.3, 0.3	-0.3, 0.4	-0.3, 0.5	-0.3, 0.5	-0.3, 0.3
Week 16					
n	682	641	634	1275	315
Mean	-0.02	0.00	-0.01	0.00	-0.03
SD	0.092	0.087	0.098	0.093	0.103
Median	-0.02	0.00	0.00	0.00	-0.03
Min, Max	-0.3, 0.3	-0.2, 0.3	-0.3, 0.3	-0.3, 0.3	-0.4, 0.4
Week 20					
n	669	635	621	1256	311
Mean	-0.02	-0.01	-0.01	-0.01	-0.03
SD	0.094	0.090	0.097	0.094	0.099
Median	-0.02	0.00	-0.01	-0.01	-0.03
Min, Max	-0.4, 0.4	-0.4, 0.4	-0.3, 0.5	-0.4, 0.5	-0.4, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	659	639	620	1259	315
Mean	-0.02	0.00	0.00	0.00	-0.04
SD	0.095	0.093	0.103	0.098	0.124
Median	-0.02	0.00	0.00	0.00	-0.03
Min, Max	-0.4, 0.3	-0.4, 0.4	-0.4, 0.4	-0.4, 0.4	-1.0, 0.3
Week 28					
n	646	609	592	1201	296
Mean	-0.03	-0.01	-0.01	-0.01	-0.04
SD	0.094	0.093	0.098	0.095	0.108
Median	-0.03	0.00	-0.01	0.00	-0.04
Min, Max	-0.5, 0.3	-0.3, 0.3	-0.4, 0.3	-0.4, 0.3	-0.3, 0.5
Week 32					
n	624	608	587	1195	299
Mean	-0.03	-0.01	-0.02	-0.01	-0.04
SD	0.095	0.095	0.098	0.096	0.106
Median	-0.03	-0.02	-0.02	-0.02	-0.04
Min, Max	-0.4, 0.4	-0.3, 0.4	-0.3, 0.3	-0.3, 0.4	-0.4, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	630	612	603	1215	306
Mean	-0.02	0.00	-0.01	-0.01	-0.04
SD	0.101	0.092	0.105	0.099	0.099
Median	-0.02	0.00	-0.01	-0.01	-0.04
Min, Max	-0.7, 0.3	-0.3, 0.3	-0.5, 0.5	-0.5, 0.5	-0.3, 0.3
Week 40					
n	608	590	583	1173	294
Mean	-0.04	-0.02	-0.02	-0.02	-0.04
SD	0.094	0.096	0.101	0.099	0.104
Median	-0.04	-0.01	-0.02	-0.02	-0.04
Min, Max	-0.5, 0.3	-0.3, 0.3	-0.4, 0.3	-0.4, 0.3	-0.4, 0.3
Week 44					
n	588	575	578	1153	293
Mean	-0.03	-0.02	-0.02	-0.02	-0.05
SD	0.097	0.097	0.106	0.101	0.100
Median	-0.03	-0.03	-0.01	-0.02	-0.05
Min, Max	-0.4, 0.4	-0.4, 0.3	-0.4, 0.4	-0.4, 0.4	-0.3, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	586	587	591	1178	293
Mean	-0.03	-0.01	-0.02	-0.02	-0.06
SD	0.100	0.105	0.102	0.103	0.110
Median	-0.03	0.00	-0.02	-0.01	-0.06
Min, Max	-0.6, 0.3	-0.8, 0.3	-0.4, 0.4	-0.8, 0.4	-0.6, 0.3
Week 52					
n	550	561	561	1122	285
Mean	-0.04	-0.03	-0.03	-0.03	-0.06
SD	0.095	0.092	0.103	0.098	0.102
Median	-0.05	-0.03	-0.03	-0.03	-0.06
Min, Max	-0.5, 0.3	-0.4, 0.3	-0.4, 0.4	-0.4, 0.4	-0.4, 0.3
Week 56					
n	550	547	552	1099	281
Mean	-0.04	-0.02	-0.03	-0.03	-0.05
SD	0.099	0.089	0.107	0.098	0.107
Median	-0.04	-0.02	-0.03	-0.03	-0.05
Min, Max	-0.5, 0.3	-0.4, 0.2	-0.4, 0.4	-0.4, 0.4	-0.6, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	544	562	573	1135	288
Mean	-0.03	-0.02	-0.02	-0.02	-0.03
SD	0.096	0.093	0.098	0.095	0.098
Median	-0.03	-0.03	-0.02	-0.03	-0.03
Min, Max	-0.5, 0.2	-0.4, 0.3	-0.3, 0.3	-0.4, 0.3	-0.3, 0.2
Week 64					
n	523	550	542	1092	268
Mean	-0.04	-0.03	-0.03	-0.03	-0.05
SD	0.095	0.089	0.098	0.094	0.101
Median	-0.04	-0.03	-0.03	-0.03	-0.04
Min, Max	-0.4, 0.3	-0.3, 0.3	-0.3, 0.3	-0.3, 0.3	-0.4, 0.2
Week 68					
n	509	541	537	1078	275
Mean	-0.04	-0.02	-0.03	-0.03	-0.05
SD	0.104	0.096	0.116	0.107	0.103
Median	-0.04	-0.03	-0.04	-0.03	-0.04
Min, Max	-0.4, 0.4	-0.4, 0.3	-1.0, 0.5	-1.0, 0.5	-0.4, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	502	551	552	1103	273
Mean	-0.03	-0.02	-0.03	-0.02	-0.04
SD	0.099	0.098	0.099	0.099	0.109
Median	-0.03	-0.02	-0.03	-0.03	-0.04
Min, Max	-0.4, 0.4	-0.5, 0.2	-0.3, 0.4	-0.5, 0.4	-0.5, 0.3
Week 76					
n	492	529	534	1063	264
Mean	-0.04	-0.03	-0.03	-0.03	-0.04
SD	0.101	0.092	0.100	0.096	0.102
Median	-0.04	-0.03	-0.04	-0.04	-0.05
Min, Max	-0.4, 0.3	-0.3, 0.3	-0.4, 0.2	-0.4, 0.3	-0.4, 0.2
Week 80					
n	489	524	521	1045	264
Mean	-0.04	-0.02	-0.03	-0.03	-0.04
SD	0.100	0.102	0.099	0.101	0.101
Median	-0.05	-0.02	-0.03	-0.03	-0.05
Min, Max	-0.4, 0.3	-0.3, 0.3	-0.3, 0.3	-0.3, 0.3	-0.4, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	497	540	541	1081	268
Mean	-0.03	-0.02	-0.03	-0.02	-0.03
SD	0.098	0.098	0.099	0.099	0.101
Median	-0.03	-0.02	-0.03	-0.02	-0.03
Min, Max	-0.4, 0.3	-0.3, 0.4	-0.5, 0.3	-0.5, 0.4	-0.3, 0.2
Week 88					
n	485	515	522	1037	259
Mean	-0.04	-0.03	-0.03	-0.03	-0.04
SD	0.100	0.093	0.103	0.098	0.099
Median	-0.04	-0.03	-0.04	-0.03	-0.05
Min, Max	-0.4, 0.4	-0.3, 0.3	-0.4, 0.3	-0.4, 0.3	-0.4, 0.2
Week 92					
n	471	508	512	1020	255
Mean	-0.04	-0.02	-0.03	-0.03	-0.04
SD	0.096	0.097	0.107	0.102	0.101
Median	-0.04	-0.03	-0.03	-0.03	-0.05
Min, Max	-0.3, 0.3	-0.6, 0.3	-0.5, 0.4	-0.6, 0.4	-0.3, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	477	520	512	1032	260
Mean	-0.03	-0.01	-0.03	-0.02	-0.03
SD	0.128	0.100	0.110	0.105	0.104
Median	-0.03	-0.02	-0.02	-0.02	-0.03
Min, Max	-1.7, 0.3	-0.4, 0.2	-0.7, 0.4	-0.7, 0.4	-0.3, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	726	712	712	1424	336
Mean	-0.01	-0.01	-0.01	-0.01	-0.01
SD	0.061	0.065	0.064	0.065	0.060
Median	0.00	-0.01	-0.01	-0.01	0.00
Min, Max	-0.4, 0.2	-0.6, 0.2	-0.5, 0.2	-0.6, 0.2	-0.2, 0.3
Week 8					
n	707	687	666	1353	325
Mean	0.00	-0.02	-0.02	-0.02	0.00
SD	0.063	0.063	0.062	0.062	0.063
Median	0.00	-0.01	-0.02	-0.02	0.00
Min, Max	-0.5, 0.3	-0.6, 0.2	-0.5, 0.2	-0.6, 0.2	-0.2, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	695	671	654	1325	325
Mean	-0.01	-0.01	-0.02	-0.02	0.00
SD	0.062	0.066	0.064	0.065	0.061
Median	0.00	-0.01	-0.02	-0.02	0.00
Min, Max	-0.3, 0.2	-0.7, 0.2	-0.5, 0.2	-0.7, 0.2	-0.2, 0.3
Week 16					
n	682	641	634	1275	315
Mean	-0.01	-0.01	-0.02	-0.02	-0.01
SD	0.062	0.063	0.065	0.064	0.057
Median	0.00	-0.01	-0.02	-0.02	-0.01
Min, Max	-0.4, 0.2	-0.5, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.2
Week 20					
n	668	635	621	1256	311
Mean	-0.01	-0.01	-0.02	-0.02	0.00
SD	0.064	0.065	0.064	0.064	0.065
Median	0.00	-0.01	-0.02	-0.02	-0.01
Min, Max	-0.5, 0.2	-0.4, 0.3	-0.5, 0.2	-0.5, 0.3	-0.3, 0.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
Page 120 of 163
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	659	639	620	1259	315
Mean	-0.01	-0.01	-0.02	-0.02	0.00
SD	0.063	0.070	0.064	0.067	0.066
Median	0.00	-0.01	-0.02	-0.02	0.00
Min, Max	-0.4, 0.2	-0.6, 0.2	-0.4, 0.2	-0.6, 0.2	-0.4, 0.2
Week 28					
n	646	609	592	1201	296
Mean	-0.01	-0.01	-0.02	-0.02	0.00
SD	0.065	0.065	0.067	0.066	0.065
Median	0.00	-0.01	-0.02	-0.01	-0.01
Min, Max	-0.4, 0.2	-0.6, 0.2	-0.5, 0.2	-0.6, 0.2	-0.2, 0.3
Week 32					
n	624	608	586	1194	298
Mean	-0.01	-0.02	-0.02	-0.02	0.00
SD	0.068	0.068	0.069	0.068	0.063
Median	0.00	-0.02	-0.02	-0.02	0.00
Min, Max	-0.4, 0.2	-0.5, 0.4	-0.6, 0.2	-0.6, 0.4	-0.2, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	630	611	603	1214	306
Mean	-0.01	-0.02	-0.02	-0.02	-0.01
SD	0.066	0.067	0.068	0.067	0.060
Median	0.00	-0.01	-0.01	-0.01	-0.01
Min, Max	-0.4, 0.4	-0.5, 0.2	-0.6, 0.2	-0.6, 0.2	-0.2, 0.2
Week 40					
n	609	590	583	1173	294
Mean	-0.01	-0.02	-0.02	-0.02	-0.01
SD	0.066	0.067	0.064	0.065	0.061
Median	0.00	-0.01	-0.02	-0.02	0.00
Min, Max	-0.4, 0.3	-0.5, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.2
Week 44					
n	587	574	578	1152	293
Mean	-0.01	-0.02	-0.02	-0.02	-0.01
SD	0.067	0.066	0.068	0.067	0.060
Median	0.00	-0.02	-0.01	-0.02	-0.01
Min, Max	-0.4, 0.2	-0.5, 0.2	-0.5, 0.3	-0.5, 0.3	-0.2, 0.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	586	587	591	1178	293
Mean	-0.01	-0.01	-0.02	-0.01	-0.01
SD	0.067	0.063	0.067	0.065	0.059
Median	-0.01	-0.01	-0.02	-0.01	-0.01
Min, Max	-0.5, 0.2	-0.5, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.2
Week 52					
n	550	561	561	1122	285
Mean	-0.01	-0.02	-0.02	-0.02	-0.01
SD	0.068	0.063	0.067	0.065	0.062
Median	0.00	-0.01	-0.02	-0.02	-0.02
Min, Max	-0.5, 0.3	-0.5, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.2
Week 56					
n	551	546	552	1098	281
Mean	-0.01	-0.02	-0.02	-0.02	-0.01
SD	0.069	0.067	0.066	0.066	0.064
Median	0.00	-0.01	-0.02	-0.02	-0.01
Min, Max	-0.5, 0.2	-0.6, 0.1	-0.5, 0.2	-0.6, 0.2	-0.2, 0.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	544	562	574	1136	288
Mean	-0.01	-0.02	-0.02	-0.02	-0.01
SD	0.068	0.063	0.067	0.065	0.063
Median	0.00	-0.02	-0.02	-0.02	-0.01
Min, Max	-0.4, 0.2	-0.5, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.1
Week 64					
n	524	550	542	1092	268
Mean	-0.01	-0.02	-0.02	-0.02	-0.02
SD	0.064	0.064	0.065	0.064	0.059
Median	-0.01	-0.02	-0.02	-0.02	-0.02
Min, Max	-0.5, 0.2	-0.6, 0.2	-0.5, 0.2	-0.6, 0.2	-0.2, 0.2
Week 68					
n	508	541	537	1078	275
Mean	-0.01	-0.02	-0.02	-0.02	-0.01
SD	0.064	0.064	0.063	0.063	0.061
Median	0.00	-0.02	-0.02	-0.02	-0.01
Min, Max	-0.5, 0.1	-0.5, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	502	552	552	1104	273
Mean	-0.01	-0.02	-0.02	-0.02	-0.01
SD	0.063	0.065	0.062	0.063	0.062
Median	-0.01	-0.02	-0.02	-0.02	-0.01
Min, Max	-0.2, 0.2	-0.5, 0.2	-0.3, 0.2	-0.5, 0.2	-0.2, 0.2
Week 76					
n	491	529	534	1063	264
Mean	-0.02	-0.02	-0.02	-0.02	-0.01
SD	0.070	0.059	0.066	0.063	0.059
Median	-0.01	-0.02	-0.02	-0.02	0.00
Min, Max	-0.5, 0.3	-0.2, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.1
Week 80					
n	489	522	520	1042	265
Mean	-0.01	-0.02	-0.03	-0.02	-0.01
SD	0.070	0.063	0.066	0.064	0.061
Median	-0.01	-0.02	-0.03	-0.02	-0.01
Min, Max	-0.5, 0.2	-0.2, 0.2	-0.4, 0.2	-0.4, 0.2	-0.2, 0.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	497	540	542	1082	268
Mean	-0.01	-0.02	-0.02	-0.02	0.00
SD	0.069	0.063	0.063	0.063	0.059
Median	0.00	-0.02	-0.02	-0.02	0.00
Min, Max	-0.5, 0.2	-0.2, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.2
Week 88					
n	485	515	522	1037	259
Mean	-0.02	-0.02	-0.03	-0.02	-0.01
SD	0.066	0.060	0.065	0.063	0.060
Median	-0.02	-0.01	-0.03	-0.02	-0.01
Min, Max	-0.5, 0.3	-0.2, 0.2	-0.6, 0.1	-0.6, 0.2	-0.2, 0.2
Week 92					
n	471	508	512	1020	255
Mean	-0.01	-0.02	-0.03	-0.02	-0.01
SD	0.067	0.063	0.069	0.066	0.062
Median	-0.01	-0.02	-0.02	-0.02	-0.01
Min, Max	-0.4, 0.2	-0.3, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	477	520	512	1032	260
Mean	-0.01	-0.01	-0.02	-0.02	-0.01
SD	0.068	0.058	0.064	0.061	0.066
Median	-0.01	-0.01	-0.02	-0.01	0.00
Min, Max	-0.4, 0.2	-0.2, 0.2	-0.5, 0.2	-0.5, 0.2	-0.2, 0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	725	711	709	1420	336
Mean	0.00	-0.01	-0.02	-0.01	-0.03
SD	0.182	0.170	0.176	0.173	0.168
Median	0.00	-0.01	-0.02	-0.02	-0.02
Min, Max	-0.7, 1.2	-0.7, 0.7	-0.9, 0.6	-0.9, 0.7	-0.5, 0.5
Week 8					
n	707	687	665	1352	325
Mean	-0.01	-0.01	-0.01	-0.01	-0.02
SD	0.172	0.165	0.184	0.175	0.172
Median	0.00	-0.01	0.00	0.00	-0.03
Min, Max	-0.5, 0.8	-0.6, 0.9	-1.0, 0.7	-1.0, 0.9	-0.7, 0.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	695	670	653	1323	325
Mean	-0.01	0.01	-0.02	-0.01	-0.03
SD	0.169	0.178	0.182	0.180	0.169
Median	-0.01	0.00	-0.01	0.00	-0.05
Min, Max	-0.7, 0.6	-0.5, 0.7	-0.7, 0.6	-0.7, 0.7	-0.5, 0.6
Week 16					
n	682	641	631	1272	315
Mean	-0.01	0.01	0.00	0.00	-0.03
SD	0.167	0.175	0.191	0.183	0.191
Median	-0.01	0.00	0.00	0.00	-0.03
Min, Max	-0.5, 0.7	-0.6, 0.9	-0.7, 0.7	-0.7, 0.9	-0.7, 0.5
Week 20					
n	667	634	619	1253	310
Mean	-0.01	0.00	-0.01	-0.01	-0.02
SD	0.171	0.186	0.194	0.190	0.183
Median	-0.01	0.00	-0.02	-0.01	-0.02
Min, Max	-0.6, 0.6	-0.6, 1.3	-0.7, 0.6	-0.7, 1.3	-0.5, 0.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	658	638	618	1256	314
Mean	0.00	0.01	0.01	0.01	-0.02
SD	0.170	0.179	0.181	0.180	0.179
Median	0.00	0.00	0.01	0.00	-0.02
Min, Max	-0.7, 0.7	-0.5, 0.9	-0.5, 0.7	-0.5, 0.9	-0.6, 0.5
Week 28					
n	646	607	592	1199	295
Mean	-0.01	0.00	-0.02	-0.01	-0.03
SD	0.378	0.179	0.191	0.185	0.177
Median	-0.03	0.00	-0.02	-0.01	-0.04
Min, Max	-0.5, 8.0	-0.5, 0.9	-0.6, 0.7	-0.6, 0.9	-0.5, 0.5
Week 32					
n	624	606	587	1193	295
Mean	-0.02	-0.01	-0.02	-0.02	-0.04
SD	0.186	0.182	0.197	0.189	0.175
Median	-0.02	-0.02	-0.01	-0.02	-0.03
Min, Max	-0.7, 0.8	-0.6, 0.9	-0.8, 0.7	-0.8, 0.9	-0.5, 0.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	629	611	601	1212	306
Mean	0.00	0.00	-0.01	0.00	-0.03
SD	0.170	0.177	0.184	0.180	0.178
Median	0.01	0.00	-0.02	-0.01	-0.03
Min, Max	-0.7, 0.8	-0.5, 0.7	-0.8, 0.6	-0.8, 0.7	-0.5, 0.6
Week 40					
n	609	589	581	1170	294
Mean	-0.02	0.00	-0.02	-0.01	-0.03
SD	0.175	0.182	0.199	0.191	0.171
Median	-0.01	-0.01	-0.03	-0.01	-0.03
Min, Max	-0.7, 0.7	-0.5, 0.9	-0.8, 0.7	-0.8, 0.9	-0.5, 0.5
Week 44					
n	586	574	577	1151	291
Mean	-0.02	-0.01	-0.03	-0.02	-0.04
SD	0.185	0.179	0.195	0.187	0.178
Median	-0.01	-0.02	-0.04	-0.03	-0.03
Min, Max	-0.7, 1.1	-0.5, 0.9	-0.7, 0.7	-0.7, 0.9	-0.6, 0.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	585	585	591	1176	293
Mean	0.00	0.01	0.00	0.00	-0.03
SD	0.168	0.173	0.190	0.182	0.182
Median	0.00	0.01	0.00	0.00	-0.03
Min, Max	-0.5, 0.7	-0.5, 0.9	-0.6, 0.9	-0.6, 0.9	-0.5, 0.4
Week 52					
n	545	560	559	1119	284
Mean	-0.02	-0.01	-0.01	-0.01	-0.05
SD	0.177	0.183	0.214	0.199	0.190
Median	-0.02	0.00	-0.03	-0.02	-0.06
Min, Max	-0.6, 0.6	-0.5, 1.1	-0.6, 1.4	-0.6, 1.4	-0.8, 0.5
Week 56					
n	549	548	550	1098	278
Mean	-0.02	0.00	-0.03	-0.02	-0.03
SD	0.175	0.186	0.209	0.198	0.176
Median	0.00	0.00	-0.03	-0.02	-0.03
Min, Max	-0.6, 0.5	-0.5, 0.9	-0.9, 0.6	-0.9, 0.9	-0.5, 0.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	543	562	573	1135	288
Mean	-0.01	0.00	0.00	0.00	-0.01
SD	0.173	0.171	0.198	0.185	0.177
Median	-0.01	0.00	-0.01	0.00	-0.02
Min, Max	-0.6, 0.5	-0.6, 1.0	-0.6, 0.8	-0.6, 1.0	-0.5, 0.5
Week 64					
n	521	547	542	1089	267
Mean	-0.02	-0.01	-0.03	-0.02	-0.04
SD	0.185	0.175	0.194	0.185	0.198
Median	-0.02	-0.01	-0.03	-0.02	-0.02
Min, Max	-0.6, 0.6	-0.6, 0.8	-0.6, 0.7	-0.6, 0.8	-0.9, 0.6
Week 68					
n	506	537	536	1073	275
Mean	-0.02	-0.01	-0.03	-0.02	-0.02
SD	0.195	0.188	0.208	0.199	0.204
Median	-0.02	-0.01	-0.03	-0.03	-0.01
Min, Max	-0.7, 0.7	-0.6, 0.9	-0.7, 1.6	-0.7, 1.6	-0.8, 0.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	502	552	550	1102	273
Mean	-0.01	0.00	-0.02	-0.01	-0.02
SD	0.173	0.181	0.194	0.188	0.190
Median	0.00	-0.01	-0.02	-0.01	-0.02
Min, Max	-0.5, 0.6	-0.6, 0.9	-0.6, 0.7	-0.6, 0.9	-0.6, 0.7
Week 76					
n	491	528	533	1061	262
Mean	-0.02	-0.01	-0.02	-0.02	-0.02
SD	0.190	0.177	0.192	0.185	0.197
Median	-0.02	-0.02	-0.02	-0.02	-0.02
Min, Max	-0.7, 0.6	-0.7, 0.7	-0.7, 0.6	-0.7, 0.7	-0.5, 0.9
Week 80					
n	489	523	518	1041	265
Mean	-0.03	-0.03	-0.03	-0.03	-0.04
SD	0.186	0.194	0.192	0.193	0.182
Median	-0.03	-0.03	-0.03	-0.03	-0.03
Min, Max	-0.6, 0.6	-0.6, 1.5	-0.6, 0.6	-0.6, 1.5	-0.7, 0.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	497	538	540	1078	268
Mean	-0.01	0.00	-0.01	-0.01	-0.02
SD	0.191	0.182	0.190	0.186	0.198
Median	0.00	-0.01	-0.01	-0.01	-0.02
Min, Max	-0.6, 1.2	-0.6, 0.9	-0.6, 0.6	-0.6, 0.9	-0.6, 0.6
Week 88					
n	484	514	522	1036	257
Mean	-0.03	-0.03	-0.03	-0.03	-0.04
SD	0.180	0.177	0.184	0.181	0.200
Median	-0.03	-0.03	-0.03	-0.03	-0.03
Min, Max	-0.5, 0.5	-0.6, 0.7	-0.6, 0.6	-0.6, 0.7	-0.6, 0.6
Week 92					
n	471	507	511	1018	254
Mean	-0.03	-0.02	-0.02	-0.02	-0.04
SD	0.186	0.182	0.195	0.189	0.194
Median	-0.03	-0.03	-0.03	-0.03	-0.03
Min, Max	-0.7, 0.6	-0.5, 1.0	-0.6, 0.7	-0.6, 1.0	-0.6, 0.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	477	518	511	1029	260
Mean	-0.01	-0.01	-0.01	-0.01	-0.01
SD	0.181	0.179	0.189	0.184	0.203
Median	0.00	-0.01	-0.02	-0.01	-0.03
Min, Max	-0.5, 0.6	-0.5, 1.1	-0.5, 0.8	-0.5, 1.1	-0.6, 1.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	723	707	704	1411	331
Mean	0.06	0.12	0.09	0.10	0.10
SD	0.933	1.120	0.909	1.020	0.896
Median	0.00	0.06	0.03	0.06	0.10
Min, Max	-4.9, 4.8	-8.6, 13.5	-3.7, 6.9	-8.6, 13.5	-3.6, 3.6
Week 8					
n	704	683	659	1342	323
Mean	0.10	0.05	0.10	0.07	0.14
SD	1.015	1.005	1.073	1.039	1.089
Median	0.10	0.00	0.00	0.00	0.00
Min, Max	-6.6, 7.2	-8.9, 6.3	-6.1, 11.7	-8.9, 11.7	-4.2, 8.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	691	668	649	1317	319
Mean	0.10	0.09	0.10	0.09	0.05
SD	1.100	1.398	1.083	1.252	1.030
Median	0.10	0.10	0.10	0.10	0.10
Min, Max	-8.3, 9.6	-8.6, 24.8	-14.2, 9.5	-14.2, 24.8	-3.9, 10.5
Week 16					
n	680	638	626	1264	311
Mean	0.08	0.05	0.12	0.09	0.06
SD	1.036	0.970	1.156	1.066	1.070
Median	0.10	0.00	0.00	0.00	0.10
Min, Max	-6.5, 9.8	-8.5, 5.1	-12.5, 5.6	-12.5, 5.6	-4.3, 10.8
Week 20					
n	665	626	614	1240	308
Mean	0.09	0.09	0.13	0.11	0.06
SD	1.003	1.044	1.302	1.178	0.967
Median	0.10	0.10	0.10	0.10	0.10
Min, Max	-7.3, 6.5	-6.8, 9.5	-16.5, 6.5	-16.5, 9.5	-4.4, 3.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	656	635	611	1246	313
Mean	0.04	0.04	0.02	0.03	0.00
SD	1.326	1.162	0.957	1.066	0.986
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-5.4, 19.9	-9.6, 15.8	-8.0, 8.1	-9.6, 15.8	-4.5, 6.2
Week 28					
n	641	602	584	1186	293
Mean	0.10	0.05	0.13	0.09	0.12
SD	1.127	0.993	0.999	0.996	1.029
Median	0.10	0.00	0.10	0.06	0.00
Min, Max	-4.5, 11.1	-7.2, 6.3	-4.6, 5.9	-7.2, 6.3	-4.5, 4.6
Week 32					
n	618	602	585	1187	293
Mean	0.09	0.10	0.13	0.11	0.04
SD	1.071	1.008	1.129	1.069	0.945
Median	0.06	0.10	0.10	0.10	0.00
Min, Max	-6.1, 10.1	-5.4, 6.9	-11.9, 4.8	-11.9, 6.9	-4.0, 5.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	627	606	597	1203	303
Mean	0.01	0.07	0.08	0.08	0.09
SD	0.987	0.980	1.039	1.009	0.932
Median	0.00	0.08	0.10	0.10	0.00
Min, Max	-9.0, 8.3	-5.7, 4.9	-9.8, 4.6	-9.8, 4.9	-4.0, 3.2
Week 40					
n	606	588	579	1167	292
Mean	0.13	0.09	0.16	0.12	0.07
SD	1.201	1.037	1.252	1.149	1.015
Median	0.10	0.10	0.10	0.10	0.10
Min, Max	-8.9, 10.9	-9.6, 4.6	-15.4, 9.7	-15.4, 9.7	-4.2, 10.0
Week 44					
n	585	565	574	1139	290
Mean	0.03	0.08	0.17	0.12	0.06
SD	1.055	1.048	1.104	1.077	0.988
Median	0.00	0.06	0.20	0.10	0.10
Min, Max	-8.0, 6.5	-9.4, 5.8	-11.4, 5.2	-11.4, 5.8	-4.6, 4.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	581	582	587	1169	293
Mean	0.04	0.00	0.04	0.02	-0.06
SD	1.146	1.198	1.050	1.126	0.900
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.6, 7.9	-9.3, 15.4	-10.6, 7.1	-10.6, 15.4	-4.5, 4.6
Week 52					
n	538	558	554	1112	282
Mean	0.05	0.01	0.12	0.07	0.06
SD	1.129	0.962	1.137	1.054	0.923
Median	0.10	0.00	0.10	0.10	0.10
Min, Max	-10.4, 8.3	-5.3, 4.7	-12.4, 6.8	-12.4, 6.8	-4.9, 4.9
Week 56					
n	545	541	545	1086	276
Mean	0.06	0.04	0.12	0.08	-0.01
SD	1.038	1.061	1.184	1.124	0.906
Median	0.00	0.00	0.10	0.10	0.00
Min, Max	-9.9, 6.6	-10.0, 4.7	-15.9, 6.4	-15.9, 6.4	-5.2, 2.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	542	560	571	1131	284
Mean	0.01	0.07	0.05	0.06	0.02
SD	1.061	0.954	1.180	1.074	0.890
Median	0.00	0.06	0.00	0.00	0.10
Min, Max	-8.7, 7.3	-6.1, 5.4	-14.9, 5.4	-14.9, 5.4	-4.3, 2.2
Week 64					
n	519	545	532	1077	263
Mean	0.03	0.07	0.13	0.10	0.10
SD	1.152	0.999	1.101	1.051	1.160
Median	0.10	0.00	0.10	0.10	0.10
Min, Max	-8.4, 10.2	-7.4, 5.1	-11.9, 5.3	-11.9, 5.3	-4.7, 10.0
Week 68					
n	507	535	531	1066	273
Mean	0.02	0.11	0.09	0.10	0.09
SD	1.152	1.045	1.086	1.066	0.986
Median	0.00	0.10	0.10	0.10	0.10
Min, Max	-9.7, 8.6	-8.9, 4.9	-9.5, 5.7	-9.5, 5.7	-4.2, 5.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	501	547	548	1095	272
Mean	0.06	0.05	0.08	0.07	-0.01
SD	1.043	1.452	0.944	1.224	0.843
Median	0.00	0.00	0.10	0.06	0.00
Min, Max	-5.3, 8.4	-9.2, 24.3	-5.1, 6.8	-9.2, 24.3	-3.9, 3.0
Week 76					
n	490	528	529	1057	261
Mean	0.09	0.13	0.06	0.10	0.09
SD	1.194	1.016	1.291	1.161	0.988
Median	0.00	0.10	0.00	0.10	0.10
Min, Max	-8.2, 13.2	-5.7, 3.9	-16.1, 6.4	-16.1, 6.4	-4.5, 5.2
Week 80					
n	487	518	517	1035	262
Mean	0.13	0.14	0.16	0.15	0.02
SD	1.134	1.080	1.348	1.221	0.936
Median	0.10	0.10	0.10	0.10	0.00
Min, Max	-4.0, 11.6	-7.0, 6.8	-8.9, 16.8	-8.9, 16.8	-3.9, 5.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	495	534	536	1070	267
Mean	0.06	0.01	0.04	0.03	0.01
SD	1.120	1.001	1.163	1.084	0.972
Median	0.06	0.00	0.10	0.10	0.06
Min, Max	-7.2, 7.3	-8.3, 4.2	-17.1, 3.6	-17.1, 4.2	-4.5, 5.5
Week 88					
n	480	513	517	1030	255
Mean	0.10	0.10	0.15	0.13	0.05
SD	1.268	1.093	1.069	1.081	0.954
Median	0.10	0.10	0.11	0.10	0.00
Min, Max	-10.8, 9.8	-8.6, 9.7	-8.3, 4.8	-8.6, 9.7	-5.4, 4.8
Week 92					
n	470	502	506	1008	252
Mean	0.02	0.11	0.14	0.12	0.06
SD	1.099	1.100	1.341	1.226	0.901
Median	0.03	0.10	0.10	0.10	0.10
Min, Max	-7.6, 10.4	-8.0, 4.2	-18.2, 6.0	-18.2, 6.0	-4.4, 3.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	474	517	506	1023	258
Mean	0.04	-0.01	0.04	0.01	-0.06
SD	1.275	1.057	1.163	1.110	0.905
Median	0.00	0.00	0.10	0.00	0.00
Min, Max	-8.6, 11.7	-8.4, 4.2	-11.7, 5.9	-11.7, 5.9	-4.4, 3.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	756	737	734	1471	339
Mean	-0.10	-0.13	-0.09	-0.11	-0.18
SD	0.644	0.622	0.677	0.650	0.594
Median	-0.10	-0.10	-0.06	-0.08	-0.18
Min, Max	-8.6, 2.6	-2.9, 2.4	-4.4, 3.9	-4.4, 3.9	-2.0, 3.3
Week 8					
n	735	706	684	1390	329
Mean	-0.07	-0.10	-0.08	-0.09	-0.22
SD	0.620	0.653	0.651	0.652	0.690
Median	-0.08	-0.07	-0.08	-0.07	-0.26
Min, Max	-3.8, 2.2	-3.8, 2.5	-2.9, 3.2	-3.8, 3.2	-3.5, 3.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	693	671	1364	328
Mean	-0.08	-0.08	-0.03	-0.06	-0.24
SD	0.680	0.647	0.692	0.670	0.669
Median	-0.08	-0.05	-0.02	-0.04	-0.20
Min, Max	-5.6, 1.8	-3.9, 2.7	-2.9, 2.9	-3.9, 2.9	-4.2, 2.4
Week 16					
n	707	666	651	1317	318
Mean	-0.09	-0.08	-0.03	-0.05	-0.25
SD	0.675	0.674	0.694	0.684	0.683
Median	-0.10	-0.06	-0.03	-0.04	-0.28
Min, Max	-3.9, 2.2	-4.2, 2.9	-2.9, 2.9	-4.2, 2.9	-4.0, 2.4
Week 20					
n	696	654	638	1292	314
Mean	-0.09	-0.11	-0.05	-0.08	-0.23
SD	0.712	0.647	0.694	0.671	0.681
Median	-0.08	-0.08	-0.09	-0.08	-0.22
Min, Max	-3.8, 4.7	-3.4, 2.7	-2.6, 2.6	-3.4, 2.7	-3.6, 2.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	704	672	656	1328	319
Mean	-0.09	-0.10	-0.06	-0.08	-0.22
SD	0.692	0.682	0.695	0.688	0.738
Median	-0.07	-0.07	-0.07	-0.07	-0.23
Min, Max	-3.4, 4.0	-3.7, 2.8	-3.2, 2.2	-3.7, 2.8	-3.1, 3.4
Week 36					
n	669	647	632	1279	315
Mean	-0.07	-0.09	-0.06	-0.08	-0.23
SD	0.703	0.674	0.698	0.686	0.684
Median	-0.05	-0.09	-0.06	-0.07	-0.23
Min, Max	-5.0, 2.9	-3.8, 2.9	-2.6, 3.4	-3.8, 3.4	-2.5, 2.5
Week 48					
n	618	625	620	1245	304
Mean	0.01	-0.04	-0.04	-0.04	-0.17
SD	0.724	0.675	0.738	0.707	0.763
Median	0.02	-0.04	-0.04	-0.04	-0.16
Min, Max	-2.9, 3.9	-3.0, 3.0	-3.2, 3.0	-3.2, 3.0	-3.5, 3.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	576	604	602	1206	294
Mean	-0.05	-0.12	-0.01	-0.07	-0.19
SD	0.739	0.699	0.745	0.724	0.685
Median	-0.05	-0.09	-0.02	-0.05	-0.17
Min, Max	-4.1, 4.5	-4.1, 2.6	-4.1, 3.0	-4.1, 3.0	-3.0, 2.5
Week 72					
n	538	589	574	1163	284
Mean	-0.06	-0.07	-0.03	-0.05	-0.17
SD	0.707	0.741	0.754	0.748	0.793
Median	-0.03	-0.08	-0.04	-0.05	-0.14
Min, Max	-2.6, 3.9	-2.6, 3.5	-3.8, 2.8	-3.8, 3.5	-3.8, 3.4
Week 84					
n	530	573	565	1138	278
Mean	-0.02	-0.08	-0.09	-0.08	-0.18
SD	0.674	0.712	0.761	0.737	0.801
Median	-0.07	-0.03	-0.08	-0.06	-0.22
Min, Max	-2.3, 2.9	-2.3, 2.8	-3.9, 3.1	-3.9, 3.1	-2.8, 3.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	491	532	522	1054	262
Mean	0.01	-0.04	-0.04	-0.04	-0.12
SD	0.723	0.755	0.762	0.758	0.676
Median	0.00	0.00	-0.01	-0.01	-0.13
Min, Max	-3.5, 4.1	-2.6, 2.7	-4.1, 2.8	-4.1, 2.8	-3.1, 2.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	756	737	734	1471	339
Mean	0.02	-0.16	-0.14	-0.15	-0.02
SD	0.691	0.582	0.640	0.611	0.588
Median	0.02	-0.09	-0.09	-0.09	-0.02
Min, Max	-4.4, 5.9	-3.4, 2.4	-4.2, 2.2	-4.2, 2.4	-2.4, 3.9
Week 8					
n	735	706	684	1390	329
Mean	0.03	-0.14	-0.12	-0.13	-0.05
SD	0.695	0.576	0.679	0.628	0.637
Median	0.02	-0.11	-0.07	-0.08	-0.05
Min, Max	-5.5, 4.8	-3.1, 2.1	-4.2, 3.4	-4.2, 3.4	-2.8, 3.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	693	671	1364	328
Mean	-0.03	-0.14	-0.12	-0.13	-0.06
SD	0.646	0.581	0.676	0.629	0.576
Median	0.01	-0.07	-0.08	-0.08	-0.05
Min, Max	-5.2, 2.4	-2.9, 2.4	-3.9, 3.8	-3.9, 3.8	-2.6, 3.6
Week 16					
n	707	666	651	1317	318
Mean	0.01	-0.15	-0.12	-0.14	-0.04
SD	0.978	0.643	0.662	0.653	0.645
Median	0.00	-0.13	-0.08	-0.10	0.00
Min, Max	-5.2, 15.5	-3.6, 3.6	-3.4, 5.1	-3.6, 5.1	-2.2, 2.7
Week 20					
n	696	654	638	1292	314
Mean	-0.01	-0.13	-0.09	-0.11	0.04
SD	0.687	0.710	0.698	0.704	0.846
Median	0.01	-0.11	-0.07	-0.09	0.00
Min, Max	-5.7, 2.9	-3.4, 5.5	-3.9, 4.5	-3.9, 5.5	-2.8, 9.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	704	672	656	1328	319
Mean	0.00	-0.15	-0.13	-0.14	-0.03
SD	0.674	0.628	0.685	0.657	0.674
Median	0.04	-0.11	-0.08	-0.09	-0.01
Min, Max	-4.9, 2.9	-3.2, 3.5	-3.9, 3.0	-3.9, 3.5	-3.4, 3.4
Week 36					
n	669	647	632	1279	315
Mean	0.05	-0.13	-0.15	-0.14	-0.05
SD	0.791	0.662	0.641	0.651	0.742
Median	0.04	-0.10	-0.10	-0.10	-0.04
Min, Max	-7.1, 5.6	-3.3, 5.1	-3.3, 1.9	-3.3, 5.1	-3.4, 6.5
Week 48					
n	618	625	620	1245	304
Mean	0.06	-0.14	-0.11	-0.12	0.00
SD	0.752	0.646	0.692	0.669	0.653
Median	0.08	-0.08	-0.06	-0.07	-0.01
Min, Max	-6.9, 4.4	-3.2, 2.4	-4.1, 2.8	-4.1, 2.8	-2.8, 3.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	576	604	602	1206	294
Mean	0.02	-0.14	-0.15	-0.15	-0.03
SD	0.878	0.672	0.696	0.684	0.660
Median	0.03	-0.10	-0.09	-0.09	-0.02
Min, Max	-6.5, 12.1	-3.5, 3.1	-4.1, 2.5	-4.1, 3.1	-3.0, 3.9
Week 72					
n	538	589	574	1163	284
Mean	0.00	-0.13	-0.11	-0.12	0.04
SD	0.767	0.671	0.714	0.693	0.769
Median	0.03	-0.08	-0.07	-0.08	0.01
Min, Max	-6.8, 3.2	-3.2, 2.7	-3.6, 3.7	-3.6, 3.7	-3.4, 3.6
Week 84					
n	530	573	565	1138	278
Mean	0.03	-0.11	-0.10	-0.10	0.00
SD	0.794	0.708	0.718	0.713	0.722
Median	0.03	-0.10	-0.06	-0.08	0.00
Min, Max	-5.2, 8.0	-2.9, 3.6	-3.8, 2.6	-3.8, 3.6	-3.2, 4.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	491	532	522	1054	262
Mean	0.05	-0.15	-0.14	-0.14	-0.03
SD	0.766	0.706	0.733	0.719	0.699
Median	0.03	-0.12	-0.05	-0.08	-0.01
Min, Max	-5.0, 3.9	-3.3, 3.1	-3.8, 2.7	-3.8, 3.1	-3.5, 4.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	726	712	712	1424	336
Mean	0.33	-1.31	-5.20	-3.25	-1.16
SD	36.737	38.851	41.130	40.040	35.195
Median	0.00	-2.00	-5.95	-4.00	-1.50
Min, Max	-194.0, 148.7	-201.0, 131.0	-124.0, 222.0	-201.0, 222.0	-113.0, 105.0
Week 8					
n	707	687	666	1353	325
Mean	1.24	0.81	-2.31	-0.72	-2.56
SD	36.168	41.375	41.678	41.538	39.251
Median	0.00	0.00	-2.00	0.00	-1.00
Min, Max	-185.0, 145.0	-201.0, 224.0	-147.0, 238.0	-201.0, 238.0	-129.0, 197.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	695	671	654	1325	325
Mean	0.45	1.89	-0.66	0.63	3.62
SD	36.717	39.398	43.688	41.574	38.267
Median	0.00	0.00	-2.00	-2.00	5.00
Min, Max	-229.0, 154.0	-172.5, 154.6	-135.0, 214.1	-172.5, 214.1	-104.0, 141.0
Week 16					
n	681	641	634	1275	315
Mean	0.09	2.17	-0.74	0.72	-0.94
SD	37.430	40.443	45.431	43.003	42.526
Median	0.00	0.00	0.00	0.00	-3.00
Min, Max	-157.0, 119.0	-200.0, 139.0	-173.0, 220.0	-200.0, 220.0	-154.6, 247.0
Week 20					
n	669	635	621	1256	311
Mean	-0.36	2.18	0.20	1.20	1.18
SD	40.342	43.953	45.786	44.861	45.691
Median	0.00	2.00	-3.00	0.00	0.00
Min, Max	-176.0, 110.0	-241.0, 237.9	-126.0, 297.4	-241.0, 297.4	-117.0, 198.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	659	639	620	1259	315
Mean	0.95	4.66	-0.78	1.98	-0.04
SD	41.813	44.025	42.631	43.412	43.693
Median	2.00	5.00	-3.00	0.00	1.00
Min, Max	-130.9, 146.0	-225.0, 196.0	-134.0, 202.0	-225.0, 202.0	-181.0, 141.0
Week 28					
n	646	609	593	1202	296
Mean	1.16	3.09	0.78	1.95	-2.94
SD	42.381	44.166	44.611	44.383	42.467
Median	1.00	2.00	0.00	0.00	0.00
Min, Max	-188.0, 149.0	-173.0, 232.0	-166.5, 250.0	-173.0, 250.0	-222.0, 120.0
Week 32					
n	624	608	587	1195	299
Mean	-0.16	1.01	0.32	0.67	0.49
SD	41.530	44.329	44.161	44.229	41.155
Median	0.00	1.50	-2.00	0.00	0.00
Min, Max	-139.0, 118.0	-190.0, 186.0	-130.0, 234.0	-190.0, 234.0	-165.0, 142.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	630	612	603	1215	306
Mean	2.16	2.49	1.08	1.79	4.78
SD	42.735	44.966	46.304	45.621	41.461
Median	1.00	3.00	-2.00	0.00	7.00
Min, Max	-179.0, 169.0	-182.0, 161.0	-180.0, 251.0	-182.0, 251.0	-160.0, 218.0
Week 40					
n	609	590	583	1173	294
Mean	1.71	1.85	0.60	1.23	1.23
SD	44.670	45.690	44.909	45.289	42.404
Median	0.00	1.00	-2.00	0.00	4.00
Min, Max	-160.6, 494.0	-202.2, 255.0	-147.0, 215.5	-202.2, 255.0	-213.0, 136.8
Week 44					
n	588	574	578	1152	293
Mean	3.30	1.06	-1.68	-0.31	4.04
SD	43.224	42.972	45.429	44.224	36.953
Median	4.00	4.00	-3.00	0.00	5.95
Min, Max	-149.0, 180.0	-190.0, 197.0	-199.0, 211.0	-199.0, 211.0	-137.0, 104.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	586	587	591	1178	293
Mean	0.50	1.02	0.36	0.69	1.28
SD	41.888	44.660	43.755	44.190	42.545
Median	0.00	1.00	0.00	0.00	0.00
Min, Max	-140.0, 326.0	-190.0, 160.6	-156.0, 231.0	-190.0, 231.0	-243.0, 109.0
Week 52					
n	550	561	561	1122	285
Mean	2.19	1.07	2.11	1.59	3.56
SD	44.787	42.801	43.736	43.255	41.866
Median	5.00	2.00	2.00	2.00	5.00
Min, Max	-311.0, 208.2	-207.0, 144.0	-138.0, 220.0	-207.0, 220.0	-148.0, 190.0
Week 56					
n	551	548	552	1100	281
Mean	4.14	2.21	0.73	1.47	5.13
SD	42.058	44.802	44.696	44.735	43.270
Median	4.00	4.00	1.50	2.00	6.00
Min, Max	-143.0, 195.0	-221.0, 158.0	-154.0, 237.9	-221.0, 237.9	-183.0, 243.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	544	562	574	1136	288
Mean	3.43	2.92	0.29	1.59	0.89
SD	43.696	46.206	43.744	44.978	39.741
Median	4.00	3.00	0.00	0.00	1.00
Min, Max	-154.0, 160.6	-244.0, 244.0	-149.0, 226.0	-244.0, 244.0	-179.0, 108.0
Week 64					
n	524	550	542	1092	268
Mean	3.98	1.63	1.06	1.35	1.83
SD	43.422	44.535	45.349	44.921	41.662
Median	5.95	0.00	0.00	0.00	2.00
Min, Max	-137.0, 166.0	-167.0, 277.0	-163.0, 199.0	-167.0, 277.0	-133.0, 133.0
Week 68					
n	509	541	537	1078	275
Mean	4.62	3.78	-2.01	0.89	0.86
SD	43.586	47.391	43.804	45.710	45.063
Median	4.00	3.00	-3.00	0.00	0.00
Min, Max	-165.0, 159.0	-171.0, 364.0	-168.0, 235.0	-171.0, 364.0	-215.0, 172.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	502	552	552	1104	273
Mean	3.04	3.29	-0.05	1.62	2.41
SD	41.805	44.117	46.007	45.083	46.431
Median	5.00	4.00	0.00	3.00	1.00
Min, Max	-142.0, 151.0	-190.0, 196.3	-136.0, 268.0	-190.0, 268.0	-177.0, 191.0
Week 76					
n	492	530	534	1064	264
Mean	3.95	3.89	2.36	3.12	0.66
SD	43.738	44.293	46.992	45.653	45.993
Median	5.95	4.00	3.00	3.00	2.00
Min, Max	-166.0, 249.8	-165.0, 127.0	-216.0, 230.0	-216.0, 230.0	-194.0, 158.0
Week 80					
n	489	524	521	1045	265
Mean	1.92	5.70	2.01	3.86	-1.05
SD	47.312	44.773	46.970	45.897	45.058
Median	6.00	4.00	2.00	3.00	0.00
Min, Max	-303.3, 143.0	-175.0, 155.0	-220.1, 231.0	-220.1, 231.0	-191.0, 167.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	497	540	541	1081	268
Mean	5.01	5.70	1.69	3.70	2.06
SD	44.966	47.282	46.546	46.936	44.271
Median	6.00	6.50	-1.00	3.00	-1.50
Min, Max	-175.0, 164.0	-161.0, 281.0	-139.0, 242.0	-161.0, 281.0	-182.0, 148.0
Week 88					
n	485	515	522	1037	259
Mean	3.51	6.09	3.80	4.94	-1.80
SD	44.962	48.088	47.760	47.914	42.672
Median	6.00	5.95	0.50	3.00	-2.00
Min, Max	-171.0, 137.0	-188.0, 210.0	-154.0, 230.0	-188.0, 230.0	-152.0, 142.8
Week 92					
n	471	508	512	1020	255
Mean	2.87	4.74	0.15	2.44	3.44
SD	43.508	47.198	44.816	46.053	45.445
Median	4.00	4.50	0.00	1.50	0.00
Min, Max	-165.0, 137.0	-214.0, 220.0	-169.0, 213.0	-214.0, 220.0	-218.0, 148.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Summary of blood chemistry laboratory parameters - change from baseline by visit: Studies 109MS301 and 109MS302
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Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	477	520	512	1032	260
Mean	3.01	6.51	-0.29	3.14	0.19
SD	40.780	45.590	45.644	45.721	46.425
Median	3.00	5.95	-2.00	0.00	2.00
Min, Max	-172.5, 129.0	-196.0, 155.0	-148.7, 225.0	-196.0, 225.0	-146.0, 196.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-CHG-A.SAS DATE: 02DEC2015

Table 240: Summary of Blood Chemistry Laboratory Parameters – Percentage Change From Baseline by Visit: Studies 109MS301 and 109MS302

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	752	730	727	1457	335
Mean	8.58	65.29	90.12	77.68	5.64
SD	74.544	123.777	204.028	169.061	39.134
Median	0.00	35.71	42.86	40.00	0.00
Min, Max	-77.5, 1607.1	-68.6, 1585.7	-79.0, 4062.5	-79.0, 4062.5	-89.5, 271.4
Week 8					
n	728	699	678	1377	326
Mean	19.59	42.79	49.36	46.03	8.44
SD	192.707	107.111	93.524	100.668	47.515
Median	0.00	18.75	26.67	22.73	0.00
Min, Max	-72.1, 3514.3	-88.2, 1658.3	-79.1, 788.9	-88.2, 1658.3	-70.4, 368.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	718	689	668	1357	322
Mean	14.54	28.18	36.54	32.30	11.40
SD	153.621	60.307	80.322	70.967	81.839
Median	0.00	14.29	18.63	15.38	0.00
Min, Max	-76.2, 3820.0	-90.7, 493.3	-89.3, 937.5	-90.7, 937.5	-81.7, 820.0
Week 16					
n	707	660	646	1306	313
Mean	9.52	26.83	29.32	28.06	15.71
SD	63.016	73.941	71.718	72.833	140.718
Median	0.00	10.00	12.92	11.11	0.00
Min, Max	-82.1, 650.0	-90.4, 790.9	-88.1, 563.6	-90.4, 790.9	-86.1, 2275.0
Week 20					
n	690	641	632	1273	310
Mean	5.09	21.18	24.36	22.76	7.45
SD	43.980	61.012	63.428	62.219	53.788
Median	0.00	9.09	11.76	10.53	-1.61
Min, Max	-75.7, 539.1	-91.7, 510.5	-85.3, 381.8	-91.7, 510.5	-87.2, 421.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	680	655	629	1284	315
Mean	7.89	17.60	22.84	20.17	9.04
SD	55.145	65.595	64.694	65.183	54.515
Median	0.00	8.00	8.33	8.33	0.00
Min, Max	-80.3, 595.5	-91.7, 894.7	-87.0, 435.7	-91.7, 894.7	-91.7, 450.0
Week 28					
n	660	621	601	1222	296
Mean	7.65	12.90	22.11	17.43	11.56
SD	61.875	63.277	121.702	96.605	84.563
Median	0.00	5.00	7.14	6.25	0.00
Min, Max	-81.2, 666.7	-93.6, 976.5	-89.5, 2537.5	-93.6, 2537.5	-74.4, 1052.2
Week 32					
n	641	621	601	1222	298
Mean	7.98	11.89	15.51	13.67	17.76
SD	116.167	52.461	76.625	65.467	151.571
Median	-2.70	4.17	4.76	4.65	-4.26
Min, Max	-73.3, 2653.3	-94.6, 394.7	-88.3, 1364.3	-94.6, 1364.3	-66.7, 2327.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	651	626	614	1240	306
Mean	7.05	12.35	15.77	14.04	11.11
SD	48.061	53.848	55.828	54.842	86.721
Median	0.00	6.07	6.56	6.25	-1.11
Min, Max	-71.6, 466.7	-92.6, 550.0	-87.6, 528.6	-92.6, 550.0	-79.4, 1172.7
Week 40					
n	628	605	597	1202	294
Mean	12.76	11.84	10.25	11.05	8.31
SD	115.937	77.289	47.436	64.199	57.949
Median	0.00	0.00	0.00	0.00	-6.25
Min, Max	-78.7, 1914.3	-93.2, 1415.0	-90.1, 306.3	-93.2, 1415.0	-74.5, 488.5
Week 44					
n	606	584	590	1174	295
Mean	13.87	8.00	15.96	12.00	3.31
SD	146.326	45.787	73.349	61.314	55.821
Median	-3.71	0.00	5.13	0.00	-6.90
Min, Max	-79.2, 2848.1	-92.2, 323.1	-88.9, 978.6	-92.2, 978.6	-71.2, 574.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	598	598	602	1200	295
Mean	6.88	9.85	17.49	13.68	12.26
SD	57.437	51.326	68.415	60.601	98.302
Median	0.00	0.00	6.39	4.76	-3.85
Min, Max	-82.7, 828.6	-93.6, 655.6	-90.7, 1092.3	-93.6, 1092.3	-70.6, 1157.6
Week 52					
n	557	575	570	1145	286
Mean	4.73	10.69	18.70	14.67	17.21
SD	48.019	58.953	132.355	102.337	143.281
Median	0.00	0.00	5.88	0.00	-4.46
Min, Max	-78.7, 590.9	-91.8, 540.0	-91.4, 2900.0	-91.8, 2900.0	-73.2, 1953.8
Week 56					
n	565	557	562	1119	282
Mean	7.17	9.98	13.18	11.59	12.61
SD	68.536	51.065	60.677	56.096	89.464
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-83.3, 1123.1	-92.6, 361.5	-90.7, 485.7	-92.6, 485.7	-77.3, 1061.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	559	576	585	1161	287
Mean	11.11	9.99	15.25	12.64	6.77
SD	81.730	54.441	61.353	58.061	57.870
Median	0.00	0.00	4.76	0.00	0.00
Min, Max	-67.6, 977.8	-93.6, 619.2	-92.0, 623.5	-93.6, 623.5	-71.0, 606.7
Week 64					
n	538	562	548	1110	267
Mean	11.14	19.31	12.60	15.99	1.20
SD	146.625	213.593	72.521	160.261	40.622
Median	-5.13	0.00	0.00	0.00	-3.85
Min, Max	-94.4, 3161.1	-92.2, 4807.7	-89.5, 1291.7	-92.2, 4807.7	-77.6, 240.0
Week 68					
n	524	551	547	1098	276
Mean	22.02	8.44	10.13	9.28	2.14
SD	216.672	48.471	51.805	50.144	38.799
Median	0.00	0.00	0.00	0.00	-3.74
Min, Max	-74.3, 3683.3	-92.2, 323.1	-90.7, 306.3	-92.2, 323.1	-73.3, 153.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	521	564	564	1128	274
Mean	7.55	9.23	12.29	10.76	8.93
SD	66.108	48.854	56.367	52.743	59.795
Median	0.00	0.00	1.93	0.00	0.00
Min, Max	-79.3, 1116.7	-94.1, 318.2	-89.5, 664.7	-94.1, 664.7	-72.7, 537.5
Week 76					
n	507	544	543	1087	265
Mean	5.71	9.30	10.53	9.92	0.30
SD	59.884	48.684	51.599	50.142	36.056
Median	-5.26	0.00	0.00	0.00	-3.23
Min, Max	-68.9, 706.7	-91.8, 333.3	-89.5, 404.8	-91.8, 404.8	-70.0, 121.4
Week 80					
n	505	533	530	1063	265
Mean	2.58	8.64	11.93	10.28	3.87
SD	46.163	61.306	54.387	57.956	45.274
Median	-5.26	0.00	0.00	0.00	-2.33
Min, Max	-83.3, 410.7	-90.4, 825.0	-90.7, 435.3	-90.7, 825.0	-72.4, 233.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	513	550	551	1101	271
Mean	8.87	10.57	10.75	10.66	0.47
SD	65.982	55.632	56.507	56.046	35.349
Median	0.00	0.00	0.00	0.00	-5.56
Min, Max	-73.2, 966.7	-93.1, 522.2	-89.5, 750.0	-93.1, 750.0	-80.0, 128.6
Week 88					
n	499	531	529	1060	259
Mean	6.80	7.86	10.56	9.21	3.04
SD	53.386	63.001	61.380	62.182	50.521
Median	0.00	-4.55	0.00	0.00	-6.67
Min, Max	-71.4, 446.7	-93.6, 752.9	-88.3, 766.7	-93.6, 766.7	-79.1, 406.3
Week 92					
n	486	518	516	1034	257
Mean	9.95	6.43	10.86	8.64	3.19
SD	91.229	54.323	58.929	56.685	46.716
Median	-3.77	-2.55	0.00	0.00	-6.25
Min, Max	-74.6, 1531.6	-95.6, 527.3	-89.5, 620.0	-95.6, 620.0	-76.7, 300.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: ALT/SGPT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	484	531	517	1048	260
Mean	10.40	9.39	9.08	9.24	5.89
SD	63.072	52.913	51.577	52.234	49.701
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-73.2, 626.7	-94.1, 600.0	-90.3, 294.7	-94.1, 600.0	-90.4, 355.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	746	726	722	1448	334
Mean	2.71	27.06	35.27	31.15	2.81
SD	34.399	60.124	77.024	69.168	27.129
Median	0.00	15.00	16.67	15.79	0.00
Min, Max	-65.9, 572.2	-63.0, 842.1	-74.6, 664.7	-74.6, 842.1	-69.4, 205.9
Week 8					
n	723	695	675	1370	324
Mean	7.35	15.68	19.56	17.59	3.83
SD	98.153	47.191	45.886	46.576	29.185
Median	0.00	6.67	10.53	9.09	0.00
Min, Max	-64.9, 2005.6	-76.7, 529.4	-76.3, 381.3	-76.7, 529.4	-61.5, 248.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	712	686	666	1352	320
Mean	4.11	9.23	13.12	11.14	3.82
SD	69.014	32.727	37.399	35.147	39.677
Median	0.00	4.76	6.25	5.56	0.00
Min, Max	-66.7, 1666.7	-74.0, 242.9	-81.6, 268.4	-81.6, 268.4	-75.5, 322.2
Week 16					
n	702	659	645	1304	309
Mean	2.57	8.35	10.70	9.51	8.69
SD	34.621	35.098	61.442	49.892	103.303
Median	0.00	0.00	5.00	4.04	0.00
Min, Max	-71.8, 309.1	-80.8, 253.3	-82.8, 1307.7	-82.8, 1307.7	-75.6, 1735.3
Week 20					
n	685	638	624	1262	308
Mean	-1.78	6.06	6.60	6.33	1.04
SD	25.680	41.691	33.251	37.740	33.363
Median	-5.26	0.00	0.00	0.00	-3.71
Min, Max	-72.3, 282.4	-80.8, 600.0	-77.0, 261.1	-80.8, 600.0	-73.1, 327.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	677	653	620	1273	311
Mean	0.30	4.84	5.94	5.38	7.44
SD	31.096	37.828	34.816	36.382	67.615
Median	-4.35	0.00	0.00	0.00	0.00
Min, Max	-69.0, 322.2	-79.5, 570.0	-76.6, 368.2	-79.5, 570.0	-79.5, 1032.0
Week 28					
n	657	613	595	1208	295
Mean	1.73	3.82	4.22	4.02	6.23
SD	47.761	63.584	56.386	60.122	51.703
Median	-4.76	0.00	0.00	0.00	0.00
Min, Max	-70.2, 909.5	-82.2, 1415.4	-74.6, 1123.1	-82.2, 1415.4	-61.2, 726.7
Week 32					
n	633	615	599	1214	295
Mean	5.37	2.29	1.80	2.05	7.70
SD	149.397	33.243	30.924	32.107	69.480
Median	-5.00	0.00	0.00	0.00	0.00
Min, Max	-70.2, 3685.7	-83.6, 375.0	-79.3, 261.5	-83.6, 375.0	-57.7, 986.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	645	618	612	1230	305
Mean	0.40	1.52	2.22	1.87	5.17
SD	25.158	35.327	32.531	33.953	39.927
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-70.7, 169.2	-80.8, 509.5	-78.2, 371.4	-80.8, 509.5	-67.3, 506.7
Week 40					
n	623	601	593	1194	292
Mean	2.18	1.21	-0.56	0.33	3.96
SD	50.677	39.012	28.448	34.174	42.994
Median	0.00	-4.76	-5.00	-4.76	-4.45
Min, Max	-69.0, 971.4	-80.8, 527.3	-80.5, 161.9	-80.8, 527.3	-57.6, 394.7
Week 44					
n	602	579	587	1166	293
Mean	2.56	-1.35	3.67	1.18	2.42
SD	58.707	26.765	89.777	66.452	37.860
Median	-4.17	-4.17	-4.76	-4.35	0.00
Min, Max	-65.0, 1079.4	-78.1, 164.7	-80.5, 2038.5	-80.5, 2038.5	-69.4, 432.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	593	595	599	1194	294
Mean	0.20	-0.39	2.41	1.01	5.32
SD	31.665	29.151	33.635	31.498	46.884
Median	-4.00	-4.00	-4.17	-4.08	0.00
Min, Max	-67.4, 361.1	-84.9, 196.0	-83.9, 343.8	-84.9, 343.8	-63.5, 550.0
Week 52					
n	553	572	570	1142	285
Mean	0.38	-0.86	3.01	1.07	6.83
SD	43.906	33.080	60.143	48.531	69.402
Median	-4.76	-5.56	-5.00	-5.26	0.00
Min, Max	-61.1, 828.0	-79.5, 422.2	-81.8, 1200.0	-81.8, 1200.0	-77.6, 995.2
Week 56					
n	557	553	559	1112	280
Mean	1.01	-0.30	0.49	0.10	6.27
SD	61.635	30.689	31.851	31.266	42.378
Median	-4.55	0.00	-5.26	-4.88	0.00
Min, Max	-65.9, 1276.9	-84.9, 233.3	-82.8, 257.1	-84.9, 257.1	-77.6, 428.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	553	569	579	1148	286
Mean	1.59	-0.43	1.19	0.39	2.52
SD	39.782	35.540	32.498	34.035	29.067
Median	-5.26	-5.00	-3.57	-4.35	0.00
Min, Max	-63.4, 433.3	-82.2, 547.6	-80.5, 305.0	-82.2, 547.6	-55.3, 205.6
Week 64					
n	533	560	544	1104	267
Mean	2.01	5.21	-1.76	1.78	-0.23
SD	65.675	124.652	27.707	90.911	26.043
Median	-5.56	0.00	-4.76	0.00	0.00
Min, Max	-73.2, 1344.4	-84.9, 2853.6	-75.9, 222.7	-84.9, 2853.6	-71.4, 110.5
Week 68					
n	521	545	544	1089	273
Mean	9.99	-2.57	-1.72	-2.15	1.04
SD	132.781	29.948	28.585	29.265	27.347
Median	0.00	-5.56	-5.56	-5.56	-4.17
Min, Max	-66.7, 2106.7	-84.9, 276.2	-81.8, 117.6	-84.9, 276.2	-61.2, 155.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	517	558	559	1117	272
Mean	-0.94	-1.11	-0.35	-0.73	6.18
SD	30.810	28.336	32.793	30.636	46.955
Median	-5.00	-5.26	0.00	-4.76	0.00
Min, Max	-73.2, 436.8	-83.6, 147.1	-81.8, 410.0	-83.6, 410.0	-64.3, 500.0
Week 76					
n	502	540	543	1083	264
Mean	-1.56	-1.27	-1.08	-1.18	-0.12
SD	30.447	29.656	27.958	28.804	24.947
Median	-5.13	-4.55	-4.55	-4.55	0.00
Min, Max	-63.4, 313.0	-79.5, 313.0	-83.1, 168.8	-83.1, 313.0	-63.5, 100.0
Week 80					
n	502	531	530	1061	260
Mean	-2.62	-1.71	-0.45	-1.08	3.17
SD	26.139	27.914	29.822	28.876	30.867
Median	-5.56	-5.56	-1.56	-5.00	0.00
Min, Max	-65.9, 243.5	-71.8, 233.3	-79.2, 215.0	-79.2, 233.3	-65.3, 236.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	507	545	550	1095	270
Mean	-0.42	-0.87	-2.11	-1.49	0.07
SD	30.570	31.933	28.229	30.122	25.295
Median	-4.00	-4.55	-5.56	-5.00	0.00
Min, Max	-65.9, 257.1	-76.0, 230.8	-83.1, 175.0	-83.1, 230.8	-68.1, 100.0
Week 88					
n	494	528	528	1056	257
Mean	0.21	-0.87	-0.06	-0.47	0.19
SD	31.407	35.489	36.601	36.035	27.767
Median	-4.88	-5.56	-4.17	-5.00	0.00
Min, Max	-68.3, 258.8	-82.2, 357.7	-81.8, 535.0	-82.2, 535.0	-68.1, 155.6
Week 92					
n	480	511	513	1024	257
Mean	-0.28	-1.88	-1.34	-1.61	2.30
SD	28.603	34.764	29.879	32.394	29.207
Median	-4.55	-6.25	-5.26	-5.88	0.00
Min, Max	-59.3, 170.6	-82.2, 355.0	-81.8, 147.8	-82.2, 355.0	-71.4, 150.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: AST/SGOT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	482	526	513	1039	260
Mean	2.09	0.48	-1.56	-0.52	3.88
SD	34.669	38.134	27.070	33.136	29.538
Median	-4.27	-4.76	-5.00	-4.76	0.00
Min, Max	-66.7, 242.9	-84.9, 600.0	-80.5, 127.3	-84.9, 600.0	-92.9, 155.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	732	732	1464	340
Mean	-0.27	-4.06	-3.93	-4.00	4.17
SD	11.210	12.349	15.535	14.028	12.960
Median	0.00	-5.45	-5.79	-5.56	3.07
Min, Max	-58.5, 82.0	-44.6, 70.0	-52.9, 137.7	-52.9, 137.7	-29.7, 75.9
Week 8					
n	732	706	683	1389	328
Mean	0.63	-4.52	-6.13	-5.31	6.19
SD	14.423	23.743	13.214	19.308	16.417
Median	0.00	-5.85	-6.56	-6.25	3.57
Min, Max	-43.1, 195.8	-54.1, 538.0	-51.8, 97.9	-54.1, 538.0	-30.3, 143.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	1.38	-4.74	-5.80	-5.26	5.55
SD	13.692	14.003	16.428	15.250	15.988
Median	0.00	-5.24	-7.10	-6.25	3.37
Min, Max	-43.1, 78.7	-41.9, 161.1	-53.5, 186.0	-53.5, 186.0	-39.4, 102.0
Week 16					
n	708	663	651	1314	317
Mean	-0.04	-4.85	-5.98	-5.41	5.08
SD	14.360	13.001	16.219	14.689	17.201
Median	-1.34	-5.77	-7.81	-6.54	3.85
Min, Max	-36.0, 105.5	-46.8, 54.9	-54.1, 163.8	-54.1, 163.8	-36.4, 174.3
Week 20					
n	692	651	637	1288	313
Mean	-0.16	-4.53	-6.39	-5.45	5.00
SD	14.538	17.404	16.167	16.823	16.019
Median	-1.40	-5.71	-8.16	-6.67	3.51
Min, Max	-52.5, 63.9	-52.3, 283.0	-50.6, 95.0	-52.3, 283.0	-33.3, 133.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	682	658	637	1295	316
Mean	0.66	-4.44	-5.26	-4.84	4.42
SD	15.219	14.984	15.020	15.001	15.763
Median	0.00	-5.48	-6.67	-6.17	2.92
Min, Max	-48.6, 95.5	-47.7, 108.6	-55.3, 67.5	-55.3, 108.6	-34.7, 61.8
Week 28					
n	667	627	609	1236	299
Mean	0.53	-4.41	-5.80	-5.09	4.47
SD	16.101	19.289	16.485	17.968	15.500
Median	-1.61	-6.25	-7.14	-6.67	3.45
Min, Max	-51.1, 100.0	-52.3, 315.8	-55.9, 100.0	-55.9, 315.8	-41.1, 58.9
Week 32					
n	647	625	604	1229	300
Mean	0.83	-4.29	-6.28	-5.27	5.02
SD	17.507	15.299	15.790	15.568	15.769
Median	-0.85	-5.68	-7.82	-6.56	4.62
Min, Max	-52.0, 156.3	-46.8, 76.5	-57.6, 74.5	-57.6, 76.5	-44.2, 56.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	630	619	1249	309
Mean	1.02	-3.42	-5.55	-4.48	4.48
SD	16.819	20.902	15.836	18.588	15.177
Median	0.00	-5.30	-6.25	-5.63	4.05
Min, Max	-43.8, 138.6	-46.0, 348.4	-52.9, 60.3	-52.9, 348.4	-48.4, 54.9
Week 40					
n	631	606	601	1207	297
Mean	0.89	-4.56	-5.95	-5.26	4.33
SD	17.144	15.879	16.061	15.978	16.170
Median	-1.05	-6.52	-6.02	-6.25	3.06
Min, Max	-43.9, 98.2	-48.7, 67.3	-55.9, 93.1	-55.9, 93.1	-48.4, 89.4
Week 44					
n	609	592	595	1187	296
Mean	1.67	-5.11	-4.77	-4.94	3.16
SD	18.091	14.513	19.780	17.348	14.691
Median	0.00	-6.36	-6.25	-6.33	2.45
Min, Max	-46.7, 132.1	-52.2, 57.8	-56.9, 182.1	-56.9, 182.1	-50.5, 56.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	603	608	1211	296
Mean	2.37	-3.98	-4.41	-4.20	4.00
SD	16.771	14.953	16.513	15.750	16.163
Median	1.43	-4.62	-5.37	-5.13	3.33
Min, Max	-46.5, 112.5	-45.9, 46.2	-50.6, 103.4	-50.6, 103.4	-49.5, 82.4
Week 52					
n	566	577	576	1153	288
Mean	0.37	-5.01	-4.32	-4.66	3.65
SD	17.772	14.712	18.556	16.739	15.453
Median	-1.19	-6.38	-5.88	-6.15	2.15
Min, Max	-64.9, 94.2	-45.9, 43.4	-49.4, 183.3	-49.4, 183.3	-48.4, 71.1
Week 56					
n	570	565	569	1134	284
Mean	1.14	-4.84	-4.63	-4.74	4.33
SD	17.353	15.499	23.478	19.898	16.647
Median	0.00	-5.41	-6.00	-5.73	2.49
Min, Max	-43.1, 117.1	-51.4, 56.8	-53.5, 400.0	-53.5, 400.0	-52.6, 76.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	562	579	588	1167	291
Mean	1.09	-4.14	-4.05	-4.09	3.08
SD	19.965	16.682	20.503	18.697	15.800
Median	0.00	-5.41	-5.99	-5.66	1.35
Min, Max	-65.0, 218.4	-50.4, 164.3	-57.1, 243.1	-57.1, 243.1	-43.2, 80.0
Week 64					
n	542	566	559	1125	271
Mean	0.59	-5.03	-4.29	-4.66	1.95
SD	18.794	15.575	23.110	19.678	15.887
Median	-1.31	-6.15	-6.52	-6.25	0.00
Min, Max	-50.4, 143.9	-51.3, 65.8	-57.6, 319.0	-57.6, 319.0	-45.3, 47.2
Week 68					
n	525	556	552	1108	278
Mean	1.00	-4.57	-5.17	-4.87	3.45
SD	18.933	16.511	20.568	18.637	17.064
Median	0.00	-6.09	-7.06	-6.45	1.90
Min, Max	-53.7, 140.4	-45.9, 79.5	-55.9, 208.3	-55.9, 208.3	-52.7, 65.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	568	567	1135	276
Mean	1.34	-3.94	-4.15	-4.05	4.19
SD	19.969	18.206	19.140	18.671	20.890
Median	0.00	-5.65	-5.45	-5.56	2.31
Min, Max	-47.0, 194.9	-54.0, 172.1	-57.6, 144.8	-57.6, 172.1	-45.3, 171.4
Week 76					
n	511	546	547	1093	266
Mean	0.19	-4.86	-4.72	-4.79	2.98
SD	17.157	17.049	17.880	17.462	19.533
Median	-1.33	-6.32	-6.35	-6.35	0.00
Min, Max	-40.1, 111.1	-67.2, 82.9	-51.2, 108.3	-67.2, 108.3	-46.3, 105.3
Week 80					
n	508	540	533	1073	268
Mean	0.30	-5.57	-4.61	-5.10	3.89
SD	19.929	16.823	19.037	17.955	21.723
Median	-2.25	-6.82	-6.25	-6.67	0.57
Min, Max	-42.3, 133.3	-52.2, 114.8	-56.5, 102.5	-56.5, 114.8	-54.7, 153.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	555	556	1111	271
Mean	0.63	-4.26	-4.49	-4.38	2.91
SD	17.722	18.529	17.687	18.105	18.227
Median	-0.46	-5.66	-5.44	-5.56	2.00
Min, Max	-45.2, 84.8	-47.8, 198.2	-55.3, 81.5	-55.3, 198.2	-51.6, 105.6
Week 88					
n	503	532	534	1066	261
Mean	0.43	-5.24	-4.35	-4.79	3.73
SD	19.547	16.942	18.858	17.925	18.554
Median	-2.00	-6.14	-5.78	-5.88	1.85
Min, Max	-45.2, 126.2	-48.7, 79.7	-56.5, 90.7	-56.5, 90.7	-51.4, 83.3
Week 92					
n	489	523	523	1046	258
Mean	0.40	-5.80	-4.70	-5.25	2.62
SD	18.083	16.101	20.401	18.377	16.943
Median	-1.33	-6.67	-6.78	-6.71	1.40
Min, Max	-45.7, 122.2	-49.6, 56.1	-55.3, 187.0	-55.3, 187.0	-52.6, 100.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Alkaline phosphatase (ALP) (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	534	522	1056	262
Mean	2.12	-3.58	-4.31	-3.94	2.86
SD	20.019	18.034	17.726	17.877	17.773
Median	1.37	-4.84	-5.35	-5.23	1.77
Min, Max	-48.3, 151.6	-51.2, 113.2	-53.5, 91.7	-53.5, 113.2	-44.2, 91.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	752	732	727	1459	335
Mean	9.58	2.16	0.59	1.38	1.24
SD	60.881	64.222	53.319	59.026	45.006
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-83.3, 900.0	-86.4, 1033.3	-89.3, 500.0	-89.3, 1033.3	-72.0, 233.3
Week 8					
n	730	701	679	1380	327
Mean	13.63	8.65	0.40	4.59	1.34
SD	83.540	68.560	47.595	59.303	55.113
Median	0.00	0.00	0.00	0.00	-10.00
Min, Max	-83.3, 1633.3	-83.3, 833.3	-93.5, 300.0	-93.5, 833.3	-81.3, 300.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	718	690	669	1359	322
Mean	9.94	10.51	5.98	8.28	-1.76
SD	59.435	65.103	61.674	63.455	44.113
Median	0.00	0.00	0.00	0.00	-5.90
Min, Max	-81.3, 833.3	-83.3, 833.3	-81.3, 640.0	-83.3, 833.3	-87.5, 233.3
Week 16					
n	707	661	647	1308	314
Mean	12.98	9.90	8.33	9.12	-1.95
SD	62.956	69.931	58.209	64.380	46.507
Median	0.00	0.00	0.00	0.00	-10.00
Min, Max	-81.3, 500.0	-81.3, 1033.3	-86.4, 366.7	-86.4, 1033.3	-86.4, 300.0
Week 20					
n	690	644	632	1276	311
Mean	11.68	13.74	10.54	12.15	-1.20
SD	53.927	71.286	60.172	66.009	44.626
Median	0.00	0.00	0.00	0.00	-9.09
Min, Max	-75.0, 366.7	-80.0, 966.7	-85.0, 500.0	-85.0, 966.7	-70.0, 233.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	682	655	631	1286	315
Mean	10.65	15.94	8.57	12.32	0.47
SD	60.843	80.425	57.107	70.032	47.774
Median	0.00	0.00	0.00	0.00	-4.55
Min, Max	-83.3, 700.0	-81.3, 1233.3	-85.0, 366.7	-85.0, 1233.3	-85.0, 300.0
Week 28					
n	662	625	601	1226	297
Mean	11.90	14.79	12.55	13.69	2.37
SD	54.949	67.768	63.297	65.597	51.663
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-85.0, 366.7	-78.6, 833.3	-85.0, 433.3	-85.0, 833.3	-83.3, 366.7
Week 32					
n	642	624	602	1226	299
Mean	13.54	14.99	7.95	11.53	1.95
SD	57.920	73.435	54.637	64.958	48.420
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-78.6, 433.3	-75.0, 1033.3	-85.0, 366.7	-85.0, 1033.3	-86.4, 300.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	651	627	615	1242	306
Mean	12.04	12.52	12.03	12.28	1.36
SD	56.596	61.938	61.535	61.714	48.461
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-81.3, 366.7	-78.6, 633.3	-85.0, 433.3	-85.0, 633.3	-91.7, 300.0
Week 40					
n	628	605	599	1204	295
Mean	11.67	17.52	11.53	14.54	2.13
SD	61.174	73.565	61.583	67.907	46.544
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-78.6, 500.0	-85.0, 1033.3	-86.4, 400.0	-86.4, 1033.3	-81.3, 200.0
Week 44					
n	608	584	591	1175	295
Mean	11.72	17.09	10.93	14.00	1.23
SD	58.821	73.062	61.683	67.620	46.186
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-81.3, 366.7	-81.3, 900.0	-70.0, 566.7	-81.3, 900.0	-86.4, 300.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	602	600	604	1204	296
Mean	10.62	14.49	8.97	11.72	0.14
SD	55.060	72.214	74.711	73.499	52.329
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-86.4, 433.3	-81.3, 1033.3	-87.5, 1300.0	-87.5, 1300.0	-86.4, 280.0
Week 52					
n	559	575	572	1147	286
Mean	14.12	15.80	14.54	15.17	0.06
SD	64.418	82.655	71.679	77.345	51.149
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-78.6, 633.3	-85.0, 1166.7	-91.2, 766.7	-91.2, 1166.7	-85.0, 433.3
Week 56					
n	566	559	564	1123	282
Mean	12.12	14.18	9.97	12.07	4.76
SD	65.985	64.661	60.811	62.764	53.775
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-83.3, 900.0	-78.6, 500.0	-82.6, 433.3	-82.6, 500.0	-86.4, 366.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	561	577	588	1165	287
Mean	11.88	10.82	10.05	10.43	2.46
SD	71.194	63.982	57.068	60.566	51.124
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-83.3, 900.0	-85.0, 766.7	-85.7, 366.7	-85.7, 766.7	-85.0, 300.0
Week 64					
n	539	564	550	1114	267
Mean	11.29	12.75	7.24	10.03	-0.19
SD	61.662	66.595	54.849	61.114	49.328
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-83.3, 433.3	-75.0, 660.0	-83.3, 300.0	-83.3, 660.0	-83.3, 433.3
Week 68					
n	525	554	547	1101	276
Mean	13.22	13.84	12.51	13.18	3.40
SD	57.606	70.736	67.158	68.954	56.943
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-80.0, 400.0	-83.3, 900.0	-83.3, 566.7	-83.3, 900.0	-86.4, 433.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	521	565	565	1130	275
Mean	10.36	11.75	7.80	9.78	2.32
SD	56.403	67.739	60.183	64.075	53.288
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-83.3, 433.3	-83.3, 966.7	-86.4, 600.0	-86.4, 966.7	-78.6, 233.3
Week 76					
n	509	544	544	1088	266
Mean	14.10	11.30	11.58	11.44	0.35
SD	61.297	54.322	67.496	61.236	54.678
Median	0.00	0.00	0.00	0.00	-6.67
Min, Max	-78.6, 433.3	-81.3, 366.7	-86.4, 500.0	-86.4, 500.0	-85.7, 366.7
Week 80					
n	506	535	534	1069	265
Mean	11.32	14.80	11.51	13.15	-1.47
SD	52.976	75.642	62.339	69.304	49.376
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-78.6, 333.3	-83.3, 1033.3	-91.4, 500.0	-91.4, 1033.3	-78.6, 250.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	515	552	551	1103	271
Mean	12.91	8.87	10.00	9.43	3.12
SD	61.863	63.906	59.446	61.693	53.608
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-81.3, 633.3	-83.3, 700.0	-81.3, 500.0	-83.3, 700.0	-86.4, 300.0
Week 88					
n	499	531	529	1060	260
Mean	11.26	13.69	8.60	11.15	1.79
SD	55.493	68.011	60.136	64.222	56.532
Median	0.00	0.00	0.00	0.00	-10.00
Min, Max	-78.6, 500.0	-81.3, 700.0	-91.2, 366.7	-91.2, 700.0	-80.0, 300.0
Week 92					
n	488	519	517	1036	257
Mean	12.14	13.34	11.69	12.51	3.00
SD	60.553	70.602	61.804	66.330	60.839
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-83.3, 766.7	-78.6, 900.0	-81.3, 566.7	-81.3, 900.0	-92.5, 566.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Total bilirubin (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	488	532	518	1050	261
Mean	7.61	12.61	7.61	10.14	3.35
SD	50.938	68.403	57.442	63.253	52.486
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-81.3, 366.7	-83.3, 700.0	-83.3, 500.0	-83.3, 700.0	-92.1, 300.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	732	732	1464	340
Mean	2.56	20.81	35.22	28.01	0.77
SD	29.984	43.401	110.684	84.348	27.874
Median	0.00	13.33	18.90	15.79	0.00
Min, Max	-94.6, 321.1	-80.0, 450.0	-67.6, 1821.4	-80.0, 1821.4	-66.7, 216.7
Week 8					
n	732	706	683	1389	328
Mean	7.29	17.87	24.99	21.37	2.10
SD	54.898	43.023	72.504	59.462	35.744
Median	0.00	11.11	16.67	13.75	0.00
Min, Max	-82.0, 888.9	-80.0, 440.0	-67.6, 1528.6	-80.0, 1528.6	-70.6, 340.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	8.26	14.32	20.84	17.53	2.94
SD	54.011	41.916	53.997	48.340	34.194
Median	0.00	9.09	13.81	11.01	0.00
Min, Max	-82.4, 957.1	-77.5, 568.8	-75.8, 826.1	-77.5, 826.1	-70.6, 237.5
Week 16					
n	708	663	651	1314	317
Mean	6.46	13.77	19.25	16.49	3.02
SD	45.136	47.453	46.880	47.232	56.656
Median	0.00	7.69	11.11	9.09	-6.67
Min, Max	-83.8, 550.0	-77.5, 543.8	-75.8, 412.5	-77.5, 543.8	-67.6, 704.2
Week 20					
n	692	651	637	1288	313
Mean	3.72	13.90	17.17	15.51	2.08
SD	33.045	54.154	45.589	50.108	38.859
Median	0.00	6.67	10.53	8.33	-4.44
Min, Max	-75.0, 276.9	-80.0, 870.0	-78.9, 425.0	-80.0, 870.0	-73.5, 342.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	682	658	637	1295	316
Mean	7.26	11.93	15.77	13.82	2.07
SD	40.139	50.025	43.650	47.019	37.077
Median	0.00	4.35	9.09	7.14	0.00
Min, Max	-71.1, 315.4	-84.6, 584.2	-81.1, 412.5	-84.6, 584.2	-73.5, 210.5
Week 28					
n	667	628	609	1237	299
Mean	7.43	8.72	17.36	12.97	0.66
SD	50.358	39.528	56.954	49.060	37.680
Median	0.00	1.22	7.14	6.25	-6.25
Min, Max	-82.4, 583.3	-82.1, 450.0	-83.5, 590.0	-83.5, 590.0	-73.5, 232.0
Week 32					
n	647	625	604	1229	301
Mean	9.12	10.27	13.63	11.92	2.22
SD	60.127	49.026	44.425	46.833	39.986
Median	0.00	0.00	7.14	4.55	-5.00
Min, Max	-81.3, 1145.8	-90.0, 672.7	-82.0, 350.0	-90.0, 672.7	-76.5, 226.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	630	619	1249	309
Mean	10.30	18.02	16.35	17.19	2.64
SD	46.668	192.510	48.291	140.833	54.841
Median	0.00	3.55	9.09	6.67	-6.25
Min, Max	-76.3, 536.4	-93.6, 4700.0	-76.8, 511.1	-93.6, 4700.0	-79.4, 750.0
Week 40					
n	631	605	601	1206	297
Mean	9.21	9.51	13.20	11.35	-0.97
SD	50.501	49.913	47.642	48.809	36.341
Median	0.00	0.00	6.67	0.00	-6.45
Min, Max	-79.0, 494.1	-93.6, 600.0	-81.3, 476.9	-93.6, 600.0	-73.5, 225.0
Week 44					
n	609	592	595	1187	296
Mean	10.31	9.36	17.44	13.41	-1.73
SD	58.626	43.184	57.727	51.134	31.681
Median	0.00	0.00	7.14	5.00	-7.69
Min, Max	-78.5, 623.5	-92.7, 425.0	-80.6, 584.6	-92.7, 584.6	-77.8, 163.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	602	608	1210	296
Mean	12.67	12.10	18.69	15.41	1.12
SD	56.544	41.299	53.257	47.778	34.577
Median	0.00	6.07	9.09	7.69	-4.90
Min, Max	-77.2, 688.9	-91.3, 350.0	-80.6, 569.2	-91.3, 569.2	-77.8, 161.1
Week 52					
n	566	577	576	1153	288
Mean	9.52	13.18	16.95	15.06	4.78
SD	63.798	139.738	62.425	108.222	86.356
Median	0.00	0.00	7.14	0.00	-7.58
Min, Max	-95.6, 1005.0	-91.3, 3190.0	-78.4, 892.3	-91.3, 3190.0	-77.8, 1272.7
Week 56					
n	570	565	569	1134	284
Mean	10.70	11.82	14.29	13.06	1.65
SD	49.248	116.954	54.068	90.972	40.826
Median	0.00	0.00	5.56	0.00	-6.70
Min, Max	-87.5, 400.0	-86.3, 2620.0	-80.0, 577.8	-86.3, 2620.0	-84.6, 319.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	562	579	588	1167	291
Mean	15.21	10.85	16.24	13.57	2.41
SD	122.641	70.682	47.324	60.094	48.741
Median	0.00	0.00	6.67	4.00	-7.14
Min, Max	-77.2, 2658.3	-87.2, 1190.0	-83.5, 300.0	-87.2, 1190.0	-74.3, 423.1
Week 64					
n	542	566	559	1125	271
Mean	8.51	9.52	18.61	14.04	-0.21
SD	54.809	44.953	75.481	62.168	36.596
Median	0.00	0.00	6.25	4.00	-6.45
Min, Max	-76.3, 716.7	-88.1, 350.0	-77.9, 1266.7	-88.1, 1266.7	-73.0, 190.0
Week 68					
n	525	556	552	1108	278
Mean	11.61	7.13	14.97	11.04	1.96
SD	63.965	35.799	53.466	45.615	38.189
Median	0.00	0.00	0.00	0.00	-4.35
Min, Max	-75.0, 838.9	-85.4, 200.0	-81.1, 507.7	-85.4, 507.7	-76.2, 222.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	568	567	1135	276
Mean	12.48	9.73	17.58	13.65	7.40
SD	60.034	37.876	58.658	49.498	53.848
Median	0.00	2.68	7.69	5.88	0.00
Min, Max	-76.3, 700.0	-84.6, 250.0	-77.7, 542.1	-84.6, 542.1	-66.7, 571.7
Week 76					
n	510	544	547	1091	266
Mean	7.74	8.72	16.37	12.56	2.97
SD	51.082	52.478	66.407	59.963	48.441
Median	0.00	0.00	4.65	2.78	-6.33
Min, Max	-76.3, 483.3	-83.3, 655.6	-82.0, 825.0	-83.3, 825.0	-79.6, 362.5
Week 80					
n	508	540	533	1073	268
Mean	7.45	11.02	13.77	12.39	2.28
SD	45.644	53.898	49.830	51.912	41.392
Median	0.00	0.00	3.85	0.00	-6.46
Min, Max	-74.3, 247.6	-77.8, 510.0	-80.6, 376.9	-80.6, 510.0	-73.0, 322.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	555	556	1111	271
Mean	8.40	10.45	15.87	13.16	1.75
SD	46.767	46.018	50.729	48.487	35.945
Median	0.00	4.76	6.25	5.88	-6.25
Min, Max	-77.1, 316.7	-79.5, 450.0	-80.0, 438.5	-80.0, 450.0	-73.8, 165.0
Week 88					
n	503	532	534	1066	261
Mean	7.85	11.50	15.89	13.70	2.73
SD	48.826	62.473	66.520	64.539	44.851
Median	0.00	0.00	2.52	0.00	0.00
Min, Max	-76.3, 411.1	-75.6, 760.0	-81.1, 860.0	-81.1, 860.0	-73.0, 410.0
Week 92					
n	489	523	523	1046	258
Mean	13.07	8.60	13.90	11.25	0.48
SD	82.586	45.521	61.140	53.938	35.174
Median	0.00	0.00	1.67	0.00	-4.55
Min, Max	-73.7, 980.8	-79.5, 400.0	-75.8, 645.5	-79.5, 645.5	-73.0, 166.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: GGT (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	534	522	1056	262
Mean	15.46	11.37	15.56	13.44	6.83
SD	69.242	44.600	62.894	54.431	45.968
Median	0.00	4.65	4.08	4.26	0.00
Min, Max	-75.0, 645.5	-81.7, 350.0	-77.7, 818.2	-81.7, 818.2	-76.2, 388.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	736	718	715	1433	334
Mean	-0.20	-1.21	-1.41	-1.31	0.77
SD	15.952	12.876	14.131	13.512	10.763
Median	-1.02	-2.21	-2.60	-2.44	0.60
Min, Max	-43.1, 284.9	-49.4, 86.0	-43.2, 103.9	-49.4, 103.9	-22.9, 51.2
Week 8					
n	717	691	663	1354	323
Mean	0.17	-2.33	-3.61	-2.96	0.73
SD	14.010	12.222	11.884	12.070	11.686
Median	-0.63	-2.08	-4.40	-3.25	0.00
Min, Max	-44.7, 157.9	-92.7, 56.8	-44.3, 39.3	-92.7, 56.8	-52.6, 60.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	708	680	657	1337	324
Mean	0.03	-2.79	-4.17	-3.47	-0.03
SD	13.096	11.750	11.869	11.824	11.800
Median	-0.81	-3.00	-4.73	-3.95	-0.29
Min, Max	-40.7, 138.1	-50.0, 46.7	-44.3, 40.5	-50.0, 46.7	-49.1, 46.8
Week 16					
n	693	653	640	1293	312
Mean	-0.66	-3.53	-3.91	-3.72	-0.74
SD	11.308	12.295	13.792	13.054	13.192
Median	-0.76	-3.97	-5.19	-4.41	-1.23
Min, Max	-50.4, 44.3	-43.6, 58.9	-46.3, 103.5	-46.3, 103.5	-45.4, 91.8
Week 20					
n	674	636	621	1257	310
Mean	-0.98	-3.77	-5.37	-4.56	-1.37
SD	11.307	13.819	11.877	12.916	12.506
Median	-0.97	-5.45	-6.13	-5.84	-2.20
Min, Max	-48.4, 42.9	-50.5, 106.4	-39.6, 33.6	-50.5, 106.4	-44.5, 39.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	669	646	611	1257	306
Mean	-0.56	-3.77	-4.36	-4.06	-0.30
SD	13.241	14.887	12.383	13.725	15.782
Median	-1.72	-4.95	-4.65	-4.72	-1.51
Min, Max	-49.2, 108.6	-45.5, 208.4	-43.2, 54.2	-45.5, 208.4	-46.1, 137.6
Week 28					
n	656	604	596	1200	296
Mean	-0.83	-3.92	-5.59	-4.75	-1.34
SD	19.443	15.160	13.124	14.204	15.901
Median	-1.77	-5.31	-6.33	-5.88	-2.32
Min, Max	-51.2, 370.2	-50.8, 128.0	-41.5, 70.5	-50.8, 128.0	-48.4, 114.2
Week 32					
n	629	608	591	1199	293
Mean	-0.56	-5.92	-6.47	-6.19	-0.95
SD	16.163	13.147	13.706	13.423	14.470
Median	-2.08	-7.09	-7.30	-7.19	-1.95
Min, Max	-45.1, 233.0	-53.0, 71.6	-51.9, 92.7	-53.0, 92.7	-47.6, 87.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	634	615	605	1220	306
Mean	-0.33	-4.16	-5.22	-4.69	-1.14
SD	11.989	13.020	13.167	13.099	12.920
Median	-0.83	-5.43	-6.19	-5.76	-2.11
Min, Max	-38.3, 54.1	-50.8, 56.0	-45.6, 101.6	-50.8, 101.6	-44.7, 54.8
Week 40					
n	617	593	578	1171	290
Mean	-1.05	-5.17	-6.77	-5.96	-1.24
SD	13.469	16.260	12.549	14.563	14.693
Median	-1.96	-6.52	-7.20	-6.92	-2.20
Min, Max	-50.8, 86.6	-48.5, 195.4	-50.2, 40.9	-50.2, 195.4	-48.4, 92.7
Week 44					
n	590	582	584	1166	292
Mean	-1.58	-6.25	-6.74	-6.50	-1.42
SD	13.692	12.404	13.783	13.110	12.932
Median	-2.66	-7.34	-8.01	-7.69	-1.62
Min, Max	-43.9, 107.3	-44.8, 46.4	-55.4, 110.0	-55.4, 110.0	-52.2, 54.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	590	588	595	1183	293
Mean	-0.48	-5.42	-4.70	-5.06	-0.03
SD	12.231	12.535	12.748	12.642	14.078
Median	-1.14	-6.25	-5.22	-5.62	-1.39
Min, Max	-45.5, 53.3	-46.3, 46.2	-40.7, 124.1	-46.3, 124.1	-45.7, 65.0
Week 52					
n	553	567	561	1128	285
Mean	-1.80	-6.13	-7.50	-6.81	-1.34
SD	13.190	12.721	11.874	12.320	20.073
Median	-2.90	-7.75	-7.59	-7.72	-2.55
Min, Max	-43.9, 91.9	-43.5, 74.1	-43.9, 60.8	-43.9, 74.1	-48.4, 247.9
Week 56					
n	551	551	556	1107	277
Mean	-1.61	-6.26	-7.56	-6.91	-1.52
SD	13.685	12.511	12.153	12.344	13.969
Median	-2.50	-7.50	-7.22	-7.35	-2.53
Min, Max	-52.8, 57.9	-42.7, 56.9	-51.2, 33.6	-51.2, 56.9	-42.4, 92.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	551	564	570	1134	287
Mean	-1.51	-5.59	-5.78	-5.68	-1.14
SD	11.872	12.593	12.257	12.420	12.587
Median	-2.17	-7.08	-5.40	-6.23	-1.59
Min, Max	-52.4, 44.3	-46.0, 55.4	-38.7, 42.6	-46.0, 55.4	-41.5, 45.9
Week 64					
n	526	552	547	1099	268
Mean	-1.55	-6.13	-7.47	-6.80	-3.26
SD	16.634	13.247	13.411	13.340	12.198
Median	-3.16	-7.46	-8.53	-7.84	-3.18
Min, Max	-51.6, 205.3	-40.4, 86.9	-43.6, 66.4	-43.6, 86.9	-48.9, 48.5
Week 68					
n	515	543	539	1082	271
Mean	-1.41	-6.13	-6.86	-6.49	-3.07
SD	15.423	13.734	13.583	13.658	12.722
Median	-3.59	-7.53	-7.46	-7.47	-3.57
Min, Max	-48.0, 126.8	-50.8, 54.9	-40.4, 69.1	-50.8, 69.1	-44.1, 50.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	513	558	552	1110	267
Mean	-1.30	-4.72	-5.66	-5.19	-0.97
SD	12.692	12.826	12.493	12.664	16.727
Median	-1.86	-5.36	-6.02	-5.87	-3.09
Min, Max	-43.2, 47.9	-37.8, 46.9	-38.1, 46.7	-38.1, 46.9	-43.7, 138.8
Week 76					
n	498	535	539	1074	262
Mean	-1.90	-4.90	-5.92	-5.41	-2.02
SD	13.593	16.163	14.487	15.346	16.568
Median	-2.31	-6.62	-6.96	-6.74	-3.29
Min, Max	-50.0, 57.4	-48.4, 173.2	-40.4, 113.3	-48.4, 173.2	-51.1, 149.7
Week 80					
n	499	530	522	1052	260
Mean	-2.39	-5.82	-5.78	-5.80	-1.52
SD	13.444	13.164	14.929	14.061	14.757
Median	-3.03	-7.12	-7.22	-7.16	-2.11
Min, Max	-51.2, 91.6	-53.2, 48.4	-45.6, 93.9	-53.2, 93.9	-58.1, 88.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	504	545	546	1091	265
Mean	-1.42	-4.64	-5.42	-5.03	-1.86
SD	14.230	13.525	13.318	13.421	16.017
Median	-2.89	-5.38	-6.45	-5.96	-2.72
Min, Max	-43.5, 111.5	-46.8, 80.4	-50.5, 55.8	-50.5, 80.4	-51.1, 124.6
Week 88					
n	494	524	528	1052	256
Mean	-1.24	-5.75	-6.48	-6.12	-1.61
SD	13.729	14.644	14.816	14.728	14.602
Median	-2.46	-8.05	-7.79	-7.88	-2.73
Min, Max	-46.7, 48.9	-44.7, 117.4	-48.1, 134.4	-48.1, 134.4	-62.5, 54.8
Week 92					
n	477	512	510	1022	255
Mean	-1.60	-5.82	-6.71	-6.26	-3.14
SD	13.616	13.566	13.839	13.704	13.566
Median	-3.57	-6.92	-8.22	-7.50	-4.17
Min, Max	-49.6, 51.6	-37.8, 135.3	-49.8, 57.1	-49.8, 135.3	-49.6, 39.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: LDH (U/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	481	522	511	1033	255
Mean	-0.07	-4.66	-5.78	-5.21	-1.33
SD	13.168	13.179	13.040	13.117	13.052
Median	-0.79	-6.10	-6.67	-6.43	-0.68
Min, Max	-54.1, 63.3	-36.6, 72.1	-45.3, 72.7	-45.3, 72.7	-44.4, 34.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	734	732	1466	340
Mean	5.79	1.27	0.15	0.71	1.55
SD	23.364	24.889	26.325	25.613	25.808
Median	3.23	0.00	-3.29	-2.44	0.00
Min, Max	-53.6, 104.0	-62.5, 100.0	-56.3, 133.3	-62.5, 133.3	-54.9, 91.3
Week 8					
n	733	706	684	1390	329
Mean	5.01	2.33	0.42	1.39	3.05
SD	25.030	25.924	24.095	25.050	26.356
Median	3.23	0.00	-2.25	0.00	0.00
Min, Max	-61.5, 146.7	-51.6, 175.0	-69.7, 127.5	-69.7, 175.0	-60.0, 109.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	4.63	2.41	1.81	2.11	2.33
SD	24.392	24.477	25.887	25.174	26.066
Median	0.00	0.00	-2.27	0.00	0.00
Min, Max	-58.2, 109.1	-65.0, 100.0	-52.1, 180.0	-65.0, 180.0	-58.8, 134.8
Week 16					
n	708	664	652	1316	318
Mean	4.30	3.72	3.24	3.48	2.36
SD	25.244	26.925	25.843	26.385	25.930
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-48.2, 120.7	-61.7, 125.0	-52.9, 125.0	-61.7, 125.0	-51.3, 100.0
Week 20					
n	692	651	637	1288	314
Mean	5.56	4.89	1.99	3.46	3.86
SD	26.859	28.856	25.481	27.268	28.176
Median	2.06	2.13	0.00	0.00	0.00
Min, Max	-63.8, 200.0	-61.0, 218.2	-56.7, 111.1	-61.0, 218.2	-58.9, 183.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	683	658	638	1296	317
Mean	4.77	4.01	2.23	3.13	2.49
SD	26.322	28.237	26.657	27.474	25.189
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-52.9, 137.5	-55.2, 132.0	-64.7, 116.7	-64.7, 132.0	-58.3, 90.9
Week 28					
n	667	627	609	1236	299
Mean	5.71	4.51	2.06	3.30	1.42
SD	26.387	27.084	25.863	26.507	24.566
Median	2.08	2.44	0.00	0.00	0.00
Min, Max	-52.5, 164.7	-58.6, 143.5	-63.3, 103.8	-63.3, 143.5	-63.3, 105.9
Week 32					
n	647	627	604	1231	302
Mean	6.76	5.69	2.95	4.35	3.10
SD	27.042	28.340	26.784	27.611	24.575
Median	2.44	1.82	0.00	0.00	0.00
Min, Max	-53.3, 136.4	-70.6, 175.0	-56.7, 138.9	-70.6, 175.0	-48.9, 86.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	630	620	1250	309
Mean	6.13	4.75	3.43	4.10	4.40
SD	26.820	29.195	25.705	27.516	25.868
Median	2.86	0.00	0.00	0.00	0.00
Min, Max	-59.2, 134.6	-58.8, 200.0	-53.3, 155.2	-58.8, 200.0	-53.9, 109.4
Week 40					
n	631	606	600	1206	297
Mean	6.93	5.39	3.95	4.68	3.64
SD	28.619	28.238	27.605	27.922	26.526
Median	2.50	0.00	0.00	0.00	0.00
Min, Max	-55.1, 157.9	-51.7, 144.4	-70.7, 157.9	-70.7, 157.9	-60.5, 105.9
Week 44					
n	609	592	595	1187	296
Mean	5.72	5.45	2.75	4.10	3.30
SD	27.994	29.214	26.433	27.876	25.343
Median	2.70	0.00	0.00	0.00	0.00
Min, Max	-44.7, 209.1	-67.7, 178.1	-62.5, 144.4	-67.7, 178.1	-65.2, 96.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	604	608	1212	296
Mean	5.52	4.32	3.32	3.82	4.60
SD	26.562	27.478	26.777	27.122	25.210
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-60.0, 176.9	-57.3, 184.2	-55.2, 166.7	-57.3, 184.2	-62.5, 95.5
Week 52					
n	567	577	577	1154	288
Mean	6.29	5.62	4.75	5.19	3.93
SD	26.894	27.149	28.146	27.644	25.142
Median	2.63	2.86	2.00	2.30	2.68
Min, Max	-55.6, 181.8	-50.0, 125.0	-63.9, 200.0	-63.9, 200.0	-54.2, 117.2
Week 56					
n	570	564	569	1133	284
Mean	7.41	5.80	4.55	5.17	4.73
SD	27.481	28.437	27.184	27.810	27.685
Median	3.52	2.41	0.00	1.75	0.00
Min, Max	-59.1, 128.0	-56.3, 133.3	-52.9, 104.2	-56.3, 133.3	-52.9, 122.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	563	579	591	1170	291
Mean	6.96	7.14	5.55	6.34	3.45
SD	27.026	28.464	28.291	28.376	25.376
Median	4.00	2.86	0.00	1.84	2.56
Min, Max	-54.0, 161.3	-67.2, 122.2	-55.9, 100.0	-67.2, 122.2	-49.2, 111.1
Week 64					
n	542	567	559	1126	271
Mean	8.38	5.69	4.11	4.91	5.00
SD	26.649	27.267	27.717	27.491	26.960
Median	5.26	2.70	0.00	1.90	3.13
Min, Max	-51.4, 111.1	-69.4, 126.3	-55.9, 142.9	-69.4, 142.9	-50.0, 108.7
Week 68					
n	527	558	552	1110	278
Mean	8.33	6.52	2.09	4.31	4.64
SD	29.399	29.111	25.799	27.591	25.601
Median	3.77	2.90	0.00	0.00	2.90
Min, Max	-55.3, 147.5	-62.5, 186.7	-59.7, 107.7	-62.5, 186.7	-50.0, 88.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	569	567	1136	276
Mean	8.36	6.49	3.91	5.20	5.07
SD	28.946	29.422	26.878	28.198	26.409
Median	3.87	2.63	0.00	0.00	0.00
Min, Max	-60.0, 128.2	-62.5, 187.5	-54.1, 121.7	-62.5, 187.5	-60.0, 109.5
Week 76					
n	511	546	548	1094	267
Mean	7.40	6.14	3.98	5.06	5.57
SD	27.702	29.158	25.422	27.359	27.248
Median	2.56	1.70	1.93	1.85	2.56
Min, Max	-53.3, 122.6	-59.4, 221.1	-64.4, 129.2	-64.4, 221.1	-56.7, 117.4
Week 80					
n	508	541	535	1076	268
Mean	8.36	7.32	5.69	6.51	7.05
SD	28.482	29.696	28.897	29.299	29.460
Median	4.10	3.85	3.75	3.81	6.56
Min, Max	-60.0, 161.9	-53.8, 204.7	-58.0, 150.0	-58.0, 204.7	-63.2, 123.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	556	555	1111	271
Mean	8.37	7.93	5.04	6.49	5.34
SD	28.369	27.382	29.573	28.521	27.236
Median	2.99	3.99	0.00	2.33	5.41
Min, Max	-54.1, 113.6	-52.6, 177.8	-53.3, 189.3	-53.3, 189.3	-55.3, 105.4
Week 88					
n	503	532	534	1066	262
Mean	8.43	6.74	5.29	6.01	4.27
SD	27.053	29.296	27.631	28.470	25.900
Median	6.52	2.78	0.00	1.90	4.04
Min, Max	-53.3, 137.5	-50.0, 176.2	-58.8, 133.3	-58.8, 176.2	-63.3, 105.9
Week 92					
n	489	524	524	1048	258
Mean	9.48	7.00	4.59	5.80	6.18
SD	27.910	27.594	25.690	26.674	27.073
Median	6.82	3.88	2.13	2.53	3.51
Min, Max	-62.5, 88.2	-48.3, 119.2	-70.1, 128.6	-70.1, 128.6	-59.3, 94.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: BUN/urea (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	534	523	1057	263
Mean	8.46	5.11	3.76	4.45	7.27
SD	26.393	27.896	27.338	27.616	27.509
Median	3.95	1.69	0.00	0.00	4.08
Min, Max	-62.2, 124.1	-58.9, 146.9	-51.6, 205.3	-58.9, 205.3	-50.0, 103.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	734	732	1466	340
Mean	0.87	-6.12	-9.25	-7.68	-0.27
SD	10.529	12.215	11.357	11.894	10.870
Median	0.00	-7.29	-10.13	-8.75	0.00
Min, Max	-30.5, 50.0	-72.7, 86.2	-55.3, 41.7	-72.7, 86.2	-53.8, 40.0
Week 8					
n	733	706	684	1390	329
Mean	1.56	-6.95	-10.16	-8.53	0.31
SD	14.490	11.435	11.216	11.437	15.043
Median	0.00	-7.09	-11.67	-9.43	0.00
Min, Max	-30.6, 264.8	-72.7, 67.2	-37.5, 55.1	-72.7, 67.2	-38.5, 164.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	1.29	-7.00	-10.18	-8.57	0.75
SD	11.398	12.463	11.910	12.292	12.271
Median	0.00	-7.69	-11.40	-9.76	0.00
Min, Max	-34.2, 58.2	-72.7, 83.6	-42.9, 92.8	-72.7, 92.8	-53.8, 64.4
Week 16					
n	708	664	652	1316	318
Mean	1.52	-6.45	-9.68	-8.05	0.80
SD	11.737	14.860	13.953	14.503	12.160
Median	0.00	-8.22	-11.94	-10.00	0.00
Min, Max	-28.0, 72.1	-72.7, 206.6	-42.9, 170.4	-72.7, 206.6	-53.8, 39.6
Week 20					
n	692	651	637	1288	314
Mean	1.58	-7.37	-10.15	-8.74	0.61
SD	11.561	11.938	11.614	11.856	13.756
Median	0.00	-8.62	-11.29	-10.17	0.00
Min, Max	-32.6, 89.4	-68.2, 97.6	-42.2, 47.8	-68.2, 97.6	-46.2, 133.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	683	658	638	1296	317
Mean	0.70	-7.58	-10.30	-8.92	0.35
SD	11.608	11.802	12.196	12.070	14.366
Median	0.00	-8.38	-12.00	-10.29	0.00
Min, Max	-33.3, 42.0	-40.9, 40.0	-37.5, 50.0	-40.9, 50.0	-53.8, 122.4
Week 28					
n	667	627	610	1237	299
Mean	2.95	-4.25	-8.17	-6.18	1.72
SD	12.417	21.216	19.320	20.390	12.515
Median	0.00	-5.49	-10.46	-8.33	0.00
Min, Max	-25.0, 75.0	-68.2, 394.8	-38.0, 368.5	-68.2, 394.8	-53.8, 84.4
Week 32					
n	647	627	604	1231	302
Mean	3.43	-4.68	-8.82	-6.71	2.36
SD	13.083	25.676	13.271	20.643	12.918
Median	1.45	-6.25	-10.94	-8.14	0.00
Min, Max	-40.0, 98.2	-72.7, 560.0	-82.3, 72.6	-82.3, 560.0	-53.8, 56.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	629	619	1248	309
Mean	1.38	-5.81	-9.28	-7.53	1.38
SD	12.241	17.234	15.549	16.504	12.784
Median	0.00	-7.25	-11.59	-9.60	0.00
Min, Max	-34.2, 60.7	-68.2, 261.8	-47.8, 223.2	-68.2, 261.8	-53.8, 43.2
Week 40					
n	631	606	600	1206	297
Mean	3.10	-4.78	-7.03	-5.90	2.82
SD	11.623	12.392	15.559	14.096	13.032
Median	1.47	-5.41	-8.45	-7.03	1.52
Min, Max	-28.6, 50.9	-68.2, 54.4	-37.5, 204.8	-68.2, 204.8	-53.8, 93.3
Week 44					
n	609	592	595	1187	296
Mean	3.28	-5.09	-7.74	-6.42	2.05
SD	12.171	12.023	13.174	12.678	12.670
Median	1.45	-5.61	-10.00	-7.46	0.00
Min, Max	-30.3, 64.9	-72.7, 50.0	-43.5, 55.0	-72.7, 55.0	-53.8, 51.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	604	608	1212	296
Mean	1.54	-7.21	-9.35	-8.28	0.11
SD	13.049	12.314	12.570	12.483	12.120
Median	0.00	-6.90	-10.66	-9.09	0.00
Min, Max	-30.3, 81.8	-68.2, 54.8	-44.4, 35.4	-68.2, 54.8	-61.5, 34.1
Week 52					
n	567	577	577	1154	288
Mean	3.57	-5.40	-7.87	-6.64	2.42
SD	13.191	12.091	12.961	12.589	12.983
Median	1.45	-6.19	-9.38	-7.59	1.47
Min, Max	-31.6, 137.5	-72.7, 40.0	-41.7, 58.5	-72.7, 58.5	-53.8, 40.9
Week 56					
n	570	565	569	1134	284
Mean	4.36	-4.83	-7.45	-6.14	2.44
SD	12.423	13.760	16.426	15.206	12.661
Median	3.20	-6.17	-8.99	-7.45	1.74
Min, Max	-26.3, 50.7	-72.7, 110.0	-43.5, 228.0	-72.7, 228.0	-53.8, 50.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	563	579	591	1170	291
Mean	1.96	-5.45	-8.28	-6.88	1.99
SD	12.664	14.208	13.155	13.753	12.643
Median	1.32	-6.94	-10.13	-8.57	0.00
Min, Max	-40.0, 66.1	-42.3, 110.6	-45.2, 62.7	-45.2, 110.6	-61.5, 80.0
Week 64					
n	542	567	559	1126	271
Mean	4.73	-4.80	-7.53	-6.16	3.69
SD	11.753	12.470	13.255	12.932	13.481
Median	4.02	-4.76	-8.82	-6.39	2.90
Min, Max	-32.2, 50.0	-68.2, 52.8	-37.5, 50.0	-68.2, 52.8	-46.2, 95.7
Week 68					
n	527	558	552	1110	278
Mean	5.26	-4.28	-8.19	-6.22	3.45
SD	17.013	13.633	12.204	13.083	13.998
Median	4.62	-4.40	-9.76	-6.92	3.18
Min, Max	-57.3, 253.9	-68.2, 112.7	-39.1, 50.0	-68.2, 112.7	-61.6, 50.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	569	567	1136	276
Mean	2.82	-5.81	-8.59	-7.20	1.68
SD	11.825	12.490	14.996	13.862	11.846
Median	1.59	-6.56	-10.00	-8.06	0.00
Min, Max	-42.7, 60.0	-41.2, 80.0	-38.0, 169.6	-41.2, 169.6	-46.2, 35.0
Week 76					
n	511	546	548	1094	267
Mean	5.45	-4.24	-6.69	-5.47	3.46
SD	12.596	13.380	13.102	13.292	13.687
Median	4.05	-5.41	-8.21	-6.85	1.85
Min, Max	-39.8, 60.0	-68.2, 83.0	-52.2, 45.3	-68.2, 83.0	-53.8, 45.1
Week 80					
n	508	541	535	1076	268
Mean	5.15	-2.40	-6.39	-4.39	3.32
SD	13.418	28.692	14.408	22.817	12.787
Median	3.97	-3.75	-7.94	-5.67	2.29
Min, Max	-40.7, 66.7	-68.2, 593.1	-44.6, 110.1	-68.2, 593.1	-46.2, 33.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	556	555	1111	271
Mean	4.35	-5.14	-8.31	-6.72	3.60
SD	16.767	12.564	12.673	12.712	17.762
Median	3.22	-5.45	-9.84	-7.46	1.30
Min, Max	-28.6, 262.5	-68.2, 60.0	-42.6, 53.1	-68.2, 60.0	-30.3, 231.7
Week 88					
n	503	532	535	1067	262
Mean	5.21	-3.80	-7.19	-5.50	4.19
SD	12.083	12.306	12.564	12.545	13.848
Median	5.00	-3.85	-8.86	-6.06	2.31
Min, Max	-41.5, 43.3	-63.6, 40.0	-40.5, 43.9	-63.6, 43.9	-53.8, 100.0
Week 92					
n	489	524	524	1048	258
Mean	5.23	-3.68	-7.21	-5.45	4.46
SD	12.235	13.825	12.485	13.284	13.783
Median	4.00	-3.81	-8.22	-6.25	3.15
Min, Max	-30.0, 49.1	-68.2, 100.0	-42.0, 40.0	-68.2, 100.0	-53.8, 77.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Creatinine (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	534	523	1057	263
Mean	3.45	-5.19	-8.15	-6.65	3.71
SD	12.011	12.645	13.000	12.901	12.225
Median	1.99	-6.25	-9.88	-7.79	2.06
Min, Max	-32.1, 50.0	-68.2, 41.1	-40.6, 42.9	-68.2, 42.9	-53.8, 50.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	734	732	1466	339
Mean	-0.14	0.03	0.05	0.04	0.03
SD	1.813	1.670	2.000	1.841	1.664
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-15.4, 12.9	-6.8, 7.7	-27.7, 6.3	-27.7, 7.7	-6.2, 8.0
Week 8					
n	732	705	684	1389	329
Mean	-0.10	-0.05	-0.05	-0.05	-0.12
SD	1.738	1.720	1.868	1.794	1.731
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-11.7, 10.9	-8.8, 9.2	-21.1, 6.6	-21.1, 9.2	-6.2, 6.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	-0.13	-0.06	-0.04	-0.05	0.14
SD	1.834	1.718	1.728	1.723	1.860
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-14.2, 11.7	-6.8, 9.2	-6.3, 7.8	-6.8, 9.2	-6.9, 9.8
Week 16					
n	707	664	652	1316	317
Mean	-0.19	-0.07	-0.05	-0.06	-0.08
SD	1.748	1.647	1.805	1.726	1.916
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-14.8, 5.6	-6.1, 6.5	-6.9, 10.0	-6.9, 10.0	-6.8, 10.8
Week 20					
n	691	651	637	1288	314
Mean	-0.14	-0.20	-0.15	-0.17	-0.12
SD	1.933	1.734	1.758	1.746	1.653
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-13.6, 11.6	-8.5, 6.4	-5.4, 6.5	-8.5, 6.5	-5.5, 6.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	683	658	638	1296	316
Mean	-0.08	-0.10	0.02	-0.04	0.00
SD	1.765	1.653	1.846	1.751	1.824
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-7.4, 7.4	-5.4, 8.6	-5.8, 10.7	-5.8, 10.7	-5.5, 8.8
Week 28					
n	667	628	610	1238	299
Mean	-0.22	-0.14	-0.03	-0.09	-0.09
SD	1.789	1.824	1.807	1.816	1.881
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.7, 5.2	-7.6, 5.8	-7.6, 8.3	-7.6, 8.3	-6.2, 6.3
Week 32					
n	646	626	603	1229	302
Mean	-0.11	-0.19	-0.12	-0.16	-0.17
SD	1.858	1.813	1.877	1.844	1.944
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-6.4, 10.0	-7.5, 6.2	-14.1, 8.5	-14.1, 8.5	-6.7, 7.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	629	619	1248	309
Mean	-0.23	-0.19	-0.13	-0.16	-0.02
SD	1.890	1.630	1.770	1.701	1.759
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-22.7, 5.8	-6.1, 5.1	-6.8, 8.3	-6.8, 8.3	-6.8, 6.4
Week 40					
n	631	606	600	1206	297
Mean	-0.14	-0.11	-0.06	-0.09	-0.31
SD	1.845	1.881	1.781	1.832	1.980
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-7.0, 7.3	-6.8, 7.3	-6.2, 6.5	-6.8, 7.3	-11.3, 4.4
Week 44					
n	608	589	595	1184	296
Mean	-0.18	-0.21	0.03	-0.09	-0.34
SD	1.918	1.851	1.826	1.842	1.806
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-11.2, 8.7	-6.8, 7.4	-4.9, 8.4	-6.8, 8.4	-6.2, 5.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	604	608	1212	296
Mean	-0.26	-0.13	-0.04	-0.09	-0.24
SD	1.739	2.090	1.871	1.983	1.658
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-10.1, 7.9	-29.4, 10.8	-6.8, 9.9	-29.4, 10.8	-6.2, 3.6
Week 52					
n	567	577	576	1153	288
Mean	-0.16	-0.20	-0.11	-0.16	-0.12
SD	1.854	1.735	1.771	1.753	1.872
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-7.3, 9.6	-6.8, 5.6	-4.9, 7.7	-6.8, 7.7	-6.2, 4.6
Week 56					
n	570	564	569	1133	284
Mean	-0.19	-0.14	-0.09	-0.12	-0.21
SD	1.843	1.711	1.851	1.782	1.822
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-5.7, 6.5	-4.9, 6.4	-4.9, 6.5	-4.9, 6.5	-5.6, 6.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	563	579	589	1168	291
Mean	-0.29	-0.19	-0.08	-0.13	-0.20
SD	1.845	1.698	1.828	1.765	1.791
Median	-0.36	0.00	0.00	0.00	0.00
Min, Max	-13.6, 5.1	-5.5, 7.0	-8.3, 8.6	-8.3, 8.6	-6.2, 8.4
Week 64					
n	542	567	558	1125	271
Mean	-0.16	-0.11	-0.15	-0.13	-0.07
SD	1.854	1.789	1.768	1.778	1.927
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-6.4, 8.8	-7.4, 5.7	-4.9, 6.6	-7.4, 6.6	-6.1, 10.8
Week 68					
n	527	558	551	1109	278
Mean	-0.18	-0.20	-0.25	-0.22	-0.17
SD	1.790	1.763	1.979	1.873	1.897
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-5.4, 8.8	-6.8, 7.2	-7.0, 18.4	-7.0, 18.4	-6.7, 7.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	568	567	1135	276
Mean	-0.17	-0.07	-0.21	-0.14	-0.02
SD	1.776	1.772	1.714	1.744	1.941
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-6.2, 9.1	-6.8, 8.6	-6.4, 5.6	-6.8, 8.6	-8.0, 8.6
Week 76					
n	511	544	548	1092	265
Mean	-0.19	-0.24	-0.11	-0.17	-0.21
SD	1.720	1.749	1.931	1.843	1.780
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-5.3, 5.8	-8.1, 5.0	-8.6, 8.7	-8.6, 8.7	-7.3, 4.4
Week 80					
n	508	541	534	1075	268
Mean	-0.24	-0.27	-0.19	-0.23	-0.15
SD	1.821	1.903	1.896	1.899	1.666
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-6.7, 11.5	-8.2, 11.8	-9.4, 8.5	-9.4, 11.8	-5.5, 4.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	556	556	1112	271
Mean	-0.16	-0.18	-0.21	-0.20	0.08
SD	1.746	1.706	1.818	1.762	2.033
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-4.8, 7.1	-5.4, 6.4	-9.4, 5.1	-9.4, 6.4	-6.3, 10.6
Week 88					
n	503	532	534	1066	262
Mean	-0.16	-0.27	-0.12	-0.20	-0.24
SD	1.725	1.831	1.822	1.827	1.872
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-5.4, 6.5	-6.8, 9.3	-8.7, 7.8	-8.7, 9.3	-6.2, 7.4
Week 92					
n	489	523	524	1047	258
Mean	-0.36	-0.31	-0.14	-0.23	-0.19
SD	1.731	1.827	1.847	1.838	1.980
Median	0.00	-0.68	0.00	0.00	0.00
Min, Max	-6.9, 4.9	-8.2, 5.8	-10.1, 6.6	-10.1, 6.6	-7.1, 7.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Sodium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	533	523	1056	263
Mean	-0.06	-0.07	-0.08	-0.08	-0.16
SD	1.772	1.763	1.793	1.777	1.918
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-5.3, 9.2	-6.8, 11.3	-6.2, 5.1	-6.8, 11.3	-6.3, 8.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	752	730	729	1459	339
Mean	0.73	1.97	1.64	1.80	0.38
SD	8.944	9.463	9.253	9.357	10.030
Median	0.00	2.22	2.08	2.17	0.00
Min, Max	-26.4, 43.2	-30.8, 55.0	-31.0, 38.7	-31.0, 55.0	-28.8, 42.4
Week 8					
n	730	703	682	1385	328
Mean	0.69	1.76	1.31	1.54	1.16
SD	10.285	9.447	9.937	9.690	9.241
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-28.8, 148.9	-25.5, 51.2	-29.6, 40.5	-29.6, 51.2	-29.8, 40.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	690	670	1360	328
Mean	0.54	1.77	1.20	1.49	1.24
SD	9.228	9.860	9.704	9.784	9.631
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-29.1, 57.1	-28.0, 35.1	-25.6, 51.3	-28.0, 51.3	-27.1, 35.3
Week 16					
n	707	663	649	1312	316
Mean	1.20	2.13	1.82	1.97	1.57
SD	9.400	9.434	10.257	9.847	10.066
Median	0.00	2.08	0.00	0.00	0.00
Min, Max	-27.1, 35.6	-21.3, 41.5	-25.0, 47.5	-25.0, 47.5	-21.6, 47.5
Week 20					
n	689	646	635	1281	313
Mean	1.23	1.56	1.08	1.32	1.90
SD	9.471	9.437	9.905	9.671	10.022
Median	0.00	0.00	0.00	0.00	2.17
Min, Max	-29.1, 37.8	-28.8, 45.9	-26.0, 42.1	-28.8, 45.9	-30.5, 32.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	680	657	634	1291	314
Mean	0.75	2.01	1.59	1.80	1.07
SD	9.314	9.563	9.898	9.727	10.270
Median	0.00	2.22	0.00	0.00	0.00
Min, Max	-23.3, 40.5	-22.2, 39.5	-26.8, 38.7	-26.8, 39.5	-31.9, 39.4
Week 28					
n	665	623	609	1232	297
Mean	0.56	2.28	1.21	1.75	1.12
SD	10.759	10.072	11.554	10.839	10.616
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-25.5, 123.5	-22.2, 40.6	-31.8, 133.0	-31.8, 133.0	-23.8, 45.0
Week 32					
n	645	620	603	1223	297
Mean	-0.03	1.50	0.87	1.19	1.18
SD	9.975	10.529	11.317	10.924	11.628
Median	-2.13	0.00	0.00	0.00	0.00
Min, Max	-29.2, 39.0	-25.9, 42.5	-24.5, 133.0	-25.9, 133.0	-25.5, 52.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	652	626	618	1244	309
Mean	1.18	1.79	1.48	1.63	1.27
SD	9.602	9.567	9.865	9.714	9.854
Median	0.00	2.17	0.00	0.00	0.00
Min, Max	-23.3, 41.7	-26.0, 32.4	-27.3, 45.2	-27.3, 45.2	-19.1, 35.0
Week 40					
n	631	605	595	1200	296
Mean	-0.33	1.29	0.97	1.14	1.36
SD	9.503	10.185	9.872	10.028	10.208
Median	-1.92	0.00	0.00	0.00	0.00
Min, Max	-30.2, 35.1	-23.4, 40.0	-22.6, 48.7	-23.4, 48.7	-25.4, 37.5
Week 44					
n	605	589	593	1182	294
Mean	0.27	0.86	1.25	1.06	0.13
SD	9.558	10.351	10.301	10.323	10.499
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-30.2, 40.5	-31.0, 38.5	-26.9, 42.9	-31.0, 42.9	-22.4, 35.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	600	601	606	1207	295
Mean	-0.31	0.69	0.29	0.49	-0.11
SD	10.521	9.190	9.145	9.166	9.697
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-28.3, 133.0	-27.6, 34.2	-28.3, 54.8	-28.3, 54.8	-35.6, 36.4
Week 52					
n	561	576	573	1149	287
Mean	0.18	0.98	1.04	1.01	0.42
SD	9.598	10.216	10.196	10.202	11.419
Median	0.00	0.00	0.00	0.00	-2.04
Min, Max	-23.9, 30.6	-26.0, 37.8	-30.4, 42.5	-30.4, 42.5	-25.4, 57.5
Week 56					
n	568	562	566	1128	281
Mean	-0.42	1.65	0.26	0.96	0.77
SD	9.622	10.375	10.310	10.361	10.148
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-26.4, 44.4	-29.3, 43.6	-32.3, 41.9	-32.3, 43.6	-25.4, 37.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	561	577	586	1163	290
Mean	0.75	1.85	1.99	1.92	1.27
SD	9.718	9.714	10.483	10.105	10.547
Median	0.00	2.17	0.00	0.00	0.00
Min, Max	-25.0, 35.0	-27.1, 39.4	-26.0, 48.6	-27.1, 48.6	-26.2, 47.5
Week 64					
n	539	563	555	1118	270
Mean	-0.35	1.53	0.47	1.00	0.78
SD	9.749	9.791	10.248	10.030	10.248
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-30.9, 36.8	-20.7, 39.4	-30.8, 37.1	-30.8, 39.4	-26.4, 30.8
Week 68					
n	524	551	550	1101	277
Mean	-0.64	1.39	0.99	1.19	1.64
SD	10.289	10.033	10.313	10.171	11.848
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-29.1, 33.3	-20.9, 38.1	-28.8, 41.9	-28.8, 41.9	-25.9, 55.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	567	564	1131	275
Mean	-0.27	1.73	1.10	1.41	1.56
SD	9.327	9.645	9.823	9.735	10.968
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-28.0, 45.0	-22.9, 36.6	-33.3, 51.3	-33.3, 51.3	-35.8, 50.0
Week 76					
n	509	542	546	1088	262
Mean	-0.39	1.40	1.12	1.26	1.09
SD	9.911	10.112	10.071	10.088	10.699
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-28.3, 34.1	-22.4, 39.5	-27.4, 38.7	-27.4, 39.5	-24.5, 39.5
Week 80					
n	507	539	529	1068	268
Mean	-0.56	0.98	0.63	0.80	0.99
SD	9.841	10.785	10.603	10.691	12.056
Median	-2.08	0.00	0.00	0.00	0.00
Min, Max	-28.8, 32.4	-24.0, 46.3	-26.9, 43.9	-26.9, 46.3	-23.4, 55.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	514	552	555	1107	271
Mean	0.76	2.31	1.34	1.82	2.00
SD	9.853	10.082	9.892	9.995	10.405
Median	0.00	2.27	0.00	2.13	0.00
Min, Max	-27.3, 42.1	-26.0, 43.2	-33.9, 41.5	-33.9, 43.2	-25.9, 35.7
Week 88					
n	502	531	534	1065	260
Mean	-0.26	1.47	0.43	0.95	1.10
SD	9.878	10.220	10.075	10.156	10.510
Median	-2.08	0.00	0.00	0.00	0.00
Min, Max	-28.3, 43.2	-34.0, 40.0	-30.6, 43.9	-34.0, 43.9	-23.7, 50.0
Week 92					
n	487	521	523	1044	257
Mean	-0.16	1.29	1.09	1.19	1.19
SD	9.991	10.575	10.863	10.715	11.361
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-26.4, 34.2	-25.5, 50.0	-30.6, 48.7	-30.6, 50.0	-26.5, 46.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Potassium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	486	530	522	1052	262
Mean	-0.63	1.25	-0.02	0.62	-0.55
SD	9.427	9.481	9.672	9.592	9.898
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-25.0, 42.1	-23.4, 37.8	-27.3, 34.2	-27.3, 37.8	-23.4, 39.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	754	734	732	1466	339
Mean	0.14	-0.02	-0.09	-0.06	0.15
SD	2.364	2.198	2.484	2.344	2.087
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-16.4, 20.2	-6.5, 7.8	-27.5, 7.9	-27.5, 7.9	-8.2, 7.9
Week 8					
n	732	705	684	1389	329
Mean	0.18	-0.23	-0.16	-0.20	0.25
SD	2.236	2.253	2.401	2.326	2.421
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-13.9, 9.7	-9.1, 7.5	-23.6, 6.8	-23.6, 7.5	-5.6, 10.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	692	672	1364	328
Mean	0.15	-0.29	-0.13	-0.21	0.45
SD	2.354	2.240	2.275	2.258	2.332
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-15.6, 9.2	-8.3, 11.8	-6.7, 14.1	-8.3, 14.1	-6.4, 13.0
Week 16					
n	707	664	652	1316	317
Mean	0.11	-0.28	-0.25	-0.26	0.23
SD	2.260	2.223	2.240	2.230	2.315
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-17.2, 8.1	-8.2, 7.8	-6.5, 11.9	-8.2, 11.9	-5.6, 8.0
Week 20					
n	691	651	637	1288	314
Mean	0.14	-0.36	-0.32	-0.34	0.11
SD	2.609	2.357	2.223	2.291	2.138
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-15.6, 12.6	-7.8, 8.8	-7.6, 7.4	-7.8, 8.8	-6.8, 6.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	683	658	638	1296	316
Mean	0.17	-0.28	-0.25	-0.26	0.33
SD	2.297	2.369	2.348	2.358	2.428
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.2, 10.2	-8.3, 10.6	-9.5, 13.9	-9.5, 13.9	-6.8, 11.2
Week 28					
n	667	628	610	1238	299
Mean	0.01	-0.42	-0.40	-0.41	0.21
SD	2.284	2.450	2.188	2.324	2.454
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.2, 8.2	-7.5, 10.1	-7.7, 9.0	-7.7, 10.1	-7.5, 7.1
Week 32					
n	646	626	604	1230	302
Mean	0.05	-0.55	-0.37	-0.47	0.09
SD	2.390	2.363	2.417	2.390	2.444
Median	0.00	-0.93	0.00	0.00	0.00
Min, Max	-9.3, 14.4	-7.3, 6.3	-12.6, 13.6	-12.6, 13.6	-7.1, 6.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	653	629	620	1249	309
Mean	-0.06	-0.47	-0.33	-0.40	0.29
SD	2.381	2.229	2.194	2.212	2.169
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-22.3, 9.2	-6.5, 7.3	-8.3, 9.7	-8.3, 9.7	-5.9, 7.1
Week 40					
n	631	606	600	1206	297
Mean	-0.12	-0.41	-0.32	-0.37	-0.04
SD	2.355	2.347	2.258	2.303	2.525
Median	0.00	-0.94	0.00	0.00	0.00
Min, Max	-9.1, 8.1	-9.1, 9.1	-7.7, 8.4	-9.1, 9.1	-11.3, 8.2
Week 44					
n	609	590	595	1185	296
Mean	0.01	-0.47	-0.28	-0.37	0.08
SD	2.492	2.358	2.383	2.372	2.269
Median	0.00	-0.93	0.00	0.00	0.00
Min, Max	-13.0, 10.7	-8.5, 8.1	-7.6, 9.2	-8.5, 9.2	-7.5, 8.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	605	604	608	1212	296
Mean	-0.19	-0.49	-0.35	-0.42	0.17
SD	2.421	2.616	2.433	2.526	2.122
Median	0.00	-0.93	0.00	0.00	0.00
Min, Max	-14.9, 9.6	-31.1, 7.8	-9.5, 12.5	-31.1, 12.5	-7.1, 5.9
Week 52					
n	567	577	576	1153	288
Mean	0.01	-0.41	-0.38	-0.40	0.30
SD	2.383	2.484	2.208	2.349	2.345
Median	0.00	0.00	0.00	0.00	0.94
Min, Max	-10.3, 6.9	-8.6, 10.1	-8.5, 10.7	-8.6, 10.7	-5.6, 8.1
Week 56					
n	570	564	569	1133	284
Mean	-0.13	-0.38	-0.33	-0.36	0.19
SD	2.442	2.417	2.457	2.436	2.237
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.3, 7.0	-8.2, 11.8	-10.6, 9.5	-10.6, 11.8	-5.8, 7.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	563	579	589	1168	291
Mean	-0.04	-0.18	-0.18	-0.18	0.29
SD	2.524	2.258	2.375	2.317	2.369
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-13.5, 10.2	-7.1, 7.1	-7.5, 8.4	-7.5, 8.4	-6.5, 12.0
Week 64					
n	542	567	558	1125	271
Mean	0.02	-0.36	-0.46	-0.41	0.18
SD	2.584	2.397	2.460	2.428	2.408
Median	0.00	0.00	-0.93	0.00	0.00
Min, Max	-10.7, 15.2	-8.3, 9.1	-6.8, 7.9	-8.3, 9.1	-4.8, 10.7
Week 68					
n	527	558	551	1109	278
Mean	-0.10	-0.45	-0.46	-0.45	0.09
SD	2.390	2.404	2.451	2.427	2.289
Median	0.00	0.00	-0.94	-0.93	0.00
Min, Max	-7.6, 7.9	-8.2, 8.3	-9.4, 17.8	-9.4, 17.8	-5.8, 9.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	522	568	567	1135	276
Mean	0.00	-0.31	-0.27	-0.29	0.27
SD	2.475	2.268	2.302	2.284	2.428
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-7.2, 12.1	-6.5, 11.1	-8.0, 6.8	-8.0, 11.1	-7.5, 9.0
Week 76					
n	510	544	548	1092	265
Mean	-0.06	-0.48	-0.40	-0.44	-0.03
SD	2.406	2.418	2.418	2.417	2.369
Median	0.00	-0.70	0.00	0.00	0.00
Min, Max	-7.5, 7.9	-10.9, 8.1	-11.7, 7.4	-11.7, 8.1	-7.5, 7.1
Week 80					
n	508	541	534	1075	268
Mean	-0.01	-0.39	-0.36	-0.37	0.16
SD	2.351	2.490	2.447	2.468	2.358
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-7.8, 8.8	-10.9, 11.0	-11.7, 9.1	-11.7, 11.0	-8.0, 8.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	516	556	556	1112	271
Mean	0.08	-0.19	-0.25	-0.22	0.41
SD	2.445	2.368	2.429	2.398	2.348
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.3, 11.9	-7.8, 9.1	-12.6, 8.9	-12.6, 9.1	-5.6, 8.1
Week 88					
n	503	532	534	1066	262
Mean	0.08	-0.34	-0.22	-0.28	0.10
SD	2.440	2.460	2.484	2.472	2.323
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-8.6, 10.1	-8.3, 10.6	-9.7, 11.5	-9.7, 11.5	-7.1, 6.7
Week 92					
n	489	523	524	1047	258
Mean	-0.26	-0.43	-0.33	-0.38	0.02
SD	2.345	2.427	2.392	2.409	2.482
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-9.8, 6.9	-9.9, 9.1	-12.6, 11.9	-12.6, 11.9	-10.7, 9.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Chloride (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	490	533	523	1056	263
Mean	0.00	-0.26	-0.22	-0.24	-0.07
SD	2.426	2.418	2.346	2.382	2.173
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-7.5, 12.7	-9.1, 11.4	-8.3, 8.4	-9.1, 11.4	-6.3, 9.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	752	731	727	1458	335
Mean	1.30	2.76	2.70	2.73	1.41
SD	11.151	11.801	11.470	11.633	12.538
Median	0.81	1.98	2.12	2.10	0.77
Min, Max	-37.3, 47.5	-45.9, 58.5	-33.8, 46.7	-45.9, 58.5	-31.6, 59.2
Week 8					
n	730	701	679	1380	327
Mean	0.98	2.99	2.56	2.78	0.92
SD	11.514	11.513	11.770	11.638	11.376
Median	0.71	2.04	1.44	1.79	0.38
Min, Max	-41.2, 57.7	-32.5, 51.1	-31.0, 51.5	-32.5, 51.5	-30.7, 44.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	718	689	668	1357	322
Mean	1.14	2.55	2.31	2.43	1.29
SD	11.773	11.901	12.036	11.964	12.550
Median	0.58	2.02	1.98	2.02	0.75
Min, Max	-50.7, 48.5	-38.0, 53.4	-40.1, 45.9	-40.1, 53.4	-34.4, 63.7
Week 16					
n	706	659	646	1305	313
Mean	1.88	2.89	2.81	2.85	2.42
SD	12.440	12.125	11.916	12.017	12.464
Median	1.40	2.08	3.30	2.65	2.03
Min, Max	-38.8, 66.2	-38.2, 70.6	-38.7, 48.9	-38.7, 70.6	-33.0, 56.1
Week 20					
n	688	643	632	1275	311
Mean	2.50	2.82	3.31	3.06	1.65
SD	11.767	12.036	12.003	12.017	12.424
Median	1.73	2.60	3.15	2.77	1.80
Min, Max	-32.2, 45.9	-64.5, 75.5	-38.7, 57.9	-64.5, 75.5	-43.1, 45.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	680	654	631	1285	315
Mean	1.18	2.82	3.55	3.18	1.57
SD	12.129	12.349	12.479	12.414	12.269
Median	0.36	2.37	2.55	2.42	0.74
Min, Max	-40.7, 51.6	-36.4, 59.1	-32.3, 55.4	-36.4, 59.1	-34.6, 51.0
Week 28					
n	661	622	601	1223	297
Mean	-4.90	-3.84	-3.99	-3.91	-5.15
SD	12.716	13.012	13.190	13.095	11.843
Median	-5.86	-5.18	-6.02	-5.51	-6.69
Min, Max	-42.2, 45.5	-54.0, 62.2	-38.7, 47.3	-54.0, 62.2	-36.9, 60.5
Week 32					
n	641	623	602	1225	297
Mean	-5.70	-3.47	-3.52	-3.50	-4.93
SD	12.632	13.392	12.719	13.060	13.092
Median	-7.28	-5.03	-5.41	-5.08	-6.42
Min, Max	-42.8, 43.9	-45.3, 53.4	-33.3, 54.1	-45.3, 54.1	-45.8, 66.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	650	626	614	1240	306
Mean	1.14	2.44	2.92	2.68	2.52
SD	12.727	12.598	12.622	12.607	12.152
Median	0.72	2.11	1.96	2.02	1.73
Min, Max	-43.3, 53.4	-40.3, 65.6	-31.2, 75.6	-40.3, 75.6	-31.3, 66.9
Week 40					
n	628	605	598	1203	295
Mean	-4.35	-3.91	-3.84	-3.87	-4.88
SD	12.551	12.495	13.003	12.745	12.981
Median	-6.30	-5.42	-4.84	-5.06	-6.56
Min, Max	-36.6, 57.3	-33.7, 61.3	-47.4, 50.3	-47.4, 61.3	-35.5, 71.3
Week 44					
n	608	583	591	1174	295
Mean	-5.25	-4.05	-3.15	-3.59	-5.57
SD	12.095	12.457	12.194	12.328	11.866
Median	-6.63	-4.93	-4.78	-4.90	-7.51
Min, Max	-40.0, 50.5	-34.9, 48.9	-32.9, 42.5	-34.9, 48.9	-42.8, 62.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	602	600	604	1204	296
Mean	0.21	1.78	2.15	1.97	0.34
SD	11.765	12.399	11.883	12.140	11.542
Median	-0.39	1.10	1.50	1.23	-0.77
Min, Max	-35.8, 45.1	-35.0, 45.2	-44.7, 48.6	-44.7, 48.6	-39.6, 61.8
Week 52					
n	557	574	572	1146	286
Mean	-5.07	-4.22	-3.58	-3.90	-6.61
SD	12.400	12.486	11.901	12.196	11.740
Median	-6.04	-5.81	-4.76	-5.25	-7.32
Min, Max	-40.4, 57.8	-35.5, 44.7	-34.5, 41.9	-35.5, 44.7	-38.7, 60.1
Week 56					
n	566	558	563	1121	282
Mean	-4.99	-3.50	-4.01	-3.75	-5.98
SD	12.463	12.443	12.776	12.608	11.400
Median	-5.72	-4.83	-5.02	-4.94	-7.11
Min, Max	-41.1, 62.4	-34.3, 64.7	-41.7, 43.6	-41.7, 64.7	-30.1, 57.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	561	577	587	1164	287
Mean	1.18	1.70	1.38	1.54	-0.06
SD	12.617	12.308	12.223	12.261	12.816
Median	0.98	1.02	1.63	1.21	0.00
Min, Max	-37.6, 43.9	-33.2, 57.7	-34.2, 54.1	-34.2, 57.7	-40.2, 41.3
Week 64					
n	538	562	549	1111	267
Mean	-5.14	-4.06	-4.13	-4.09	-5.16
SD	12.389	11.503	12.115	11.804	12.729
Median	-6.33	-5.00	-5.00	-5.00	-7.02
Min, Max	-36.5, 45.2	-30.7, 45.0	-38.1, 50.5	-38.1, 50.5	-46.6, 66.9
Week 68					
n	526	554	546	1100	276
Mean	-5.68	-4.34	-4.24	-4.29	-5.32
SD	12.164	12.296	12.713	12.500	12.270
Median	-6.45	-5.80	-4.97	-5.27	-7.04
Min, Max	-39.6, 47.1	-36.3, 62.0	-42.4, 44.3	-42.4, 62.0	-39.5, 49.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	521	564	565	1129	275
Mean	0.14	1.68	1.14	1.41	0.42
SD	12.042	12.245	11.871	12.057	12.326
Median	-0.37	1.46	0.72	1.08	0.00
Min, Max	-42.0, 54.8	-39.6, 46.3	-42.4, 36.5	-42.4, 46.3	-37.4, 54.8
Week 76					
n	509	544	544	1088	266
Mean	-6.11	-5.10	-5.43	-5.26	-5.95
SD	11.940	12.095	12.669	12.381	12.538
Median	-6.60	-6.36	-6.58	-6.43	-7.21
Min, Max	-49.0, 40.5	-39.0, 50.0	-46.2, 44.8	-46.2, 50.0	-42.7, 52.9
Week 80					
n	506	533	531	1064	265
Mean	-6.95	-5.57	-4.96	-5.27	-5.62
SD	12.410	12.611	12.622	12.614	12.725
Median	-8.28	-6.75	-5.58	-6.13	-6.07
Min, Max	-35.4, 49.7	-36.9, 57.7	-40.1, 42.4	-40.1, 57.7	-31.9, 50.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	515	551	550	1101	269
Mean	-0.18	0.95	1.52	1.23	1.05
SD	11.986	12.108	12.123	12.113	12.456
Median	-0.35	0.36	0.44	0.39	-0.36
Min, Max	-46.9, 42.5	-37.2, 57.2	-33.8, 40.0	-37.2, 57.2	-33.7, 58.6
Week 88					
n	499	531	529	1060	259
Mean	-6.81	-5.33	-4.66	-5.00	-6.14
SD	12.055	12.375	13.139	12.761	12.441
Median	-8.30	-6.77	-5.28	-5.96	-7.05
Min, Max	-78.0, 51.6	-43.4, 52.2	-43.6, 41.4	-43.6, 52.2	-34.9, 55.8
Week 92					
n	488	519	516	1035	257
Mean	-5.60	-4.91	-4.97	-4.94	-5.62
SD	12.238	12.580	12.182	12.377	12.125
Median	-6.97	-6.87	-5.76	-6.27	-6.79
Min, Max	-41.2, 41.9	-46.3, 57.4	-42.3, 36.3	-46.3, 57.4	-32.4, 39.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Bicarbonate (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	488	531	516	1047	259
Mean	-0.61	0.53	0.39	0.46	-0.15
SD	12.049	12.324	12.040	12.179	12.909
Median	-1.34	0.39	0.37	0.38	-2.37
Min, Max	-40.1, 48.2	-59.6, 52.8	-39.6, 38.9	-59.6, 52.8	-34.9, 58.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	726	712	711	1423	336
Mean	-0.38	0.05	-0.27	-0.11	-0.68
SD	3.661	3.809	3.761	3.788	3.888
Median	-0.42	0.00	-0.41	0.00	-0.60
Min, Max	-15.4, 17.2	-13.0, 17.6	-11.6, 12.9	-13.0, 17.6	-11.4, 14.3
Week 8					
n	707	687	666	1353	325
Mean	-0.49	0.14	-0.06	0.04	-0.95
SD	3.765	3.722	3.830	3.776	3.906
Median	-0.41	0.00	0.00	0.00	-1.05
Min, Max	-13.0, 16.7	-12.6, 20.0	-9.5, 20.5	-12.6, 20.5	-11.0, 11.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	695	671	654	1325	325
Mean	-0.51	0.41	0.31	0.36	-0.92
SD	3.700	3.650	3.989	3.820	3.950
Median	-0.43	0.41	0.00	0.00	-1.16
Min, Max	-12.7, 15.2	-10.4, 17.6	-11.4, 20.1	-11.4, 20.1	-11.4, 11.8
Week 16					
n	682	641	634	1275	315
Mean	-0.83	0.01	-0.16	-0.08	-1.11
SD	3.794	3.606	4.066	3.841	4.178
Median	-0.86	0.00	0.00	0.00	-1.21
Min, Max	-11.1, 15.3	-9.5, 14.3	-9.7, 15.6	-9.7, 15.6	-13.3, 15.5
Week 20					
n	669	635	621	1256	311
Mean	-0.76	-0.22	-0.32	-0.27	-1.15
SD	3.858	3.743	4.035	3.889	4.022
Median	-0.81	0.00	-0.41	-0.39	-1.25
Min, Max	-14.8, 15.4	-15.2, 21.0	-12.2, 22.0	-15.2, 22.0	-15.0, 12.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	659	639	620	1259	315
Mean	-0.96	-0.04	0.00	-0.02	-1.65
SD	3.889	3.851	4.241	4.046	4.976
Median	-0.85	0.00	0.00	0.00	-1.25
Min, Max	-17.2, 15.1	-14.5, 17.6	-16.2, 18.0	-16.2, 18.0	-36.9, 13.3
Week 28					
n	646	609	592	1201	296
Mean	-1.04	-0.26	-0.48	-0.36	-1.56
SD	3.872	3.854	4.010	3.932	4.396
Median	-1.03	0.00	-0.41	0.00	-1.68
Min, Max	-16.7, 14.9	-12.4, 14.3	-13.0, 14.6	-13.0, 14.6	-12.9, 19.1
Week 32					
n	624	608	587	1195	299
Mean	-1.13	-0.46	-0.57	-0.51	-1.50
SD	3.865	3.945	4.049	3.995	4.319
Median	-1.28	-0.80	-0.82	-0.81	-1.65
Min, Max	-13.3, 14.5	-13.2, 17.6	-12.2, 15.6	-13.2, 17.6	-15.6, 12.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	630	612	603	1215	306
Mean	-0.87	-0.11	-0.46	-0.28	-1.38
SD	4.137	3.822	4.337	4.087	4.053
Median	-0.85	0.00	-0.41	-0.40	-1.60
Min, Max	-29.3, 12.6	-12.2, 13.2	-20.2, 22.0	-20.2, 22.0	-12.4, 14.7
Week 40					
n	608	590	583	1173	294
Mean	-1.45	-0.65	-0.73	-0.69	-1.73
SD	3.838	3.971	4.164	4.066	4.214
Median	-1.71	-0.43	-0.89	-0.84	-1.68
Min, Max	-16.4, 12.7	-11.5, 14.3	-15.7, 12.9	-15.7, 14.3	-14.2, 12.3
Week 44					
n	588	575	578	1153	293
Mean	-1.34	-0.67	-0.72	-0.70	-2.05
SD	3.976	3.994	4.361	4.180	4.056
Median	-1.30	-1.08	-0.43	-0.85	-2.12
Min, Max	-15.0, 16.7	-17.4, 12.9	-16.4, 15.6	-17.4, 15.6	-11.9, 12.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	586	587	591	1178	293
Mean	-1.24	-0.47	-0.62	-0.55	-2.37
SD	4.089	4.288	4.204	4.245	4.444
Median	-1.25	0.00	-0.82	-0.41	-2.37
Min, Max	-21.6, 12.1	-31.4, 11.9	-16.7, 19.5	-31.4, 19.5	-21.0, 12.8
Week 52					
n	550	561	561	1122	285
Mean	-1.75	-1.08	-1.04	-1.06	-2.22
SD	3.866	3.781	4.253	4.022	4.141
Median	-2.04	-1.20	-1.22	-1.20	-2.38
Min, Max	-19.3, 11.6	-13.1, 15.5	-14.6, 17.1	-14.6, 17.1	-15.8, 10.7
Week 56					
n	550	547	552	1099	281
Mean	-1.45	-0.89	-1.15	-1.02	-2.02
SD	4.031	3.649	4.379	4.033	4.357
Median	-1.65	-0.88	-1.20	-1.04	-2.11
Min, Max	-16.7, 12.6	-13.4, 10.9	-15.6, 16.2	-15.6, 16.2	-25.0, 12.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	544	562	573	1135	288
Mean	-1.31	-0.94	-0.65	-0.79	-1.31
SD	3.904	3.827	4.025	3.929	3.987
Median	-1.23	-1.17	-0.85	-1.02	-1.28
Min, Max	-18.3, 11.2	-15.8, 15.8	-12.1, 13.2	-15.8, 15.8	-12.4, 10.3
Week 64					
n	523	550	542	1092	268
Mean	-1.49	-1.08	-1.18	-1.13	-1.84
SD	3.870	3.661	4.024	3.844	4.097
Median	-1.65	-1.04	-1.21	-1.08	-1.60
Min, Max	-15.6, 13.0	-13.2, 12.4	-12.3, 14.4	-13.2, 14.4	-13.3, 10.0
Week 68					
n	509	541	537	1078	275
Mean	-1.67	-0.93	-1.30	-1.12	-1.74
SD	4.240	3.944	4.760	4.372	4.170
Median	-1.64	-1.05	-1.70	-1.26	-1.66
Min, Max	-15.6, 17.2	-14.1, 14.7	-40.2, 24.7	-40.2, 24.7	-16.1, 13.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	502	551	552	1103	273
Mean	-1.34	-0.75	-1.09	-0.92	-1.39
SD	4.065	4.010	4.097	4.056	4.461
Median	-1.27	-0.81	-1.22	-0.96	-1.61
Min, Max	-14.3, 16.7	-17.5, 9.6	-12.4, 20.5	-17.5, 20.5	-22.6, 12.3
Week 76					
n	492	529	534	1063	264
Mean	-1.70	-1.08	-1.16	-1.12	-1.56
SD	4.115	3.763	4.125	3.947	4.137
Median	-1.69	-1.27	-1.63	-1.58	-2.04
Min, Max	-13.7, 12.6	-11.7, 11.6	-14.5, 10.8	-14.5, 11.6	-15.8, 10.9
Week 80					
n	489	524	521	1045	264
Mean	-1.62	-0.93	-1.33	-1.13	-1.74
SD	4.078	4.197	4.044	4.124	4.088
Median	-2.04	-0.85	-1.24	-1.21	-2.02
Min, Max	-16.3, 13.0	-12.5, 12.2	-11.9, 14.6	-12.5, 14.6	-15.1, 14.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	497	540	541	1081	268
Mean	-1.24	-0.72	-0.99	-0.86	-0.95
SD	4.021	4.037	4.071	4.055	4.128
Median	-1.05	-0.85	-1.00	-0.87	-1.23
Min, Max	-14.7, 13.7	-11.6, 17.4	-17.9, 13.2	-17.9, 17.4	-11.5, 9.7
Week 88					
n	485	515	522	1037	259
Mean	-1.66	-1.07	-1.32	-1.20	-1.63
SD	4.102	3.828	4.223	4.032	4.023
Median	-1.72	-1.08	-1.55	-1.24	-2.01
Min, Max	-13.3, 17.2	-11.7, 10.2	-15.3, 13.1	-15.3, 13.1	-14.3, 8.3
Week 92					
n	471	508	512	1020	255
Mean	-1.55	-0.84	-1.17	-1.01	-1.51
SD	3.931	3.987	4.393	4.197	4.150
Median	-1.65	-1.07	-1.21	-1.20	-1.96
Min, Max	-12.6, 14.8	-24.5, 11.5	-19.1, 15.3	-24.5, 15.3	-11.7, 13.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Calcium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	477	520	512	1032	260
Mean	-1.28	-0.55	-0.99	-0.77	-1.07
SD	5.393	4.128	4.494	4.317	4.224
Median	-1.23	-0.79	-0.83	-0.82	-1.19
Min, Max	-73.1, 14.1	-14.6, 10.4	-25.9, 17.1	-25.9, 17.1	-12.8, 12.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	726	712	712	1424	336
Mean	-0.71	-1.29	-1.42	-1.35	-0.36
SD	6.827	6.981	7.131	7.054	7.016
Median	0.00	-1.10	-1.15	-1.12	0.00
Min, Max	-30.0, 25.7	-40.3, 24.1	-37.5, 25.0	-40.3, 25.0	-18.2, 40.6
Week 8					
n	707	687	666	1353	325
Mean	-0.23	-1.60	-2.06	-1.83	-0.29
SD	6.993	6.725	6.916	6.821	7.259
Median	0.00	-1.20	-2.30	-2.17	0.00
Min, Max	-36.7, 35.0	-43.1, 25.0	-34.4, 22.9	-43.1, 25.0	-22.7, 34.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	695	671	654	1325	325
Mean	-0.54	-1.25	-2.11	-1.68	0.09
SD	7.007	7.031	6.989	7.021	6.993
Median	0.00	-1.16	-2.20	-2.13	0.00
Min, Max	-27.7, 29.1	-45.8, 24.4	-37.5, 33.3	-45.8, 33.3	-15.8, 24.8
Week 16					
n	682	641	634	1275	315
Mean	-0.71	-1.45	-2.03	-1.74	-0.97
SD	6.931	6.921	7.133	7.030	6.556
Median	0.00	-1.23	-2.25	-2.17	-1.14
Min, Max	-30.0, 29.1	-31.9, 18.2	-37.5, 22.2	-37.5, 22.2	-16.0, 29.5
Week 20					
n	668	635	621	1256	311
Mean	-0.50	-1.44	-2.37	-1.90	-0.22
SD	7.018	7.136	7.083	7.122	7.515
Median	0.00	-1.16	-2.44	-2.20	-1.08
Min, Max	-36.7, 17.7	-28.5, 32.1	-40.6, 27.1	-40.6, 32.1	-31.8, 33.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	659	639	620	1259	315
Mean	-0.54	-1.33	-1.53	-1.43	-0.02
SD	6.971	7.534	7.110	7.326	7.533
Median	0.00	-1.16	-2.27	-2.17	0.00
Min, Max	-30.0, 21.8	-43.1, 26.3	-28.1, 22.2	-43.1, 26.3	-36.0, 27.5
Week 28					
n	646	609	592	1201	296
Mean	-0.79	-1.27	-2.14	-1.70	-0.27
SD	7.192	7.120	7.266	7.202	7.475
Median	0.00	-1.11	-2.27	-1.22	-1.04
Min, Max	-33.3, 27.4	-40.3, 21.9	-40.6, 23.5	-40.6, 23.5	-20.0, 37.7
Week 32					
n	624	608	586	1194	298
Mean	-0.69	-1.93	-2.05	-1.99	-0.13
SD	7.599	7.386	7.478	7.428	7.290
Median	0.00	-2.31	-2.20	-2.27	0.00
Min, Max	-30.0, 31.6	-37.5, 43.8	-43.8, 25.6	-43.8, 43.8	-16.5, 32.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	630	611	603	1214	306
Mean	-0.47	-1.51	-1.88	-1.70	-0.83
SD	7.308	7.242	7.385	7.312	7.007
Median	0.00	-1.14	-1.22	-1.18	-1.05
Min, Max	-33.7, 52.4	-34.7, 28.6	-46.9, 34.3	-46.9, 34.3	-20.6, 24.6
Week 40					
n	609	590	583	1173	294
Mean	-0.78	-1.63	-2.26	-1.94	-0.78
SD	7.299	7.146	6.894	7.026	7.053
Median	0.00	-1.15	-2.33	-2.20	0.00
Min, Max	-33.3, 30.8	-37.5, 22.7	-40.6, 19.5	-40.6, 22.7	-21.4, 33.3
Week 44					
n	587	574	578	1152	293
Mean	-0.82	-1.85	-1.59	-1.72	-1.32
SD	7.552	7.157	7.532	7.345	6.977
Median	0.00	-2.22	-1.28	-2.12	-1.19
Min, Max	-30.0, 26.1	-39.3, 23.8	-40.6, 32.1	-40.6, 32.1	-17.4, 23.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	586	587	591	1178	293
Mean	-0.86	-1.21	-1.50	-1.35	-0.73
SD	7.402	6.974	7.452	7.216	6.868
Median	-1.06	-1.14	-2.08	-1.16	-1.15
Min, Max	-40.0, 25.0	-32.6, 21.6	-37.5, 31.9	-37.5, 31.9	-18.7, 20.5
Week 52					
n	550	561	561	1122	285
Mean	-0.85	-1.84	-2.05	-1.94	-1.31
SD	7.535	6.848	7.255	7.052	7.088
Median	0.00	-1.22	-2.20	-2.08	-2.02
Min, Max	-36.7, 33.8	-37.5, 19.3	-40.6, 21.0	-40.6, 21.0	-20.0, 29.0
Week 56					
n	551	546	552	1098	281
Mean	-0.74	-1.76	-2.20	-1.98	-1.05
SD	7.667	7.205	7.171	7.188	7.429
Median	0.00	-1.16	-2.33	-2.22	-1.10
Min, Max	-36.7, 26.1	-40.3, 19.2	-34.4, 22.0	-40.3, 22.0	-20.7, 33.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	544	562	574	1136	288
Mean	-0.83	-1.79	-1.85	-1.82	-1.32
SD	7.587	6.864	7.370	7.121	7.099
Median	0.00	-2.21	-2.19	-2.20	-1.18
Min, Max	-33.3, 23.1	-37.5, 19.1	-40.6, 25.7	-40.6, 25.7	-23.9, 17.4
Week 64					
n	524	550	542	1092	268
Mean	-1.22	-2.33	-2.54	-2.43	-1.54
SD	7.099	6.884	7.135	7.007	6.867
Median	-1.10	-2.54	-2.48	-2.48	-2.17
Min, Max	-36.7, 28.9	-38.2, 19.7	-34.4, 19.2	-38.2, 19.7	-16.5, 23.0
Week 68					
n	508	541	537	1078	275
Mean	-1.03	-2.00	-2.34	-2.17	-0.89
SD	6.989	6.947	6.800	6.873	7.103
Median	0.00	-2.27	-2.27	-2.27	-1.11
Min, Max	-36.7, 18.3	-34.7, 19.8	-40.6, 21.4	-40.6, 21.4	-16.2, 26.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	502	552	552	1104	273
Mean	-0.83	-2.05	-1.79	-1.92	-0.63
SD	7.221	7.027	7.029	7.026	7.199
Median	-1.11	-2.17	-2.21	-2.20	-1.06
Min, Max	-26.1, 26.3	-36.8, 21.1	-28.6, 18.3	-36.8, 21.1	-18.2, 31.9
Week 76					
n	491	529	534	1063	264
Mean	-1.34	-2.03	-2.14	-2.09	-0.75
SD	7.619	6.679	7.192	6.938	6.741
Median	-1.14	-2.30	-2.44	-2.35	0.00
Min, Max	-40.0, 34.6	-26.7, 17.3	-37.5, 21.0	-37.5, 21.0	-18.0, 18.9
Week 80					
n	489	522	520	1042	265
Mean	-1.25	-2.31	-2.62	-2.47	-1.04
SD	7.710	7.074	7.244	7.158	7.040
Median	-1.18	-2.33	-3.33	-2.52	-1.14
Min, Max	-40.0, 22.2	-24.4, 21.0	-31.2, 25.0	-31.2, 25.0	-22.4, 16.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	497	540	542	1082	268
Mean	-0.84	-1.58	-2.15	-1.86	-0.17
SD	7.528	7.163	6.976	7.073	6.697
Median	0.00	-2.22	-2.27	-2.25	0.00
Min, Max	-40.0, 23.6	-24.0, 26.0	-34.4, 23.1	-34.4, 26.0	-17.0, 17.1
Week 88					
n	485	515	522	1037	259
Mean	-1.45	-1.87	-2.77	-2.32	-1.20
SD	7.345	6.731	7.050	6.905	6.942
Median	-2.17	-1.22	-3.23	-2.30	-1.10
Min, Max	-36.7, 35.1	-23.1, 21.0	-43.8, 20.0	-43.8, 21.0	-18.2, 30.4
Week 92					
n	471	508	512	1020	255
Mean	-1.03	-2.24	-2.56	-2.40	-0.72
SD	7.414	7.123	7.497	7.311	7.210
Median	-1.11	-2.16	-2.35	-2.27	-1.09
Min, Max	-33.3, 24.1	-31.9, 26.5	-34.4, 25.7	-34.4, 26.5	-18.9, 23.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Magnesium (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	477	520	512	1032	260
Mean	-0.86	-1.26	-2.06	-1.66	-0.28
SD	7.462	6.600	6.876	6.747	7.692
Median	-1.12	-1.17	-2.27	-1.27	0.00
Min, Max	-33.3, 22.2	-18.8, 25.0	-37.5, 19.0	-37.5, 25.0	-21.7, 31.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	725	711	709	1420	336
Mean	1.35	0.67	-0.69	-0.01	-1.05
SD	16.778	17.338	15.943	16.664	15.513
Median	0.00	-1.01	-1.75	-1.58	-1.60
Min, Max	-54.6, 123.2	-55.3, 220.0	-59.2, 105.8	-59.2, 220.0	-38.7, 63.2
Week 8					
n	707	687	665	1352	325
Mean	0.18	0.56	0.47	0.52	-0.63
SD	15.744	17.417	17.315	17.361	16.215
Median	0.00	-0.82	0.00	0.00	-2.22
Min, Max	-46.5, 118.3	-44.6, 240.0	-58.8, 103.8	-58.8, 240.0	-42.0, 101.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	695	670	653	1323	325
Mean	0.24	1.99	-0.09	0.96	-1.25
SD	15.410	18.489	16.765	17.683	15.904
Median	-0.98	0.00	-0.79	0.00	-4.03
Min, Max	-51.8, 74.6	-36.9, 230.0	-54.8, 86.5	-54.8, 230.0	-38.3, 94.7
Week 16					
n	682	641	631	1272	315
Mean	0.16	2.29	1.37	1.84	-1.07
SD	15.174	19.075	17.961	18.529	17.813
Median	-0.85	0.00	0.00	0.00	-3.03
Min, Max	-42.6, 75.0	-48.7, 270.0	-41.0, 128.8	-48.7, 270.0	-42.0, 96.4
Week 20					
n	667	634	619	1253	310
Mean	0.23	1.59	0.32	0.96	-0.41
SD	15.878	18.685	18.057	18.381	17.491
Median	-0.97	0.00	-1.72	-0.76	-1.59
Min, Max	-46.0, 85.1	-43.2, 210.0	-43.4, 105.8	-43.4, 210.0	-45.4, 103.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	658	638	618	1256	314
Mean	1.19	2.29	2.22	2.25	0.05
SD	15.765	19.778	17.131	18.516	16.753
Median	0.00	0.00	0.77	0.00	-1.28
Min, Max	-42.5, 85.1	-43.8, 280.0	-38.1, 91.4	-43.8, 280.0	-40.7, 96.4
Week 28					
n	646	607	592	1199	295
Mean	0.89	1.64	0.19	0.92	-1.38
SD	38.390	19.632	17.881	18.794	16.770
Median	-2.61	0.00	-2.30	-0.88	-3.51
Min, Max	-40.5, 834.4	-48.2, 280.0	-43.5, 94.3	-48.2, 280.0	-34.9, 64.0
Week 32					
n	624	606	587	1193	295
Mean	-0.58	0.43	0.02	0.23	-1.66
SD	16.691	19.870	18.659	19.277	16.504
Median	-1.55	-2.07	-1.10	-1.92	-2.38
Min, Max	-52.5, 69.0	-44.6, 280.0	-45.8, 113.5	-45.8, 280.0	-33.9, 83.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	629	611	601	1212	306
Mean	1.40	1.31	0.74	1.03	-0.90
SD	15.667	17.573	17.282	17.424	16.590
Median	0.70	0.00	-1.80	-0.92	-2.60
Min, Max	-52.5, 105.3	-44.1, 170.0	-47.4, 88.9	-47.4, 170.0	-37.3, 73.3
Week 40					
n	609	589	581	1170	294
Mean	-0.61	1.15	-0.22	0.47	-1.57
SD	15.567	20.716	19.042	19.905	15.577
Median	-1.09	-0.83	-2.27	-1.16	-2.36
Min, Max	-51.4, 54.0	-42.4, 290.0	-46.2, 128.8	-46.2, 290.0	-36.2, 50.0
Week 44					
n	586	574	577	1151	291
Mean	-0.38	0.53	-1.12	-0.30	-2.10
SD	16.610	19.550	18.680	19.128	16.211
Median	-0.99	-1.85	-3.45	-2.63	-2.80
Min, Max	-50.0, 100.0	-41.1, 270.0	-62.4, 115.4	-62.4, 270.0	-40.9, 84.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	585	585	591	1176	293
Mean	1.24	2.13	1.43	1.78	-0.93
SD	15.482	19.129	18.086	18.608	16.384
Median	0.00	0.81	0.00	0.00	-2.56
Min, Max	-35.6, 65.4	-34.8, 270.0	-40.5, 113.2	-40.5, 270.0	-40.0, 52.6
Week 52					
n	545	560	559	1119	284
Mean	-0.51	0.95	0.71	0.83	-2.58
SD	16.049	20.502	21.381	20.937	18.035
Median	-1.63	0.00	-2.59	-1.61	-5.38
Min, Max	-47.4, 72.0	-44.5, 280.0	-46.0, 177.2	-46.0, 280.0	-49.0, 96.4
Week 56					
n	549	548	550	1098	278
Mean	-0.66	1.21	-0.81	0.20	-1.53
SD	15.695	20.869	19.293	20.111	16.175
Median	0.00	0.00	-2.24	-1.43	-2.67
Min, Max	-42.4, 64.0	-40.2, 290.0	-55.1, 100.0	-55.1, 290.0	-38.6, 79.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	543	562	573	1135	288
Mean	0.27	1.84	1.60	1.72	0.57
SD	15.722	20.056	18.288	19.176	16.866
Median	-0.88	0.00	-0.90	0.00	-1.36
Min, Max	-42.5, 64.0	-48.4, 310.0	-43.5, 87.5	-48.4, 310.0	-34.9, 94.5
Week 64					
n	521	547	542	1089	267
Mean	-0.33	0.83	-0.82	0.00	-1.66
SD	16.824	19.418	18.282	18.870	17.115
Median	-1.77	-1.02	-2.87	-2.13	-1.67
Min, Max	-43.2, 78.3	-44.4, 260.0	-38.6, 126.9	-44.4, 260.0	-56.0, 64.9
Week 68					
n	506	537	536	1073	275
Mean	-0.75	0.35	-1.20	-0.43	0.12
SD	17.516	20.494	19.516	20.017	19.218
Median	-1.86	-0.92	-3.13	-2.48	-0.94
Min, Max	-50.4, 69.6	-44.2, 270.0	-45.7, 130.8	-45.7, 270.0	-50.0, 115.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	502	552	550	1102	273
Mean	0.23	1.36	0.10	0.73	0.42
SD	16.187	20.120	18.433	19.298	19.002
Median	0.00	-0.33	-1.75	-0.96	-1.52
Min, Max	-43.4, 78.3	-50.4, 280.0	-40.3, 125.0	-50.4, 280.0	-37.9, 127.3
Week 76					
n	491	528	533	1061	262
Mean	-0.60	0.13	-0.23	-0.05	-0.10
SD	17.304	18.670	18.143	18.399	19.340
Median	-1.60	-1.72	-2.29	-1.90	-2.00
Min, Max	-55.8, 85.1	-55.5, 230.0	-43.8, 84.3	-55.5, 230.0	-44.7, 147.4
Week 80					
n	489	523	518	1041	265
Mean	-1.65	-0.74	-0.69	-0.71	-1.71
SD	16.576	20.377	17.742	19.102	16.480
Median	-2.63	-2.78	-2.49	-2.68	-2.80
Min, Max	-45.4, 63.8	-53.8, 220.0	-50.0, 107.7	-53.8, 220.0	-55.6, 61.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	497	538	540	1078	268
Mean	0.36	1.29	0.62	0.96	0.45
SD	17.504	20.522	17.785	19.194	18.947
Median	0.00	-0.90	-0.36	-0.81	-1.95
Min, Max	-52.9, 101.8	-43.2, 280.0	-44.7, 89.7	-44.7, 280.0	-37.1, 89.5
Week 88					
n	484	514	522	1036	257
Mean	-1.54	-1.46	-1.31	-1.38	-2.18
SD	16.174	16.804	17.456	17.127	18.357
Median	-2.86	-2.48	-2.48	-2.48	-2.22
Min, Max	-50.0, 67.6	-45.7, 117.2	-44.7, 98.1	-45.7, 117.2	-44.7, 80.0
Week 92					
n	471	507	511	1018	254
Mean	-1.11	0.36	0.12	0.24	-1.52
SD	17.091	21.126	18.408	19.799	19.254
Median	-2.38	-2.52	-2.56	-2.54	-2.77
Min, Max	-45.9, 67.1	-44.5, 300.0	-39.0, 86.5	-44.5, 300.0	-39.3, 136.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Phosphorus (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	477	518	511	1029	260
Mean	0.81	1.23	0.83	1.03	0.47
SD	16.795	21.667	18.511	20.153	19.219
Median	0.00	-0.37	-1.82	-0.92	-2.52
Min, Max	-42.2, 80.0	-45.5, 330.0	-37.4, 159.6	-45.5, 330.0	-47.7, 100.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	723	707	704	1411	331
Mean	2.50	4.04	3.06	3.55	2.94
SD	17.111	25.158	17.813	21.803	17.150
Median	0.00	1.14	0.57	1.14	1.89
Min, Max	-53.0, 92.5	-57.7, 409.1	-44.9, 146.8	-57.7, 409.1	-55.8, 70.1
Week 8					
n	704	683	659	1342	323
Mean	3.36	2.54	3.49	3.01	4.23
SD	18.931	18.543	22.241	20.440	21.802
Median	1.96	0.00	0.00	0.00	0.00
Min, Max	-61.8, 157.5	-60.8, 166.7	-42.3, 285.4	-60.8, 285.4	-43.3, 182.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	691	668	649	1317	319
Mean	3.83	3.80	3.38	3.60	2.34
SD	24.719	34.859	18.484	28.003	19.414
Median	1.85	1.92	2.00	1.96	1.75
Min, Max	-48.8, 435.0	-57.7, 751.5	-67.9, 193.3	-67.9, 751.5	-42.5, 219.5
Week 16					
n	680	638	626	1264	311
Mean	3.36	2.76	3.96	3.35	2.53
SD	24.349	18.330	19.615	18.979	20.042
Median	1.96	0.00	0.00	0.00	1.92
Min, Max	-48.7, 447.5	-57.7, 131.9	-59.8, 108.3	-59.8, 131.9	-44.3, 225.3
Week 20					
n	665	626	614	1240	308
Mean	3.41	3.47	4.48	3.97	2.41
SD	20.944	18.880	22.537	20.769	17.027
Median	1.92	1.92	1.82	1.90	1.94
Min, Max	-55.1, 295.0	-52.6, 124.2	-78.9, 155.9	-78.9, 155.9	-72.1, 70.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	656	635	611	1246	313
Mean	3.25	2.73	1.50	2.13	1.60
SD	40.974	25.967	16.466	21.831	18.179
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-50.0, 905.0	-63.3, 478.8	-45.8, 117.4	-63.3, 478.8	-47.7, 128.7
Week 28					
n	641	602	584	1186	293
Mean	3.29	2.68	3.93	3.30	3.54
SD	20.252	18.749	19.461	19.105	19.195
Median	1.85	0.00	1.94	1.16	0.00
Min, Max	-50.5, 220.5	-52.6, 166.7	-44.9, 148.6	-52.6, 166.7	-46.4, 110.5
Week 32					
n	618	602	585	1187	293
Mean	3.19	3.69	4.15	3.92	1.93
SD	19.126	20.311	20.095	20.198	17.740
Median	1.12	1.75	1.89	1.82	0.00
Min, Max	-42.7, 126.3	-58.8, 186.5	-56.9, 101.1	-58.8, 186.5	-51.0, 107.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	627	606	597	1203	303
Mean	1.75	3.36	3.17	3.27	3.15
SD	16.712	19.954	18.949	19.454	17.866
Median	0.00	1.41	1.85	1.75	0.00
Min, Max	-49.5, 109.2	-58.9, 148.5	-47.2, 129.6	-58.9, 148.5	-47.1, 93.1
Week 40					
n	606	588	579	1167	292
Mean	4.09	3.51	5.01	4.26	2.75
SD	21.964	19.270	21.932	20.639	19.464
Median	1.68	1.96	2.13	2.04	1.90
Min, Max	-48.9, 222.4	-63.3, 121.2	-73.7, 198.9	-73.7, 198.9	-54.1, 208.0
Week 44					
n	585	565	574	1139	290
Mean	2.24	3.61	4.95	4.29	2.57
SD	18.343	19.257	19.430	19.348	18.289
Median	0.00	1.06	3.60	2.00	1.87
Min, Max	-56.5, 103.2	-62.2, 128.0	-54.5, 106.7	-62.2, 128.0	-48.4, 91.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	581	582	587	1169	293
Mean	2.27	1.94	2.03	1.99	0.20
SD	19.378	26.229	18.360	22.613	16.705
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-52.9, 111.8	-61.5, 466.7	-50.7, 151.1	-61.5, 466.7	-47.1, 104.5
Week 52					
n	538	558	554	1112	282
Mean	2.60	1.85	4.12	2.98	2.56
SD	18.824	18.634	19.489	19.090	16.911
Median	1.89	0.00	1.92	1.61	1.92
Min, Max	-57.1, 161.3	-48.1, 142.4	-59.3, 149.2	-59.3, 149.2	-51.9, 92.2
Week 56					
n	545	541	545	1086	276
Mean	3.08	2.91	4.22	3.57	1.17
SD	19.143	19.398	19.821	19.613	15.879
Median	0.00	0.00	1.89	1.77	0.00
Min, Max	-54.4, 153.5	-66.2, 130.3	-76.1, 161.1	-76.1, 161.1	-53.8, 65.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	542	560	571	1131	284
Mean	1.81	3.06	2.76	2.91	1.70
SD	18.478	18.799	19.400	19.097	15.485
Median	0.00	1.13	0.00	0.00	1.92
Min, Max	-54.3, 111.8	-54.0, 163.6	-71.3, 111.2	-71.3, 163.6	-64.2, 55.0
Week 64					
n	519	545	532	1077	263
Mean	2.39	3.20	4.26	3.73	3.76
SD	19.707	20.012	19.357	19.689	21.987
Median	1.92	0.00	2.21	1.85	2.00
Min, Max	-50.0, 137.6	-54.6, 130.3	-56.9, 129.3	-56.9, 130.3	-48.5, 209.2
Week 68					
n	507	535	531	1066	273
Mean	2.26	4.04	3.57	3.80	2.99
SD	19.097	20.526	19.315	19.924	18.094
Median	0.00	2.04	1.96	2.00	2.08
Min, Max	-53.3, 124.2	-58.9, 169.7	-51.2, 139.0	-58.9, 169.7	-57.4, 120.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	501	547	548	1095	272
Mean	2.61	3.32	2.96	3.14	1.08
SD	18.289	36.434	17.628	28.599	14.946
Median	0.00	0.00	1.89	1.11	0.00
Min, Max	-46.7, 121.0	-61.1, 736.4	-47.8, 107.3	-61.1, 736.4	-49.2, 55.6
Week 76					
n	490	528	529	1057	261
Mean	3.23	4.17	3.24	3.70	3.23
SD	20.311	19.560	20.102	19.829	19.294
Median	0.00	2.08	0.00	1.89	1.96
Min, Max	-47.8, 173.7	-58.8, 93.9	-77.0, 110.4	-77.0, 110.4	-49.4, 126.8
Week 80					
n	487	518	517	1035	262
Mean	3.87	4.65	4.94	4.79	1.39
SD	21.051	21.451	25.833	23.730	17.179
Median	1.96	1.93	2.08	2.00	0.00
Min, Max	-41.3, 152.6	-53.9, 163.6	-55.1, 343.8	-55.1, 343.8	-53.8, 113.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	495	534	536	1070	267
Mean	2.72	1.94	2.60	2.27	1.50
SD	20.880	17.504	17.360	17.427	17.548
Median	0.79	0.00	1.90	1.82	1.09
Min, Max	-54.6, 221.4	-59.1, 127.3	-81.8, 83.7	-81.8, 127.3	-46.4, 114.9
Week 88					
n	480	513	517	1030	255
Mean	3.68	4.14	4.80	4.47	2.14
SD	20.953	22.161	19.481	20.851	16.988
Median	1.92	2.13	2.27	2.20	0.00
Min, Max	-59.3, 128.9	-57.1, 293.9	-40.8, 135.6	-57.1, 293.9	-55.7, 89.8
Week 92					
n	470	502	506	1008	252
Mean	1.95	3.97	4.56	4.27	2.56
SD	18.607	21.185	19.645	20.419	16.426
Median	0.54	1.87	2.35	2.02	1.92
Min, Max	-49.3, 136.8	-58.2, 181.8	-87.1, 139.5	-87.1, 181.8	-43.3, 75.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Glucose (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	474	517	506	1023	258
Mean	2.62	1.86	2.37	2.11	0.17
SD	21.648	19.480	18.517	19.002	15.535
Median	0.00	0.00	1.76	0.00	0.00
Min, Max	-59.5, 157.9	-58.2, 175.8	-56.0, 85.5	-58.2, 175.8	-45.4, 75.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	756	737	734	1471	339
Mean	-1.24	-1.53	-0.83	-1.18	-2.64
SD	11.037	11.994	12.672	12.338	11.465
Median	-1.85	-1.81	-1.24	-1.52	-3.33
Min, Max	-64.7, 65.2	-41.4, 81.1	-56.1, 96.0	-56.1, 96.0	-28.8, 70.3
Week 8					
n	735	706	684	1390	329
Mean	-0.83	-0.93	-0.60	-0.77	-3.28
SD	11.368	12.251	12.357	12.300	12.567
Median	-1.49	-1.36	-1.43	-1.39	-4.46
Min, Max	-39.4, 57.0	-58.6, 83.1	-47.4, 60.6	-58.6, 83.1	-41.6, 65.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	693	671	1364	328
Mean	-0.76	-0.64	0.39	-0.13	-3.64
SD	12.045	12.242	13.812	13.043	12.298
Median	-1.45	-1.13	-0.43	-0.84	-3.98
Min, Max	-50.3, 41.4	-46.4, 90.7	-39.9, 72.4	-46.4, 90.7	-56.0, 49.7
Week 16					
n	707	666	651	1317	318
Mean	-1.00	-0.52	0.43	-0.05	-3.84
SD	12.411	12.658	13.772	13.224	12.350
Median	-1.87	-1.16	-0.43	-0.80	-5.22
Min, Max	-45.2, 41.6	-49.9, 58.5	-40.4, 83.7	-49.9, 83.7	-53.2, 52.7
Week 20					
n	696	654	638	1292	314
Mean	-0.85	-1.15	0.01	-0.58	-3.34
SD	13.090	12.368	13.629	13.014	12.479
Median	-1.52	-1.60	-1.65	-1.63	-4.23
Min, Max	-46.9, 78.0	-57.3, 89.0	-33.7, 61.1	-57.3, 89.0	-48.1, 38.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	704	672	656	1328	319
Mean	-1.11	-0.78	-0.25	-0.52	-3.29
SD	12.880	13.047	13.123	13.082	13.764
Median	-1.48	-1.42	-1.50	-1.47	-4.12
Min, Max	-39.5, 91.8	-44.5, 90.4	-40.3, 65.3	-44.5, 90.4	-42.9, 64.6
Week 36					
n	669	647	632	1279	315
Mean	-0.56	-0.68	-0.29	-0.49	-3.57
SD	13.037	12.931	13.346	13.134	12.860
Median	-1.14	-1.44	-1.23	-1.33	-4.63
Min, Max	-44.4, 67.0	-52.6, 75.7	-35.7, 72.3	-52.6, 75.7	-37.1, 52.2
Week 48					
n	618	625	620	1245	304
Mean	0.93	0.14	0.38	0.26	-2.21
SD	14.130	13.238	14.231	13.736	14.201
Median	0.57	-0.73	-0.79	-0.73	-3.10
Min, Max	-36.5, 99.4	-42.5, 100.0	-43.8, 64.4	-43.8, 100.0	-46.8, 68.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	576	604	602	1206	294
Mean	-0.13	-1.32	0.83	-0.24	-2.79
SD	14.235	13.224	14.101	13.705	12.725
Median	-1.02	-1.74	-0.26	-1.07	-3.19
Min, Max	-47.2, 103.7	-54.5, 87.4	-52.2, 64.2	-54.5, 87.4	-39.9, 55.5
Week 72					
n	538	589	574	1163	284
Mean	-0.50	-0.08	0.47	0.19	-2.19
SD	13.437	14.738	14.351	14.544	14.466
Median	-0.67	-1.47	-0.76	-1.08	-2.74
Min, Max	-45.7, 90.7	-43.0, 86.4	-48.9, 63.6	-48.9, 86.4	-44.8, 75.7
Week 84					
n	530	573	565	1138	278
Mean	0.22	-0.47	-0.66	-0.57	-2.49
SD	13.231	13.667	14.465	14.063	15.183
Median	-1.35	-0.59	-1.51	-1.10	-4.21
Min, Max	-35.8, 63.4	-32.6, 82.7	-50.3, 65.0	-50.3, 82.7	-36.9, 65.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Cholesterol (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	491	532	522	1054	262
Mean	0.77	0.20	0.05	0.13	-1.56
SD	13.893	14.018	14.209	14.107	12.526
Median	0.00	0.00	-0.18	-0.08	-2.53
Min, Max	-46.4, 90.6	-38.9, 56.6	-51.8, 59.9	-51.8, 59.9	-40.6, 58.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	756	737	734	1471	339
Mean	8.44	-3.13	-1.73	-2.43	5.61
SD	43.635	35.918	36.022	35.964	38.779
Median	2.10	-7.62	-8.53	-8.08	-1.96
Min, Max	-78.1, 395.3	-75.4, 165.9	-77.4, 156.6	-77.4, 165.9	-63.9, 180.4
Week 8					
n	735	706	684	1390	329
Mean	9.25	-3.34	0.35	-1.52	5.58
SD	43.468	36.097	43.177	39.767	45.518
Median	1.49	-10.21	-6.20	-7.52	-3.77
Min, Max	-81.1, 329.3	-74.7, 228.0	-69.9, 403.5	-74.7, 403.5	-66.8, 259.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	722	693	671	1364	328
Mean	6.29	-1.86	0.42	-0.74	2.72
SD	39.197	38.162	41.225	39.700	40.903
Median	1.22	-6.52	-6.67	-6.54	-4.90
Min, Max	-77.5, 300.0	-73.0, 207.9	-80.9, 249.5	-80.9, 249.5	-61.5, 306.0
Week 16					
n	707	666	651	1317	318
Mean	6.56	-2.76	0.39	-1.21	5.45
SD	43.444	43.504	43.712	43.619	44.048
Median	0.00	-11.32	-7.50	-9.30	0.00
Min, Max	-78.3, 381.5	-82.1, 350.0	-74.5, 427.8	-82.1, 427.8	-72.5, 272.2
Week 20					
n	696	654	638	1292	314
Mean	7.20	-2.71	1.90	-0.43	10.02
SD	43.060	41.059	44.073	42.620	48.399
Median	1.34	-11.26	-7.42	-9.56	0.00
Min, Max	-74.4, 313.5	-79.5, 211.1	-76.7, 243.8	-79.5, 243.8	-67.2, 275.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	704	672	656	1328	319
Mean	9.13	-2.95	0.80	-1.10	5.64
SD	43.868	40.444	42.570	41.534	40.275
Median	3.47	-10.72	-7.27	-8.57	-0.88
Min, Max	-76.9, 315.9	-76.1, 210.3	-75.2, 287.5	-76.1, 287.5	-72.9, 200.9
Week 36					
n	669	647	632	1279	315
Mean	11.50	-1.04	-1.06	-1.05	3.88
SD	48.175	43.588	40.302	41.980	42.377
Median	2.78	-9.68	-8.47	-9.23	-3.07
Min, Max	-79.6, 320.6	-80.1, 253.3	-79.7, 168.8	-80.1, 253.3	-73.7, 289.2
Week 48					
n	618	625	620	1245	304
Mean	15.78	-0.86	3.14	1.13	7.28
SD	53.298	41.958	46.664	44.391	43.075
Median	5.99	-7.61	-5.63	-7.14	-0.94
Min, Max	-77.7, 415.9	-72.4, 265.1	-78.3, 411.3	-78.3, 411.3	-65.8, 232.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	576	604	602	1206	294
Mean	10.31	-1.81	0.28	-0.77	5.40
SD	44.112	43.391	45.847	44.628	44.086
Median	2.83	-9.18	-7.27	-8.38	-1.76
Min, Max	-77.5, 304.5	-81.3, 341.1	-78.7, 415.1	-81.3, 415.1	-66.0, 396.2
Week 72					
n	538	589	574	1163	284
Mean	9.58	-0.51	2.83	1.14	9.76
SD	44.304	44.472	47.626	46.066	49.742
Median	2.56	-7.45	-6.96	-7.27	0.28
Min, Max	-88.3, 313.1	-79.7, 366.6	-72.5, 346.3	-79.7, 366.6	-74.2, 255.7
Week 84					
n	530	573	565	1138	278
Mean	9.80	0.78	2.85	1.81	8.13
SD	44.717	47.295	44.511	45.925	46.875
Median	2.39	-9.39	-4.55	-7.92	0.00
Min, Max	-77.7, 250.0	-73.6, 276.5	-79.4, 337.0	-79.4, 337.0	-77.5, 219.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Triglycerides (mmol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	491	532	522	1054	262
Mean	12.44	-1.17	1.67	0.24	5.51
SD	53.026	48.727	45.258	47.040	42.124
Median	2.08	-10.58	-4.42	-7.33	-0.92
Min, Max	-75.8, 473.0	-75.8, 315.4	-74.2, 259.3	-75.8, 315.4	-76.1, 221.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 4					
n	726	712	712	1424	336
Mean	0.93	0.18	-0.69	-0.26	0.45
SD	13.681	15.355	20.390	18.048	13.143
Median	0.00	-0.75	-2.33	-1.61	-0.49
Min, Max	-49.0, 84.1	-51.1, 89.5	-43.3, 323.4	-51.1, 323.4	-29.7, 38.1
Week 8					
n	707	687	666	1353	325
Mean	1.14	1.46	0.17	0.83	-0.24
SD	13.498	16.835	19.472	18.186	15.193
Median	0.00	0.00	-0.77	0.00	-0.43
Min, Max	-49.1, 52.9	-54.0, 111.4	-61.5, 250.0	-61.5, 250.0	-57.8, 84.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	695	671	654	1325	325
Mean	1.05	1.69	0.99	1.34	2.55
SD	14.166	15.815	19.958	17.976	14.642
Median	0.00	0.00	-1.03	-0.69	1.63
Min, Max	-67.6, 76.6	-43.3, 118.1	-44.4, 259.4	-44.4, 259.4	-39.0, 63.0
Week 16					
n	681	641	634	1275	315
Mean	0.85	2.11	1.10	1.60	1.05
SD	14.180	16.531	20.326	18.515	17.345
Median	0.00	0.00	0.00	0.00	-1.14
Min, Max	-48.1, 65.9	-53.8, 120.2	-53.7, 250.0	-53.8, 250.0	-42.9, 165.8
Week 20					
n	669	635	621	1256	311
Mean	1.01	2.11	1.66	1.89	1.91
SD	15.256	18.583	21.526	20.085	17.089
Median	0.00	0.58	-0.89	0.00	0.00
Min, Max	-49.4, 74.6	-52.7, 140.0	-43.3, 245.3	-52.7, 245.3	-33.3, 65.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	659	639	620	1259	315
Mean	1.39	2.92	1.18	2.06	1.22
SD	15.883	18.243	19.959	19.119	16.274
Median	0.54	1.69	-0.98	0.00	0.42
Min, Max	-41.7, 93.5	-55.2, 176.2	-42.4, 264.1	-55.2, 264.1	-63.1, 70.5
Week 28					
n	646	609	593	1202	296
Mean	1.50	2.57	1.75	2.17	0.28
SD	16.329	18.760	22.052	20.446	15.886
Median	0.39	0.75	0.00	0.00	0.00
Min, Max	-54.6, 89.9	-42.2, 156.2	-45.1, 295.3	-45.1, 295.3	-74.5, 65.7
Week 32					
n	624	608	587	1195	299
Mean	1.20	1.84	1.25	1.55	1.37
SD	16.286	18.280	21.315	19.823	15.863
Median	0.00	0.66	-0.85	0.00	0.00
Min, Max	-46.5, 61.6	-51.1, 145.7	-49.0, 311.7	-51.1, 311.7	-36.5, 63.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	630	612	603	1215	306
Mean	2.01	2.13	1.72	1.93	3.23
SD	16.689	17.937	22.067	20.086	15.924
Median	0.33	1.08	-0.64	0.00	2.99
Min, Max	-46.6, 79.0	-48.9, 141.2	-47.2, 267.2	-48.9, 267.2	-29.0, 73.2
Week 40					
n	609	590	583	1173	294
Mean	1.60	2.39	1.67	2.03	1.96
SD	16.074	19.926	22.957	21.480	16.091
Median	0.00	0.48	-0.61	0.00	1.46
Min, Max	-42.0, 108.3	-53.5, 162.3	-47.1, 336.7	-53.5, 336.7	-54.9, 72.9
Week 44					
n	588	574	578	1152	293
Mean	2.13	1.96	0.95	1.45	2.58
SD	16.099	17.416	22.556	20.157	14.265
Median	1.37	1.41	-1.10	0.00	1.91
Min, Max	-56.0, 61.7	-51.4, 121.6	-66.3, 325.0	-66.3, 325.0	-34.9, 67.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	586	587	591	1178	293
Mean	1.30	1.49	1.53	1.51	1.77
SD	16.799	16.482	23.054	20.042	16.231
Median	0.00	0.27	0.00	0.00	0.00
Min, Max	-49.5, 167.2	-48.4, 63.8	-44.9, 360.9	-48.4, 360.9	-48.4, 70.5
Week 52					
n	550	561	561	1122	285
Mean	1.94	1.74	1.78	1.76	2.45
SD	16.256	17.350	18.060	17.701	15.294
Median	1.66	0.99	0.91	0.96	1.98
Min, Max	-61.2, 69.2	-55.6, 105.7	-45.5, 141.0	-55.6, 141.0	-31.8, 58.9
Week 56					
n	551	548	552	1100	281
Mean	2.40	2.48	1.42	1.95	3.19
SD	16.339	18.120	17.321	17.724	17.472
Median	1.63	1.29	0.61	0.85	2.80
Min, Max	-42.2, 72.7	-59.4, 137.1	-43.5, 94.1	-59.4, 137.1	-41.7, 163.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	544	562	574	1136	288
Mean	2.39	2.51	1.10	1.80	1.67
SD	16.607	18.274	17.903	18.094	14.885
Median	1.59	1.04	0.00	0.00	0.43
Min, Max	-56.8, 62.8	-51.9, 125.8	-43.5, 144.9	-51.9, 144.9	-48.6, 53.6
Week 64					
n	524	550	542	1092	268
Mean	2.67	2.08	1.41	1.75	1.89
SD	16.882	18.642	18.510	18.571	15.180
Median	1.85	0.00	0.00	0.00	0.69
Min, Max	-50.2, 73.7	-43.2, 140.0	-42.7, 127.6	-43.2, 140.0	-38.4, 53.6
Week 68					
n	509	541	537	1078	275
Mean	2.87	3.29	0.34	1.82	1.90
SD	17.016	20.848	17.988	19.523	16.818
Median	1.36	0.94	-1.08	0.00	0.00
Min, Max	-72.4, 63.1	-46.9, 231.8	-53.1, 150.6	-53.1, 231.8	-56.6, 103.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	502	552	552	1104	273
Mean	2.24	2.51	1.18	1.85	2.29
SD	16.236	17.266	19.177	18.251	17.089
Median	1.98	1.82	0.00	1.08	0.45
Min, Max	-48.4, 81.5	-43.3, 108.8	-56.8, 171.8	-56.8, 171.8	-37.5, 96.4
Week 76					
n	492	530	534	1064	264
Mean	2.71	3.05	2.07	2.56	1.66
SD	16.499	17.825	18.755	18.296	17.474
Median	2.38	1.67	1.23	1.34	0.82
Min, Max	-47.9, 95.5	-38.8, 121.0	-55.2, 147.4	-55.2, 147.4	-53.2, 85.7
Week 80					
n	489	524	521	1045	265
Mean	2.26	3.80	1.82	2.82	0.83
SD	17.347	18.273	19.397	18.859	16.612
Median	2.54	1.54	0.67	1.24	0.00
Min, Max	-70.8, 59.3	-45.7, 113.3	-66.1, 148.1	-66.1, 148.1	-55.2, 71.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 84					
n	497	540	541	1081	268
Mean	3.07	3.96	1.65	2.80	2.12
SD	17.102	18.699	18.777	18.765	16.442
Median	2.19	2.70	-0.36	1.36	-0.61
Min, Max	-46.1, 68.0	-39.5, 157.9	-53.8, 155.1	-53.8, 157.9	-36.9, 47.1
Week 88					
n	485	515	522	1037	259
Mean	2.67	3.90	2.60	3.25	0.83
SD	16.979	20.373	19.418	19.899	16.002
Median	2.56	2.28	0.14	1.09	-1.01
Min, Max	-44.8, 62.9	-42.3, 184.2	-43.7, 147.4	-43.7, 184.2	-41.2, 62.3
Week 92					
n	471	508	512	1020	255
Mean	2.45	3.52	1.02	2.27	2.86
SD	16.742	19.181	18.003	18.632	16.938
Median	1.46	1.76	0.00	0.65	0.00
Min, Max	-55.7, 71.3	-41.9, 145.6	-44.5, 136.5	-44.5, 145.6	-37.8, 58.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Summary of blood chemistry laboratory parameters - percentage change from baseline by visit:
Studies 109MS301 and 109MS302
Lab test: Uric Acid (umol/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	477	520	512	1032	260
Mean	2.20	3.90	0.97	2.45	1.51
SD	15.551	17.891	18.609	18.301	16.411
Median	1.10	1.88	-0.58	0.00	0.81
Min, Max	-59.8, 53.5	-40.4, 107.0	-42.0, 144.2	-42.0, 144.2	-42.3, 53.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-LB-BC-PCTCHG-A.SAS DATE: 08OCT2015

Table 241: Summary of Blood Chemistry Laboratory Parameters: Change From Baseline by Visit Part I (Placebo-Controlled Period)

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 1 of 38
Lab test: ALT/SGPT (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.2	10.3
SD	5.21	18.37
Median	0.0	5.0
Min, Max	-22, 15	-33, 103
Week 8		
n	112	108
Mean	0.9	6.3
SD	10.79	13.09
Median	0.0	4.0
Min, Max	-21, 96	-29, 55
Week 12		
n	109	107
Mean	-0.2	6.2
SD	6.64	16.31
Median	0.0	4.0
Min, Max	-32, 30	-32, 95

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 2 of 38
Lab test: ALT/SGPT (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.8	3.5
SD	9.95	11.29
Median	0.0	2.0
Min, Max	-30, 48	-31, 46
Week 20		
n	110	106
Mean	1.2	3.4
SD	16.31	14.23
Median	0.0	2.5
Min, Max	-40, 149	-39, 92
Week 24		
n	108	105
Mean	2.8	2.5
SD	25.31	11.58
Median	0.0	2.0
Min, Max	-42, 221	-35, 49

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 3 of 38
Lab test: AST/SGOT (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	112	107
Mean	0.2	4.3
SD	4.07	11.02
Median	0.0	2.0
Min, Max	-11, 16	-42, 56
Week 8		
n	111	108
Mean	0.3	2.3
SD	4.77	6.51
Median	0.0	1.3
Min, Max	-13, 17	-17, 25
Week 12		
n	109	106
Mean	0.0	2.8
SD	4.51	9.21
Median	0.0	1.0
Min, Max	-21, 10	-20, 51

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 4 of 38
Lab test: AST/SGOT (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.0	1.5
SD	5.17	6.73
Median	0.0	1.0
Min, Max	-18, 17	-19, 25
Week 20		
n	107	106
Mean	0.3	0.8
SD	8.01	7.15
Median	0.0	0.5
Min, Max	-25, 59	-23, 30
Week 24		
n	107	104
Mean	1.1	0.3
SD	11.68	6.06
Median	0.0	0.0
Min, Max	-25, 92	-22, 17

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
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Lab test: Alkaline Phosphatase (ALP) (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	-0.3	-1.7
SD	6.18	7.97
Median	0.0	-2.0
Min, Max	-19, 16	-28, 34
Week 8		
n	112	108
Mean	1.2	-2.2
SD	9.39	8.69
Median	1.0	-2.5
Min, Max	-23, 60	-39, 40
Week 12		
n	109	107
Mean	1.4	-3.1
SD	6.92	9.50
Median	2.0	-3.0
Min, Max	-22, 20	-45, 25

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 6 of 38
Lab test: Alkaline Phosphatase (ALP) (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	1.6	-1.4
SD	8.27	8.48
Median	3.0	-2.0
Min, Max	-18, 21	-27, 23
Week 20		
n	110	106
Mean	2.4	-0.8
SD	8.45	9.00
Median	3.0	-1.0
Min, Max	-25, 26	-41, 23
Week 24		
n	108	105
Mean	2.8	-0.5
SD	9.19	11.37
Median	3.0	-1.0
Min, Max	-19, 29	-47, 35

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 7 of 38
Lab test: Total Bilirubin (umol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.02	-0.94
SD	4.151	2.736
Median	0.00	-1.00
Min, Max	-17.0, 13.0	-8.0, 9.0
Week 8		
n	112	108
Mean	-0.37	-0.51
SD	4.089	3.585
Median	0.00	0.00
Min, Max	-16.0, 10.5	-21.0, 9.0
Week 12		
n	109	107
Mean	0.13	-0.59
SD	4.217	3.119
Median	0.00	0.00
Min, Max	-13.0, 15.0	-17.0, 7.0

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 8 of 38
Lab test: Total Bilirubin (umol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.09	-0.22
SD	3.974	3.144
Median	0.00	0.00
Min, Max	-11.0, 13.5	-11.0, 10.0
Week 20		
n	110	106
Mean	-0.12	-0.72
SD	4.223	3.410
Median	0.00	0.00
Min, Max	-20.0, 12.0	-17.0, 7.0
Week 24		
n	109	105
Mean	-0.40	-0.67
SD	4.370	3.763
Median	0.00	0.00
Min, Max	-14.0, 8.5	-19.0, 7.0

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 9 of 38
Lab test: GGT (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.8	4.3
SD	6.30	10.71
Median	0.0	3.0
Min, Max	-12, 38	-32, 87
Week 8		
n	112	108
Mean	1.4	3.8
SD	13.23	9.90
Median	0.0	3.0
Min, Max	-17, 124	-35, 45
Week 12		
n	109	107
Mean	-0.8	2.6
SD	6.30	10.48
Median	0.0	1.0
Min, Max	-27, 19	-33, 60

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 10 of 38
Lab test: GGT (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-0.1	2.7
SD	7.46	9.40
Median	0.0	2.0
Min, Max	-33, 35	-34, 44
Week 20		
n	110	106
Mean	-0.3	4.7
SD	6.68	24.16
Median	0.0	2.0
Min, Max	-27, 23	-35, 237
Week 24		
n	108	105
Mean	-0.6	3.5
SD	6.62	15.32
Median	0.0	2.0
Min, Max	-27, 24	-39, 111

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
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Lab test: LDH (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	111	100
Mean	-0.8	-6.5
SD	15.52	20.23
Median	-2.0	-7.0
Min, Max	-56, 61	-113, 87
Week 8		
n	111	107
Mean	-0.4	-6.4
SD	19.37	16.78
Median	0.0	-5.0
Min, Max	-49, 79	-63, 41
Week 12		
n	107	104
Mean	-0.5	-8.7
SD	24.95	19.65
Median	1.0	-9.5
Min, Max	-73, 186	-44, 80

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 12 of 38
Lab test: LDH (U/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	107	103
Mean	1.4	-9.7
SD	24.75	17.94
Median	-1.0	-9.0
Min, Max	-39, 181	-66, 45
Week 20		
n	105	101
Mean	1.1	-10.8
SD	32.48	20.41
Median	-1.0	-10.0
Min, Max	-69, 245	-97, 52
Week 24		
n	104	102
Mean	-2.1	-12.4
SD	18.71	16.73
Median	-1.5	-11.0
Min, Max	-53, 60	-91, 30

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 13 of 38
Lab test: BUN/urea (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	-0.12	-0.03
SD	0.876	0.977
Median	-0.10	0.00
Min, Max	-2.8, 2.3	-4.2, 2.0
Week 8		
n	112	108
Mean	0.14	-0.04
SD	0.990	0.971
Median	0.10	0.00
Min, Max	-2.3, 4.4	-3.8, 2.7
Week 12		
n	109	107
Mean	-0.11	0.16
SD	0.881	1.076
Median	0.00	0.20
Min, Max	-2.7, 1.6	-3.5, 3.4

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
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Lab test: BUN/urea (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-0.05	0.07
SD	0.998	0.998
Median	-0.10	0.00
Min, Max	-2.5, 3.3	-4.7, 2.5
Week 20		
n	110	106
Mean	-0.08	0.24
SD	1.021	1.109
Median	-0.05	0.20
Min, Max	-2.7, 2.4	-4.1, 2.5
Week 24		
n	109	105
Mean	-0.09	0.35
SD	1.102	1.102
Median	-0.10	0.20
Min, Max	-3.5, 2.4	-2.3, 3.1

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
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Lab test: Creatinine (umol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.1	-5.9
SD	6.55	6.43
Median	-0.7	-5.0
Min, Max	-18, 26	-26, 12
Week 8		
n	112	108
Mean	0.1	-6.8
SD	6.44	7.28
Median	0.0	-7.0
Min, Max	-17, 16	-26, 15
Week 12		
n	109	107
Mean	0.1	-7.6
SD	6.92	6.80
Median	0.0	-7.0
Min, Max	-20, 20	-25, 10

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 16 of 38
Lab test: Creatinine (umol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.2	-7.2
SD	7.21	7.73
Median	0.0	-7.5
Min, Max	-18, 20	-36, 16
Week 20		
n	110	106
Mean	-0.6	-6.4
SD	6.82	7.90
Median	0.0	-7.0
Min, Max	-21, 15	-32, 15
Week 24		
n	109	105
Mean	-0.3	-7.6
SD	6.46	8.55
Median	0.0	-8.0
Min, Max	-15, 13	-36, 24

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 17 of 38
Lab test: Sodium (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	-0.2	0.1
SD	2.07	1.97
Median	0.0	0.0
Min, Max	-5, 4	-5, 5
Week 8		
n	112	108
Mean	-0.3	-0.1
SD	1.86	1.93
Median	-0.3	0.0
Min, Max	-5, 4	-6, 5
Week 12		
n	109	107
Mean	-0.4	-0.4
SD	1.86	2.00
Median	-1.0	0.0
Min, Max	-4, 4	-6, 5

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 18 of 38
Lab test: Sodium (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-0.3	-0.4
SD	1.91	2.13
Median	0.0	0.0
Min, Max	-6, 4	-7, 6
Week 20		
n	110	106
Mean	-0.1	0.0
SD	2.08	1.89
Median	0.0	0.0
Min, Max	-6, 5	-4, 6
Week 24		
n	109	105
Mean	-0.4	-0.2
SD	2.07	2.16
Median	0.0	0.0
Min, Max	-6, 4	-10, 6

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 19 of 38
Lab test: Potassium (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.03	0.01
SD	0.336	0.374
Median	0.00	0.00
Min, Max	-0.7, 1.9	-0.8, 1.8
Week 8		
n	112	108
Mean	0.02	-0.07
SD	0.342	0.389
Median	0.00	-0.10
Min, Max	-0.9, 0.9	-1.1, 0.9
Week 12		
n	109	107
Mean	0.06	0.00
SD	0.315	0.370
Median	0.10	0.00
Min, Max	-0.8, 1.0	-1.1, 0.9

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 20 of 38
Lab test: Potassium (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-0.01	-0.02
SD	0.319	0.372
Median	0.00	0.00
Min, Max	-1.1, 1.3	-1.1, 1.1
Week 20		
n	108	106
Mean	0.03	-0.03
SD	0.342	0.367
Median	0.00	0.00
Min, Max	-0.9, 1.0	-1.1, 1.2
Week 24		
n	108	105
Mean	0.05	0.00
SD	0.332	0.375
Median	0.00	0.00
Min, Max	-0.8, 1.2	-0.8, 1.2

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
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Lab test: Chloride (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.1	-0.3
SD	2.01	1.81
Median	0.0	0.0
Min, Max	-6, 5	-6, 4
Week 8		
n	112	108
Mean	0.0	-0.4
SD	2.18	2.00
Median	0.0	-0.2
Min, Max	-5, 6	-8, 5
Week 12		
n	109	107
Mean	-0.2	-0.7
SD	2.05	2.13
Median	0.0	-0.5
Min, Max	-5, 5	-7, 5

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 22 of 38
Lab test: Chloride (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.0	-0.5
SD	1.89	2.22
Median	0.0	-1.0
Min, Max	-4, 5	-7, 5
Week 20		
n	110	106
Mean	0.1	-0.4
SD	2.10	2.01
Median	0.0	-0.3
Min, Max	-6, 5	-5, 7
Week 24		
n	109	105
Mean	0.1	-0.3
SD	1.94	2.39
Median	0.0	0.0
Min, Max	-6, 6	-11, 6

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 23 of 38
Lab test: Bicarbonate (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.04	0.18
SD	2.190	2.144
Median	0.00	0.10
Min, Max	-4.3, 5.8	-5.2, 5.6
Week 8		
n	112	108
Mean	0.05	0.56
SD	2.398	2.247
Median	0.00	0.50
Min, Max	-5.3, 6.0	-6.0, 7.8
Week 12		
n	109	107
Mean	0.05	0.40
SD	2.422	2.338
Median	-0.10	0.50
Min, Max	-7.9, 7.4	-5.4, 5.9

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 24 of 38
Lab test: Bicarbonate (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-0.17	0.35
SD	2.415	2.398
Median	-0.20	0.30
Min, Max	-7.0, 6.6	-7.2, 6.0
Week 20		
n	110	106
Mean	0.16	0.47
SD	2.305	2.793
Median	0.15	0.40
Min, Max	-7.3, 7.2	-8.7, 8.7
Week 24		
n	109	105
Mean	0.13	0.80
SD	2.161	2.271
Median	0.20	1.10
Min, Max	-4.6, 7.2	-6.2, 5.8

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 25 of 38
Lab test: Calcium (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	-0.001	0.000
SD	0.0810	0.0827
Median	0.000	0.000
Min, Max	-0.23, 0.27	-0.20, 0.28
Week 8		
n	112	108
Mean	-0.010	-0.006
SD	0.0846	0.0977
Median	-0.010	0.003
Min, Max	-0.23, 0.20	-0.41, 0.19
Week 12		
n	109	107
Mean	-0.003	0.006
SD	0.0955	0.0889
Median	-0.005	0.010
Min, Max	-0.45, 0.24	-0.19, 0.20

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 26 of 38
Lab test: Calcium (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-0.013	0.014
SD	0.0960	0.0930
Median	0.000	0.010
Min, Max	-0.41, 0.24	-0.29, 0.25
Week 20		
n	110	106
Mean	-0.003	0.013
SD	0.0872	0.0855
Median	0.000	0.010
Min, Max	-0.20, 0.29	-0.25, 0.21
Week 24		
n	109	105
Mean	0.006	-0.003
SD	0.0906	0.0922
Median	0.000	0.000
Min, Max	-0.26, 0.24	-0.34, 0.19

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
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Lab test: Magnesium (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.001	-0.015
SD	0.0504	0.0520
Median	0.000	-0.010
Min, Max	-0.12, 0.20	-0.17, 0.11
Week 8		
n	112	108
Mean	-0.002	-0.018
SD	0.0556	0.0530
Median	0.000	-0.020
Min, Max	-0.19, 0.12	-0.17, 0.12
Week 12		
n	109	107
Mean	0.002	-0.017
SD	0.0611	0.0584
Median	-0.007	-0.020
Min, Max	-0.12, 0.22	-0.17, 0.16

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 28 of 38
Lab test: Magnesium (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.003	-0.013
SD	0.0544	0.0506
Median	0.000	-0.013
Min, Max	-0.14, 0.14	-0.13, 0.16
Week 20		
n	110	106
Mean	0.005	-0.017
SD	0.0592	0.0500
Median	0.005	-0.020
Min, Max	-0.16, 0.16	-0.15, 0.08
Week 24		
n	109	105
Mean	0.002	-0.013
SD	0.0595	0.0543
Median	0.000	-0.010
Min, Max	-0.11, 0.18	-0.27, 0.12

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 29 of 38
Lab test: Phosphorus (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	-0.016	-0.034
SD	0.1664	0.1544
Median	-0.020	-0.030
Min, Max	-0.52, 0.44	-0.49, 0.39
Week 8		
n	112	108
Mean	-0.013	-0.038
SD	0.1454	0.1576
Median	-0.010	-0.030
Min, Max	-0.40, 0.34	-0.50, 0.39
Week 12		
n	109	107
Mean	0.009	-0.023
SD	0.1666	0.1668
Median	0.000	0.000
Min, Max	-0.44, 0.79	-0.54, 0.36

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 30 of 38
Lab test: Phosphorus (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-0.039	-0.016
SD	0.1443	0.1673
Median	-0.060	-0.010
Min, Max	-0.44, 0.32	-0.44, 0.54
Week 20		
n	110	106
Mean	-0.018	-0.025
SD	0.1790	0.1580
Median	-0.010	-0.020
Min, Max	-0.46, 0.48	-0.44, 0.34
Week 24		
n	108	105
Mean	-0.041	-0.036
SD	0.1518	0.1601
Median	-0.025	-0.040
Min, Max	-0.57, 0.34	-0.40, 0.30

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
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Lab test: Glucose (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.04	0.09
SD	0.966	0.927
Median	0.00	-0.05
Min, Max	-2.9, 3.2	-2.9, 4.1
Week 8		
n	112	108
Mean	0.05	0.09
SD	0.948	0.875
Median	0.05	0.10
Min, Max	-3.2, 4.3	-2.5, 3.3
Week 12		
n	109	107
Mean	-0.12	0.01
SD	0.771	1.079
Median	0.00	0.00
Min, Max	-3.3, 1.7	-2.8, 6.7

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 32 of 38
Lab test: Glucose (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.01	0.04
SD	1.096	1.087
Median	0.00	0.00
Min, Max	-2.8, 6.6	-2.6, 6.4
Week 20		
n	110	106
Mean	-0.01	0.09
SD	0.893	0.884
Median	0.05	0.10
Min, Max	-3.2, 2.2	-2.5, 2.6
Week 24		
n	109	105
Mean	-0.13	0.00
SD	0.921	0.798
Median	0.00	0.10
Min, Max	-2.8, 3.0	-2.4, 2.9

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 33 of 38
Lab test: Cholesterol (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	-0.011	0.001
SD	0.4583	0.5460
Median	-0.020	-0.010
Min, Max	-0.89, 1.58	-2.03, 1.33
Week 8		
n	112	108
Mean	0.002	0.031
SD	0.5152	0.6617
Median	-0.025	0.055
Min, Max	-1.17, 1.09	-1.92, 2.10
Week 12		
n	109	107
Mean	0.109	0.034
SD	0.5323	0.5883
Median	0.120	0.110
Min, Max	-0.87, 1.42	-1.67, 1.61

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 34 of 38
Lab test: Cholesterol (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.092	0.159
SD	0.5947	0.5962
Median	0.110	0.090
Min, Max	-1.17, 1.75	-1.40, 2.44
Week 20		
n	110	106
Mean	0.068	0.126
SD	0.5667	0.6701
Median	0.055	0.130
Min, Max	-1.23, 1.61	-1.47, 2.93
Week 24		
n	109	105
Mean	0.001	0.079
SD	0.5332	0.6172
Median	0.000	0.120
Min, Max	-1.24, 1.43	-1.82, 1.58

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 35 of 38
Lab test: Triglycerides (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	0.060	-0.076
SD	0.5792	0.5050
Median	0.000	-0.050
Min, Max	-1.39, 2.92	-1.60, 1.90
Week 8		
n	112	108
Mean	0.034	-0.120
SD	0.4728	0.5251
Median	0.065	-0.075
Min, Max	-1.40, 1.74	-1.74, 1.52
Week 12		
n	109	107
Mean	0.024	-0.161
SD	0.5360	0.6341
Median	0.020	-0.110
Min, Max	-1.56, 3.33	-2.94, 3.26

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 36 of 38
Lab test: Triglycerides (mmol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.076	-0.055
SD	0.4889	0.5909
Median	0.050	-0.055
Min, Max	-1.05, 2.28	-1.91, 1.94
Week 20		
n	110	106
Mean	0.068	-0.125
SD	0.5304	0.6314
Median	0.065	-0.135
Min, Max	-1.81, 2.73	-2.52, 3.06
Week 24		
n	109	105
Mean	0.068	-0.169
SD	0.5836	0.5755
Median	0.030	-0.140
Min, Max	-1.14, 2.66	-2.08, 1.40

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 37 of 38
Lab test: Uric Acid (umol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 4		
n	113	109
Mean	-0.55	-11.34
SD	37.242	35.903
Median	-3.00	-13.00
Min, Max	-72.5, 104.0	-112.0, 94.0
Week 8		
n	112	108
Mean	-2.13	-10.55
SD	37.374	40.264
Median	-1.25	-12.50
Min, Max	-137.0, 117.0	-101.0, 132.0
Week 12		
n	109	107
Mean	-1.78	-15.50
SD	36.919	40.754
Median	-3.00	-9.00
Min, Max	-81.0, 121.0	-124.0, 103.0

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Summary of blood chemistry laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 38 of 38
Lab test: Uric Acid (umol/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-7.26	-12.23
SD	41.948	46.499
Median	-9.00	-11.50
Min, Max	-173.0, 95.0	-171.0, 144.0
Week 20		
n	110	106
Mean	-12.45	-5.58
SD	46.279	47.657
Median	-12.00	-12.50
Min, Max	-269.0, 104.0	-117.0, 145.0
Week 24		
n	109	105
Mean	-8.86	-11.31
SD	34.994	45.725
Median	-9.00	-10.00
Min, Max	-97.0, 97.0	-149.0, 141.0

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-BC.SAS DATE: 25SEP2015

Table 242: Summary of Quantitative Urinalysis Laboratory Parameters – Actual Values by Visit: Studies 109MS301 and 109MS302

Summary of quantitative urinalysis laboratory parameters - actual values by visit:
Studies 109MS301 and 109MS302
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Lab test: Urine Beta-2 Microglobulin (mg/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Baseline					
n	660	682	653	1335	320
Mean	0.223	0.143	0.212	0.177	0.115
SD	2.2921	0.2724	2.0824	1.4692	0.0508
Median	0.110	0.110	0.110	0.110	0.110
Min, Max	0.01, 58.90	0.01, 6.04	0.01, 53.20	0.01, 53.20	0.01, 0.51
Week 12					
n	670	660	655	1315	318
Mean	0.127	0.138	0.153	0.145	0.110
SD	0.2017	0.2748	0.5447	0.4308	0.0697
Median	0.110	0.110	0.110	0.110	0.110
Min, Max	0.01, 4.70	0.01, 6.10	0.01, 12.90	0.01, 12.90	0.01, 0.66

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - actual values by visit:
Studies 109MS301 and 109MS302
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Lab test: Urine Beta-2 Microglobulin (mg/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	637	617	606	1223	306
Mean	0.225	0.184	0.123	0.154	0.100
SD	2.5675	1.6114	0.1818	1.1516	0.0703
Median	0.110	0.110	0.110	0.110	0.110
Min, Max	0.01, 64.70	0.01, 39.90	0.01, 3.94	0.01, 39.90	0.01, 0.61
Week 36					
n	617	599	581	1180	296
Mean	0.219	0.122	0.104	0.113	0.102
SD	2.7760	0.3551	0.0862	0.2602	0.0763
Median	0.110	0.110	0.110	0.110	0.110
Min, Max	0.01, 69.00	0.01, 8.05	0.01, 1.20	0.01, 8.05	0.01, 0.51
Week 48					
n	591	591	582	1173	292
Mean	0.101	0.126	0.098	0.112	0.098
SD	0.0883	0.5069	0.0763	0.3639	0.0880
Median	0.110	0.110	0.110	0.110	0.095
Min, Max	0.01, 1.04	0.01, 12.00	0.01, 0.76	0.01, 12.00	0.01, 1.11

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - actual values by visit:
Studies 109MS301 and 109MS302
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Lab test: Urine Beta-2 Microglobulin (mg/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	550	574	568	1142	274
Mean	0.102	0.144	0.100	0.122	0.090
SD	0.1234	1.1059	0.1538	0.7915	0.0843
Median	0.099	0.091	0.087	0.090	0.076
Min, Max	0.01, 2.24	0.01, 26.50	0.01, 2.52	0.01, 26.50	0.01, 0.69
Week 72					
n	521	564	562	1126	275
Mean	0.100	0.108	0.087	0.097	0.086
SD	0.1369	0.3362	0.0761	0.2440	0.0818
Median	0.084	0.076	0.072	0.074	0.068
Min, Max	0.01, 2.48	0.01, 7.66	0.01, 0.84	0.01, 7.66	0.01, 0.92
Week 84					
n	518	558	545	1103	271
Mean	0.091	0.107	0.088	0.097	0.089
SD	0.1701	0.3662	0.0857	0.2674	0.1055
Median	0.062	0.071	0.072	0.071	0.072
Min, Max	0.01, 2.86	0.01, 8.25	0.01, 0.84	0.01, 8.25	0.01, 1.36

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - actual values by visit:
Studies 109MS301 and 109MS302
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Lab test: Urine Beta-2 Microglobulin (mg/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	478	522	504	1026	255
Mean	0.086	0.136	0.085	0.111	0.082
SD	0.1269	1.1557	0.0926	0.8269	0.0758
Median	0.062	0.061	0.061	0.061	0.065
Min, Max	0.01, 1.85	0.01, 26.40	0.01, 0.86	0.01, 26.40	0.01, 0.59

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - actual values by visit:
Studies 109MS301 and 109MS302
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Lab test: Urine Microalbumin (mg/dL)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Baseline					
n	720	723	711	1434	337
Mean	1.32	1.43	1.33	1.38	1.52
SD	4.329	5.881	4.437	5.213	5.650
Median	0.60	0.60	0.60	0.60	0.60
Min, Max	0.2, 70.4	0.2, 140.0	0.2, 80.5	0.2, 140.0	0.2, 90.5
Week 12					
n	727	720	717	1437	335
Mean	1.38	1.35	1.33	1.34	1.17
SD	6.440	5.187	4.981	5.084	1.971
Median	0.60	0.60	0.60	0.60	0.70
Min, Max	0.2, 130.5	0.2, 116.0	0.2, 120.0	0.2, 120.0	0.2, 20.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - actual values by visit:
Studies 109MS301 and 109MS302
Page 6 of 8
Lab test: Urine Microalbumin (mg/dL)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
n	690	670	649	1319	318
Mean	0.88	1.29	1.38	1.33	1.14
SD	1.924	4.010	9.176	7.040	1.834
Median	0.50	0.60	0.60	0.60	0.60
Min, Max	0.2, 35.9	0.2, 66.6	0.2, 230.0	0.2, 230.0	0.2, 15.1
Week 36					
n	655	644	627	1271	314
Mean	1.05	1.34	1.12	1.23	1.17
SD	2.194	3.893	2.541	3.297	2.010
Median	0.60	0.60	0.60	0.60	0.70
Min, Max	0.2, 26.1	0.2, 70.4	0.2, 45.3	0.2, 70.4	0.2, 17.7
Week 48					
n	618	620	615	1235	303
Mean	1.04	1.56	1.37	1.47	1.99
SD	2.094	8.153	3.822	6.373	9.269
Median	0.60	0.60	0.60	0.60	0.60
Min, Max	0.2, 20.7	0.2, 161.0	0.2, 57.8	0.2, 161.0	0.2, 127.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - actual values by visit:
Studies 109MS301 and 109MS302
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Lab test: Urine Microalbumin (mg/dL)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 60					
n	572	600	596	1196	286
Mean	1.01	1.80	1.11	1.45	1.07
SD	2.282	10.386	2.569	7.582	1.966
Median	0.60	0.60	0.60	0.60	0.60
Min, Max	0.2, 42.6	0.2, 217.0	0.2, 38.5	0.2, 217.0	0.2, 19.6
Week 72					
n	533	583	569	1152	280
Mean	0.85	1.24	1.11	1.18	1.04
SD	1.176	5.854	3.355	4.784	1.955
Median	0.60	0.60	0.60	0.60	0.60
Min, Max	0.2, 14.6	0.2, 134.0	0.2, 64.5	0.2, 134.0	0.2, 20.2
Week 84					
n	525	565	550	1115	272
Mean	0.84	1.73	1.04	1.39	1.07
SD	1.171	15.541	1.801	11.136	1.778
Median	0.60	0.60	0.60	0.60	0.60
Min, Max	0.2, 14.9	0.2, 365.0	0.2, 26.7	0.2, 365.0	0.2, 18.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - actual values by visit:
Studies 109MS301 and 109MS302
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Lab test: Urine Microalbumin (mg/dL)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	484	530	519	1049	261
Mean	0.89	1.87	1.06	1.47	0.95
SD	1.593	11.753	2.383	8.526	1.572
Median	0.60	0.60	0.60	0.60	0.60
Min, Max	0.2, 25.1	0.2, 222.0	0.2, 37.7	0.2, 222.0	0.2, 19.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-A.SAS DATE: 28NOV2011

Table 243: Summary of Quantitative Urinalysis Laboratory Parameters – Change From Baseline by Visit: Studies 109MS301 and 109MS302

Summary of quantitative urinalysis laboratory parameters - change from baseline by visit:
Studies 109MS301 and 109MS302
Page 1 of 6
Lab test: Urine Beta-2 Microglobulin (mg/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 12					
n	597	611	596	1207	294
Mean	0.00	-0.01	-0.07	-0.04	0.00
SD	0.253	0.327	2.233	1.586	0.081
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-2.1, 4.6	-5.9, 4.5	-52.9, 12.8	-52.9, 12.8	-0.5, 0.6
Week 24					
n	567	566	543	1109	286
Mean	0.00	0.05	-0.11	-0.03	-0.01
SD	0.349	1.645	2.234	1.956	0.075
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.3, 5.8	-5.9, 38.3	-52.0, 0.8	-52.0, 38.3	-0.5, 0.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-CHG-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - change from baseline by visit:
Studies 109MS301 and 109MS302
Page 2 of 6
Lab test: Urine Beta-2 Microglobulin (mg/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	549	550	515	1065	272
Mean	-0.01	-0.02	-0.12	-0.07	-0.01
SD	0.470	0.412	2.340	1.654	0.085
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-2.1, 10.1	-5.9, 6.5	-53.1, 0.5	-53.1, 6.5	-0.4, 0.4
Week 48					
n	517	537	511	1048	266
Mean	-0.04	-0.02	-0.13	-0.07	-0.02
SD	0.161	0.519	2.338	1.675	0.100
Median	-0.01	-0.01	-0.01	-0.01	-0.01
Min, Max	-1.7, 0.8	-5.9, 10.1	-52.8, 0.5	-52.8, 10.1	-0.5, 1.0
Week 60					
n	479	519	493	1012	252
Mean	-0.03	0.00	-0.13	-0.06	-0.03
SD	0.170	1.136	2.360	1.837	0.091
Median	-0.02	-0.03	-0.04	-0.03	-0.03
Min, Max	-1.3, 2.1	-5.9, 24.9	-52.3, 1.6	-52.3, 24.9	-0.5, 0.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-CHG-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - change from baseline by visit:
Studies 109MS301 and 109MS302
Page 3 of 6
Lab test: Urine Beta-2 Microglobulin (mg/L)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	453	510	486	996	251
Mean	-0.03	-0.04	-0.15	-0.09	-0.03
SD	0.152	0.407	2.405	1.705	0.092
Median	-0.04	-0.04	-0.05	-0.04	-0.04
Min, Max	-1.2, 1.8	-6.0, 6.1	-53.0, 0.5	-53.0, 6.1	-0.5, 0.8
Week 84					
n	451	501	477	978	249
Mean	-0.04	-0.04	-0.15	-0.09	-0.03
SD	0.185	0.433	2.431	1.725	0.114
Median	-0.05	-0.05	-0.05	-0.05	-0.04
Min, Max	-1.4, 2.8	-5.8, 6.7	-53.1, 0.7	-53.1, 6.7	-0.4, 1.3
Week 96					
n	423	467	441	908	234
Mean	-0.05	-0.01	-0.16	-0.08	-0.03
SD	0.158	1.188	2.525	1.956	0.079
Median	-0.05	-0.05	-0.05	-0.05	-0.04
Min, Max	-1.4, 1.8	-5.7, 24.8	-53.0, 0.6	-53.0, 24.8	-0.2, 0.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-CHG-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - change from baseline by visit:
Studies 109MS301 and 109MS302
Page 4 of 6
Lab test: Urine Microalbumin (mg/dL)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Week 12					
n	687	682	675	1357	322
Mean	-0.10	-0.11	0.01	-0.05	-0.30
SD	4.623	3.480	4.115	3.808	5.540
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-69.8, 71.6	-34.7, 39.5	-54.0, 39.5	-54.0, 39.5	-88.6, 17.2
Week 24					
n	650	633	608	1241	307
Mean	-0.22	-0.04	0.18	0.07	-0.34
SD	2.690	6.178	10.033	8.291	5.897
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-42.9, 24.8	-109.1, 64.7	-53.2, 229.4	-109.1, 229.4	-88.1, 14.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-CHG-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - change from baseline by visit:
Studies 109MS301 and 109MS302
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Lab test: Urine Microalbumin (mg/dL)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 36					
n	615	608	585	1193	302
Mean	-0.05	-0.09	-0.10	-0.10	-0.28
SD	2.907	4.649	4.289	4.474	6.075
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-41.8, 26.0	-69.6, 40.5	-53.7, 44.7	-69.6, 44.7	-89.4, 16.3
Week 48					
n	579	587	572	1159	291
Mean	-0.11	0.16	0.22	0.19	0.57
SD	3.286	9.660	5.140	7.763	10.209
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-41.6, 20.0	-133.2, 160.0	-53.1, 57.7	-133.2, 160.0	-89.7, 126.6
Week 60					
n	537	566	555	1121	276
Mean	-0.17	0.39	-0.09	0.15	-0.44
SD	3.461	10.250	4.063	7.824	6.170
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-41.1, 42.5	-40.0, 215.8	-49.5, 36.1	-49.5, 215.8	-89.7, 18.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-CHG-A.SAS DATE: 28NOV2011

Summary of quantitative urinalysis laboratory parameters - change from baseline by visit:
Studies 109MS301 and 109MS302
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Lab test: Urine Microalbumin (mg/dL)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	497	549	529	1078	269
Mean	-0.34	-0.23	-0.13	-0.18	-0.36
SD	2.930	7.464	4.816	6.302	6.251
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-42.1, 14.1	-101.2, 126.8	-52.9, 63.2	-101.2, 126.8	-88.7, 18.9
Week 84					
n	492	532	513	1045	261
Mean	-0.37	0.25	-0.10	0.08	-0.47
SD	2.908	10.456	3.190	7.786	6.158
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-42.2, 14.5	-34.4, 225.0	-46.7, 21.7	-46.7, 225.0	-89.6, 18.0
Week 96					
n	460	502	487	989	251
Mean	-0.33	0.41	-0.04	0.19	-0.48
SD	2.878	13.655	3.396	10.014	6.350
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-41.9, 7.2	-130.4, 221.5	-45.3, 37.1	-130.4, 221.5	-90.0, 18.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-CHG-A.SAS DATE: 28NOV2011

Table 244: Summary of Beta2-Microglobulin and Microalbumin by Categories by Visit Studies: Studies 109MS301 and 109MS302

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
Page 1 of 10

Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Urine Beta2-microglobulin					
Baseline					
Total n	660 (100)	682 (100)	653 (100)	1335 (100)	320 (100)
<= 0.29 (normal)	637 (97)	659 (97)	635 (97)	1294 (97)	314 (98)
>0.29 - 0.42 (a)	7 (1)	8 (1)	8 (1)	16 (1)	5 (2)
>0.42 - 1.2 (a)	11 (2)	10 (1)	7 (1)	17 (1)	1 (<1)
> 1.2 (a)	5 (<1)	5 (<1)	3 (<1)	8 (<1)	0
Week 12					
Total n	670 (100)	660 (100)	655 (100)	1315 (100)	318 (100)
<= 0.29 (normal)	649 (97)	636 (96)	631 (96)	1267 (96)	311 (98)
>0.29 - 0.42 (a)	12 (2)	13 (2)	13 (2)	26 (2)	5 (2)
>0.42 - 1.2 (a)	7 (1)	7 (1)	9 (1)	16 (1)	2 (<1)
> 1.2 (a)	2 (<1)	4 (<1)	2 (<1)	6 (<1)	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
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Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
Total n	637 (100)	617 (100)	606 (100)	1223 (100)	306 (100)
<= 0.29 (normal)	619 (97)	598 (97)	591 (98)	1189 (97)	299 (98)
>0.29 - 0.42 (a)	6 (<1)	9 (1)	6 (<1)	15 (1)	6 (2)
>0.42 - 1.2 (a)	9 (1)	7 (1)	8 (1)	15 (1)	1 (<1)
> 1.2 (a)	3 (<1)	3 (<1)	1 (<1)	4 (<1)	0
Week 36					
Total n	617 (100)	599 (100)	581 (100)	1180 (100)	296 (100)
<= 0.29 (normal)	602 (98)	580 (97)	568 (98)	1148 (97)	287 (97)
>0.29 - 0.42 (a)	7 (1)	8 (1)	6 (1)	14 (1)	7 (2)
>0.42 - 1.2 (a)	5 (<1)	9 (2)	7 (1)	16 (1)	2 (<1)
> 1.2 (a)	3 (<1)	2 (<1)	0	2 (<1)	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
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Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
Total n	591 (100)	591 (100)	582 (100)	1173 (100)	292 (100)
<= 0.29 (normal)	579 (98)	572 (97)	566 (97)	1138 (97)	287 (98)
>0.29 - 0.42 (a)	4 (<1)	11 (2)	10 (2)	21 (2)	3 (1)
>0.42 - 1.2 (a)	8 (1)	6 (1)	6 (1)	12 (1)	2 (<1)
> 1.2 (a)	0	2 (<1)	0	2 (<1)	0
Week 60					
Total n	550 (100)	574 (100)	568 (100)	1142 (100)	274 (100)
<= 0.29 (normal)	534 (97)	555 (97)	553 (97)	1108 (97)	268 (98)
>0.29 - 0.42 (a)	10 (2)	11 (2)	6 (1)	17 (1)	1 (<1)
>0.42 - 1.2 (a)	5 (<1)	7 (1)	7 (1)	14 (1)	5 (2)
> 1.2 (a)	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
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Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
Total n	521 (100)	564 (100)	562 (100)	1126 (100)	275 (100)
<= 0.29 (normal)	507 (97)	546 (97)	555 (99)	1101 (98)	273 (>99)
>0.29 - 0.42 (a)	4 (<1)	7 (1)	3 (<1)	10 (<1)	1 (<1)
>0.42 - 1.2 (a)	9 (2)	10 (2)	4 (<1)	14 (1)	1 (<1)
> 1.2 (a)	1 (<1)	1 (<1)	0	1 (<1)	0
Week 84					
Total n	518 (100)	558 (100)	545 (100)	1103 (100)	271 (100)
<= 0.29 (normal)	507 (98)	540 (97)	531 (97)	1071 (97)	266 (98)
>0.29 - 0.42 (a)	4 (<1)	10 (2)	5 (<1)	15 (1)	2 (<1)
>0.42 - 1.2 (a)	4 (<1)	5 (<1)	9 (2)	14 (1)	2 (<1)
> 1.2 (a)	3 (<1)	3 (<1)	0	3 (<1)	1 (<1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
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Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
Total n	478 (100)	522 (100)	504 (100)	1026 (100)	255 (100)
<= 0.29 (normal)	463 (97)	511 (98)	491 (97)	1002 (98)	249 (98)
>0.29 - 0.42 (a)	6 (1)	5 (<1)	8 (2)	13 (1)	4 (2)
>0.42 - 1.2 (a)	8 (2)	5 (<1)	5 (<1)	10 (<1)	2 (<1)
> 1.2 (a)	1 (<1)	1 (<1)	0	1 (<1)	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
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Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Urine microalbumin					
Baseline					
Total n	720 (100)	723 (100)	711 (100)	1434 (100)	337 (100)
<= 1.8 (normal)	646 (90)	628 (87)	629 (88)	1257 (88)	303 (90)
>1.8 - 3 (a)	33 (5)	50 (7)	38 (5)	88 (6)	10 (3)
>3 - 10.4 (a)	32 (4)	34 (5)	34 (5)	68 (5)	17 (5)
> 10.4 (a)	9 (1)	11 (2)	10 (1)	21 (1)	7 (2)
Week 12					
Total n	727 (100)	720 (100)	717 (100)	1437 (100)	335 (100)
<= 1.8 (normal)	657 (90)	634 (88)	624 (87)	1258 (88)	295 (88)
>1.8 - 3 (a)	32 (4)	40 (6)	44 (6)	84 (6)	14 (4)
>3 - 10.4 (a)	31 (4)	35 (5)	41 (6)	76 (5)	24 (7)
> 10.4 (a)	7 (<1)	11 (2)	8 (1)	19 (1)	2 (<1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
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Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 24					
Total n	690 (100)	670 (100)	649 (100)	1319 (100)	318 (100)
<= 1.8 (normal)	641 (93)	598 (89)	578 (89)	1176 (89)	276 (87)
>1.8 - 3 (a)	26 (4)	34 (5)	38 (6)	72 (5)	20 (6)
>3 - 10.4 (a)	19 (3)	29 (4)	26 (4)	55 (4)	18 (6)
> 10.4 (a)	4 (<1)	9 (1)	7 (1)	16 (1)	4 (1)
Week 36					
Total n	655 (100)	644 (100)	627 (100)	1271 (100)	314 (100)
<= 1.8 (normal)	589 (90)	557 (86)	554 (88)	1111 (87)	275 (88)
>1.8 - 3 (a)	38 (6)	41 (6)	42 (7)	83 (7)	21 (7)
>3 - 10.4 (a)	19 (3)	37 (6)	25 (4)	62 (5)	14 (4)
> 10.4 (a)	9 (1)	9 (1)	6 (<1)	15 (1)	4 (1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
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Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
Total n	618 (100)	620 (100)	615 (100)	1235 (100)	303 (100)
<= 1.8 (normal)	557 (90)	540 (87)	538 (87)	1078 (87)	264 (87)
>1.8 - 3 (a)	36 (6)	36 (6)	29 (5)	65 (5)	15 (5)
>3 - 10.4 (a)	18 (3)	37 (6)	37 (6)	74 (6)	19 (6)
> 10.4 (a)	7 (1)	7 (1)	11 (2)	18 (1)	5 (2)
Week 60					
Total n	572 (100)	600 (100)	596 (100)	1196 (100)	286 (100)
<= 1.8 (normal)	521 (91)	531 (89)	536 (90)	1067 (89)	261 (91)
>1.8 - 3 (a)	28 (5)	34 (6)	31 (5)	65 (5)	12 (4)
>3 - 10.4 (a)	18 (3)	25 (4)	23 (4)	48 (4)	9 (3)
> 10.4 (a)	5 (<1)	10 (2)	6 (1)	16 (1)	4 (1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
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Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
Total n	533 (100)	583 (100)	569 (100)	1152 (100)	280 (100)
<= 1.8 (normal)	493 (92)	518 (89)	504 (89)	1022 (89)	251 (90)
>1.8 - 3 (a)	22 (4)	37 (6)	41 (7)	78 (7)	15 (5)
>3 - 10.4 (a)	17 (3)	25 (4)	20 (4)	45 (4)	11 (4)
> 10.4 (a)	1 (<1)	3 (<1)	4 (<1)	7 (<1)	3 (1)
Week 84					
Total n	525 (100)	565 (100)	550 (100)	1115 (100)	272 (100)
<= 1.8 (normal)	485 (92)	497 (88)	486 (88)	983 (88)	243 (89)
>1.8 - 3 (a)	26 (5)	38 (7)	27 (5)	65 (6)	16 (6)
>3 - 10.4 (a)	12 (2)	25 (4)	34 (6)	59 (5)	11 (4)
> 10.4 (a)	2 (<1)	5 (<1)	3 (<1)	8 (<1)	2 (<1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Summary of beta2-microglobulin and microalbumin by categories by visit: Studies 109MS301 and 109MS302
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Parameters/visits	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
Total n	484 (100)	530 (100)	519 (100)	1049 (100)	261 (100)
<= 1.8 (normal)	444 (92)	461 (87)	463 (89)	924 (88)	239 (92)
>1.8 - 3 (a)	22 (5)	32 (6)	35 (7)	67 (6)	11 (4)
>3 - 10.4 (a)	16 (3)	30 (6)	14 (3)	44 (4)	10 (4)
> 10.4 (a)	2 (<1)	7 (1)	7 (1)	14 (1)	1 (<1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Total n is the number of subjects with non-missing values for urine Beta2-microglobulin (or urine microalbumin) at that visit.
(a) These cutoff values correspond to the ULN, the 50th and 90th percentile of the high values of 109MS301/302 Studies.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SUM-A.SAS DATE: 29NOV2011

Table 245: Summary of Shifts From Baseline – Beta2-Microglobulin and Microalbumin: Studies 109MS301 and 109MS302

Summary of shifts from baseline - beta2-microglobulin and microalbumin: Studies 109MS301 and 109MS302
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Laboratory Parameters	Placebo		BG00012 240 mg BID		BG00012 240 mg TID	
	Shift to Low (a)	Shift to High (b)	Shift to Low (a)	Shift to High (b)	Shift to Low (a)	Shift to High (b)
Urine Beta2-microglobulin		62/728(9)		69/710(10)		66/707 (9)
Urine Microalbumin		198/686(29)		232/651(36)		239/652 (37)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Entries are number low (or high)/number at risk. Number at risk for shift to low (or high) is the number of subjects whose baseline value was not low (or high) and who had at least one post-baseline value. Numbers in parentheses are percentages based on number at risk.
(a) Shift to low includes normal to low, high to low, and unknown to low.
(b) Shift to high includes normal to high, low to high, and unknown to high.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SHFT-A.SAS DATE: 28NOV2011

Summary of shifts from baseline - beta2-microglobulin and microalbumin: Studies 109MS301 and 109MS302
Page 2 of 2

Laboratory Parameters	Total BG00012 Shift to Low (a)	Total BG00012 Shift to High (b)	GA Shift to Low (a)	GA Shift to High (b)
Urine Beta2-microglobulin		135/1417(10)		29/336(9)
Urine Microalbumin		471/1303(36)		102/311(33)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Entries are number low (or high)/number at risk. Number at risk for shift to low (or high) is the number of subjects whose baseline value was not low (or high) and who had at least one post-baseline value. Numbers in parentheses are percentages based on number at risk.
(a) Shift to low includes normal to low, high to low, and unknown to low.
(b) Shift to high includes normal to high, low to high, and unknown to high.

SOURCE: BG12MS/ISS/CSR/T-LB-SP-SHFT-A.SAS DATE: 28NOV2011

Table 246: Summary of Shift to Abnormalities in Vital Signs: 24 Weeks of Studies 109MS301 and 109MS302

Summary of shift to abnormalities in vital signs: 24 weeks of studies 109MS301 and 109MS302
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Vital sign	Criteria	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in the safety population		771	769	760	1529	351
Temperature	>38 C with >=1 C increase from baseline	2/754 (<1)	4/747 (<1)	4/736 (<1)	8/1483 (<1)	0/341
Pulse	(>120 post-baseline if <=120 at baseline) or (>20 increase from baseline)	86/766 (11)	110/761 (14)	105/749 (14)	215/1510 (14)	34/347 (10)
	>120 post-baseline if <=120 at baseline	2/766 (<1)	2/761 (<1)	2/749 (<1)	4/1510 (<1)	2/347 (<1)
	>20 increase from baseline	86/766 (11)	110/761 (14)	105/749 (14)	215/1510 (14)	34/347 (10)
	(<50 post-baseline if >=50 at baseline) or (>20 decrease from baseline)	49/766 (6)	28/761 (4)	28/749 (4)	56/1510 (4)	25/347 (7)
	<50 post-baseline if >=50 at baseline	5/761 (<1)	2/758 (<1)	3/747 (<1)	5/1505 (<1)	3/346 (<1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Entries are numbers of subjects with an abnormality/number of subjects at risk (percentage). Number of subjects at risk is the number of subjects who had a baseline assessment, at least one post-baseline assessment and at risk for that vital sign criteria.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SHFT-A-24W.SAS DATE: 16OCT2015

Summary of shift to abnormalities in vital signs: 24 weeks of studies 109MS301 and 109MS302
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Vital sign	Criteria	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Pulse	>20 decrease from baseline	45/766 (6)	26/761 (3)	26/749 (3)	52/1510 (3)	24/347 (7)
Systolic blood pressure	(>180 post-baseline if <=180 at baseline) or (>40 increase from baseline)	7/766 (<1)	6/760 (<1)	6/749 (<1)	12/1509 (<1)	3/347 (<1)
	>180 post-baseline if <=180 at baseline	2/765 (<1)	1/760 (<1)	0/748	1/1508 (<1)	0/347
	>40 increase from baseline	7/766 (<1)	6/760 (<1)	6/749 (<1)	12/1509 (<1)	3/347 (<1)
	(<90 post-baseline if >=90 at baseline) or (>30 decrease from baseline)	31/766 (4)	37/760 (5)	36/749 (5)	73/1509 (5)	11/347 (3)
	<90 post-baseline if >=90 at baseline	10/764 (1)	17/758 (2)	8/744 (1)	25/1502 (2)	2/346 (<1)
	>30 decrease from baseline	24/766 (3)	22/760 (3)	29/749 (4)	51/1509 (3)	9/347 (3)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Entries are numbers of subjects with an abnormality/number of subjects at risk (percentage). Number of subjects at risk is the number of subjects who had a baseline assessment, at least one post-baseline assessment and at risk for that vital sign criteria.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SHFT-A-24W.SAS DATE: 16OCT2015

Summary of shift to abnormalities in vital signs: 24 weeks of studies 109MS301 and 109MS302
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Vital sign	Criteria	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Diastolic blood pressure	(>105 post-baseline if <=105 at baseline) or (>30 increase from baseline)	9/766 (1)	13/760 (2)	11/749 (1)	24/1509 (2)	3/347 (<1)
	>105 post-baseline if <=105 at baseline	4/762 (<1)	9/759 (1)	5/747 (<1)	14/1506 (<1)	0/347
	>30 increase from baseline	7/766 (<1)	5/760 (<1)	8/749 (1)	13/1509 (<1)	3/347 (<1)
	(<50 post-baseline if >=50 at baseline) or (>20 decrease from baseline)	44/766 (6)	41/760 (5)	43/749 (6)	84/1509 (6)	16/347 (5)
	<50 post-baseline if >=50 at baseline	9/766 (1)	4/758 (<1)	6/748 (<1)	10/1506 (<1)	0/346
	>20 decrease from baseline	38/766 (5)	38/760 (5)	41/749 (5)	79/1509 (5)	16/347 (5)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Entries are numbers of subjects with an abnormality/number of subjects at risk (percentage). Number of subjects at risk is the number of subjects who had a baseline assessment, at least one post-baseline assessment and at risk for that vital sign criteria.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SHFT-A-24W.SAS DATE: 16OCT2015

Table 247: Summary of Shift to Abnormalities in Vital Signs: Studies 109MS301 and 109MS302

Summary of shift to abnormalities in vital signs: Studies 109MS301 and 109MS302
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Vital sign	Criteria	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in the safety population		771	769	760	1529	351
Temperature	>38 C with >=1 C increase from baseline	5/754 (<1)	7/748 (<1)	5/737 (<1)	12/1485 (<1)	1/341 (<1)
Pulse	(>120 post-baseline if <=120 at baseline) or (>20 increase from baseline)	186/766 (24)	198/761 (26)	197/749 (26)	395/1510 (26)	71/347 (20)
	>120 post-baseline if <=120 at baseline	4/766 (<1)	5/761 (<1)	5/749 (<1)	10/1510 (<1)	2/347 (<1)
	>20 increase from baseline	185/766 (24)	198/761 (26)	197/749 (26)	395/1510 (26)	71/347 (20)
	(<50 post-baseline if >=50 at baseline) or (>20 decrease from baseline)	99/766 (13)	63/761 (8)	72/749 (10)	135/1510 (9)	46/347 (13)
	<50 post-baseline if >=50 at baseline	12/761 (2)	7/758 (<1)	10/747 (1)	17/1505 (1)	4/346 (1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Entries are numbers of subjects with an abnormality/number of subjects at risk (percentage). Number of subjects at risk is the number of subjects who had a baseline assessment, at least one post-baseline assessment and at risk for that vital sign criteria.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SHFT-A.SAS DATE: 01OCT2015

Summary of shift to abnormalities in vital signs: Studies 109MS301 and 109MS302
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Vital sign	Criteria	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Pulse	>20 decrease from baseline	90/766 (12)	58/761 (8)	67/749 (9)	125/1510 (8)	45/347 (13)
Systolic blood pressure	(>180 post-baseline if <=180 at baseline) or (>40 increase from baseline)	16/766 (2)	11/760 (1)	20/749 (3)	31/1509 (2)	9/347 (3)
	>180 post-baseline if <=180 at baseline	2/765 (<1)	1/760 (<1)	1/748 (<1)	2/1508 (<1)	0/347
	>40 increase from baseline	16/766 (2)	11/760 (1)	19/749 (3)	30/1509 (2)	9/347 (3)
	(<90 post-baseline if >=90 at baseline) or (>30 decrease from baseline)	65/766 (8)	86/760 (11)	90/749 (12)	176/1509 (12)	31/347 (9)
	<90 post-baseline if >=90 at baseline	28/764 (4)	34/758 (4)	25/744 (3)	59/1502 (4)	5/346 (1)
	>30 decrease from baseline	45/766 (6)	63/760 (8)	73/749 (10)	136/1509 (9)	26/347 (7)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Entries are numbers of subjects with an abnormality/number of subjects at risk (percentage). Number of subjects at risk is the number of subjects who had a baseline assessment, at least one post-baseline assessment and at risk for that vital sign criteria.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SHFT-A.SAS DATE: 01OCT2015

Summary of shift to abnormalities in vital signs: Studies 109MS301 and 109MS302
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Vital sign	Criteria	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Diastolic blood pressure	(>105 post-baseline if <=105 at baseline) or (>30 increase from baseline)	33/766 (4)	24/760 (3)	27/749 (4)	51/1509 (3)	12/347 (3)
	>105 post-baseline if <=105 at baseline	19/762 (2)	16/759 (2)	17/747 (2)	33/1506 (2)	7/347 (2)
	>30 increase from baseline	19/766 (2)	11/760 (1)	15/749 (2)	26/1509 (2)	6/347 (2)
	(<50 post-baseline if >=50 at baseline) or (>20 decrease from baseline)	100/766 (13)	104/760 (14)	105/749 (14)	209/1509 (14)	45/347 (13)
	<50 post-baseline if >=50 at baseline	16/766 (2)	11/758 (1)	8/748 (1)	19/1506 (1)	2/346 (<1)
	>20 decrease from baseline	91/766 (12)	99/760 (13)	102/749 (14)	201/1509 (13)	45/347 (13)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Entries are numbers of subjects with an abnormality/number of subjects at risk (percentage). Number of subjects at risk is the number of subjects who had a baseline assessment, at least one post-baseline assessment and at risk for that vital sign criteria.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SHFT-A.SAS DATE: 01OCT2015

Table 248: Summary of Vital Signs: Actual Values by Visit

Summary of vital signs: actual values by visit
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Visit/Parameters	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113	111
Diastolic Blood Pressure (mmHg)		
Baseline		
n	113	111
Mean	74.6	74.5
SD	11.28	11.08
Median	76.0	75.0
Min, Max	49, 100	50, 107
Week 4		
n	113	110
Mean	73.4	72.8
SD	11.40	10.40
Median	75.0	72.0
Min, Max	49, 101	45, 95
Week 8		
n	112	108
Mean	74.4	73.8
SD	10.45	10.25
Median	72.5	73.0
Min, Max	47, 100	54, 100

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Summary of vital signs: actual values by visit
Page 2 of 10

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 12		
n	111	107
Mean	73.9	72.8
SD	9.79	9.62
Median	74.0	72.0
Min, Max	50, 100	49, 97
Week 16		
n	111	106
Mean	73.2	73.5
SD	10.35	10.18
Median	73.0	73.0
Min, Max	49, 97	52, 100
Week 20		
n	110	105
Mean	73.5	74.6
SD	10.35	10.91
Median	73.0	75.0
Min, Max	51, 98	52, 100

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Summary of vital signs: actual values by visit
Page 3 of 10

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 24		
n	108	105
Mean	73.7	73.1
SD	10.09	10.08
Median	72.0	73.0
Min, Max	46, 96	50, 102
Systolic Blood Pressure (mmHg)		
Baseline		
n	113	111
Mean	117.5	119.7
SD	14.31	12.22
Median	116.0	120.0
Min, Max	84, 151	94, 165
Week 4		
n	113	110
Mean	116.0	118.4
SD	14.66	12.77
Median	116.0	118.5
Min, Max	87, 152	90, 155

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Summary of vital signs: actual values by visit
Page 4 of 10

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 8		
n	112	108
Mean	117.0	117.8
SD	14.61	12.75
Median	115.0	117.5
Min, Max	82, 153	90, 142
Week 12		
n	111	107
Mean	117.4	115.8
SD	13.60	11.96
Median	118.0	118.0
Min, Max	83, 150	88, 142
Week 16		
n	111	106
Mean	116.9	118.3
SD	14.86	12.94
Median	116.0	118.5
Min, Max	86, 164	93, 151

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Summary of vital signs: actual values by visit
Page 5 of 10

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 20		
n	110	105
Mean	116.9	118.1
SD	13.68	12.95
Median	115.5	117.0
Min, Max	89, 155	90, 145
Week 24		
n	108	105
Mean	115.9	118.6
SD	13.70	13.58
Median	114.0	120.0
Min, Max	79, 148	88, 150
Pulse rate (beats/min)		
Baseline		
n	113	111
Mean	73.8	73.2
SD	11.78	11.17
Median	74.0	73.0
Min, Max	51, 113	51, 107

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Summary of vital signs: actual values by visit
Page 6 of 10

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 4		
n	113	110
Mean	75.5	77.9
SD	10.33	11.84
Median	75.0	76.5
Min, Max	54, 109	56, 128
Week 8		
n	112	108
Mean	76.2	76.9
SD	11.48	10.83
Median	74.0	76.0
Min, Max	48, 112	57, 111
Week 12		
n	111	107
Mean	75.7	75.6
SD	10.77	10.64
Median	74.0	75.0
Min, Max	52, 114	53, 109

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Summary of vital signs: actual values by visit
Page 7 of 10

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	76.5	76.9
SD	10.66	11.03
Median	76.0	75.0
Min, Max	46, 110	56, 106
Week 20		
n	110	105
Mean	77.3	78.8
SD	11.57	12.53
Median	76.0	77.0
Min, Max	50, 119	53, 116
Week 24		
n	108	105
Mean	73.8	77.2
SD	10.86	11.48
Median	72.0	77.0
Min, Max	52, 110	57, 103

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Summary of vital signs: actual values by visit
Page 8 of 10

Visit/Parameters	Placebo	BG00012 240 mg BID
Temperature (C)		
Baseline		
n	113	111
Mean	36.45	36.44
SD	0.332	0.334
Median	36.50	36.50
Min, Max	35.0, 37.1	35.5, 37.5
Week 4		
n	113	110
Mean	36.50	36.52
SD	0.299	0.369
Median	36.50	36.60
Min, Max	35.7, 37.4	35.1, 37.5
Week 8		
n	112	108
Mean	36.48	36.54
SD	0.323	0.297
Median	36.50	36.60
Min, Max	35.7, 37.2	35.7, 37.3

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Summary of vital signs: actual values by visit
Page 9 of 10

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 12		
n	111	107
Mean	36.47	36.50
SD	0.316	0.326
Median	36.50	36.50
Min, Max	35.3, 37.0	35.2, 37.4
Week 16		
n	111	106
Mean	36.53	36.49
SD	0.284	0.342
Median	36.60	36.50
Min, Max	35.5, 37.2	35.7, 37.4
Week 20		
n	110	105
Mean	36.48	36.50
SD	0.352	0.374
Median	36.50	36.50
Min, Max	35.3, 37.5	35.8, 38.1

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Summary of vital signs: actual values by visit
Page 10 of 10

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 24		
n	108	105
Mean	36.49	36.51
SD	0.306	0.359
Median	36.50	36.50
Min, Max	35.7, 37.3	35.2, 37.5

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-VISIT.SAS DATE: 25SEP2015

Table 249: Summary of Vital Signs: Change by Visit – Part I (Placebo-Controlled Period)

Summary of vital signs: change from baseline by visit - Part I (placebo-controlled period)
Page 1 of 8

Visit/Parameters	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113	111
Diastolic Blood Pressure (mmHg)		
Week 4		
n	113	110
Mean	-1.2	-1.9
SD	9.98	8.99
Median	0.0	-2.0
Min, Max	-30, 27	-30, 20
Week 8		
n	112	108
Mean	-0.1	-1.1
SD	9.75	9.60
Median	0.0	-1.0
Min, Max	-30, 29	-33, 25
Week 12		
n	111	107
Mean	-0.8	-2.1
SD	9.21	10.69
Median	-1.0	-2.0
Min, Max	-24, 33	-30, 21

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-CHG-VISIT.SAS DATE: 04JAN2016

Summary of vital signs: change from baseline by visit - Part I (placebo-controlled period)
Page 2 of 8

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-1.5	-1.3
SD	9.26	9.32
Median	0.0	-1.0
Min, Max	-29, 21	-27, 20
Week 20		
n	110	105
Mean	-1.3	-0.2
SD	9.87	10.70
Median	-1.0	0.0
Min, Max	-30, 29	-31, 29
Week 24		
n	108	105
Mean	-1.2	-1.8
SD	10.05	10.24
Median	0.0	-3.0
Min, Max	-30, 20	-34, 25

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-CHG-VISIT.SAS DATE: 04JAN2016

Summary of vital signs: change from baseline by visit - Part I (placebo-controlled period)
Page 3 of 8

Visit/Parameters	Placebo	BG00012 240 mg BID
Systolic Blood Pressure (mmHg)		
Week 4		
n	113	110
Mean	-1.6	-1.3
SD	11.65	10.47
Median	-1.0	0.0
Min, Max	-35, 26	-33, 18
Week 8		
n	112	108
Mean	-0.6	-2.3
SD	10.51	10.56
Median	0.0	-1.0
Min, Max	-30, 38	-34, 23
Week 12		
n	111	107
Mean	-0.4	-4.3
SD	10.97	9.77
Median	-1.0	-3.0
Min, Max	-25, 38	-35, 25

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-CHG-VISIT.SAS DATE: 04JAN2016

Summary of vital signs: change from baseline by visit - Part I (placebo-controlled period)
Page 4 of 8

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	-0.9	-1.9
SD	11.40	11.91
Median	0.0	-3.0
Min, Max	-32, 28	-38, 24
Week 20		
n	110	105
Mean	-0.9	-2.0
SD	11.56	11.65
Median	0.0	-1.0
Min, Max	-30, 26	-38, 24
Week 24		
n	108	105
Mean	-1.9	-1.5
SD	10.66	12.10
Median	-2.0	-1.0
Min, Max	-30, 42	-31, 32

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-CHG-VISIT.SAS DATE: 04JAN2016

Summary of vital signs: change from baseline by visit - Part I (placebo-controlled period)
Page 5 of 8

Visit/Parameters	Placebo	BG00012 240 mg BID
Pulse rate (beats/min)		
Week 4		
n	113	110
Mean	1.7	4.6
SD	10.30	9.53
Median	2.0	4.0
Min, Max	-27, 23	-29, 27
Week 8		
n	112	108
Mean	2.5	3.6
SD	11.33	9.62
Median	2.0	3.5
Min, Max	-23, 54	-24, 41
Week 12		
n	111	107
Mean	1.9	2.2
SD	9.99	9.36
Median	0.0	1.0
Min, Max	-15, 37	-24, 26

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-CHG-VISIT.SAS DATE: 04JAN2016

Summary of vital signs: change from baseline by visit - Part I (placebo-controlled period)
Page 6 of 8

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	2.8	3.5
SD	10.05	10.79
Median	3.0	3.0
Min, Max	-20, 30	-22, 42
Week 20		
n	110	105
Mean	3.7	5.3
SD	10.91	10.71
Median	3.0	4.0
Min, Max	-20, 41	-18, 42
Week 24		
n	108	105
Mean	0.2	3.8
SD	10.47	11.23
Median	-0.5	3.0
Min, Max	-22, 31	-22, 42

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-CHG-VISIT.SAS DATE: 04JAN2016

Summary of vital signs: change from baseline by visit - Part I (placebo-controlled period)
Page 7 of 8

Visit/Parameters	Placebo	BG00012 240 mg BID
Temperature (C)		
Week 4		
n	113	110
Mean	0.05	0.08
SD	0.380	0.346
Median	0.00	0.00
Min, Max	-0.8, 1.9	-0.6, 1.6
Week 8		
n	112	108
Mean	0.02	0.10
SD	0.368	0.357
Median	0.00	0.05
Min, Max	-0.9, 1.5	-0.7, 1.2
Week 12		
n	111	107
Mean	0.01	0.06
SD	0.326	0.320
Median	0.00	0.00
Min, Max	-0.9, 1.4	-0.6, 1.4

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-CHG-VISIT.SAS DATE: 04JAN2016

Summary of vital signs: change from baseline by visit - Part I (placebo-controlled period)
Page 8 of 8

Visit/Parameters	Placebo	BG00012 240 mg BID
Week 16		
n	111	106
Mean	0.06	0.05
SD	0.334	0.368
Median	0.00	0.00
Min, Max	-0.9, 1.8	-1.1, 1.2
Week 20		
n	110	105
Mean	0.02	0.06
SD	0.375	0.323
Median	0.00	0.00
Min, Max	-1.2, 1.4	-0.7, 1.0
Week 24		
n	108	105
Mean	0.02	0.07
SD	0.322	0.359
Median	0.00	0.10
Min, Max	-0.8, 1.4	-0.9, 1.3

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-VS-CHG-VISIT.SAS DATE: 04JAN2016

Table 250: Incidence of Abnormalities in Vital Signs – Part I (Placebo-Controlled Period)

Incidence of abnormalities in vital signs
-Part I (placebo-controlled period)
Page 1 of 3

Vital sign	Criteria	Placebo	BG00012 240 mg BID
Number of subjects in the safety population		113	111
Temperature (C)	>38 C and an increase from pre-dosing of at least 1 C	0/113	1/110 (<1)
Pulse rate (beats/min)	(>120 post-baseline if <=120 at baseline) or (>20 increase from baseline)	22/113 (19)	22/110 (20)
	>120 post-baseline if <=120 at baseline	0/113	1/110 (<1)
	>20 increase from baseline	22/113 (19)	22/110 (20)
	(<50 post-baseline if >=50 at baseline) or (>20 decrease from baseline)	10/113 (9)	3/110 (3)
	<50 post-baseline if >=50 at baseline	2/113 (2)	0/110

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Entries are numbers of subjects with an abnormality/number of subjects at risk (percentage). Number of subjects at risk is the number of subjects who had a baseline assessment, at least one post-baseline assessment and at risk for that vital sign criteria.

SOURCE: BG12MS/109MS305/PART1/T-VS-ABN.SAS DATE: 25SEP2015

Incidence of abnormalities in vital signs
-Part I (placebo-controlled period)
Page 2 of 3

Vital sign	Criteria	Placebo	BG00012 240 mg BID
Pulse rate (beats/min)	>20 decrease from baseline	8/113 (7)	3/110 (3)
Systolic Blood Pressure (mmHg)	(>180 post-baseline if <=180 at baseline) or (>40 increase from baseline)	1/113 (<1)	0/110
	>180 post-baseline if <=180 at baseline	0/113	0/110
	>40 increase from baseline	1/113 (<1)	0/110
	(<90 post-baseline if >=90 at baseline) or (>30 decrease from baseline)	7/113 (6)	8/110 (7)
	<90 post-baseline if >=90 at baseline	4/113 (4)	4/110 (4)
	>30 decrease from baseline	3/113 (3)	4/110 (4)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Entries are numbers of subjects with an abnormality/number of subjects at risk (percentage). Number of subjects at risk is the number of subjects who had a baseline assessment, at least one post-baseline assessment and at risk for that vital sign criteria.

SOURCE: BG12MS/109MS305/PART1/T-VS-ABN.SAS DATE: 25SEP2015

Incidence of abnormalities in vital signs
-Part I (placebo-controlled period)
Page 3 of 3

Vital sign	Criteria	Placebo	BG00012 240 mg BID
Diastolic Blood Pressure (mmHg)	(>105 post-baseline if <=105 at baseline) or (>30 increase from baseline)	1/113 (<1)	1/110 (<1)
	>105 post-baseline if <=105 at baseline	0/113	0/110
	>30 increase from baseline	1/113 (<1)	1/110 (<1)
	(<50 post-baseline if >=50 at baseline) or (>20 decrease from baseline)	13/113 (12)	11/110 (10)
	<50 post-baseline if >=50 at baseline	3/113 (3)	2/110 (2)
	>20 decrease from baseline	10/113 (9)	11/110 (10)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Entries are numbers of subjects with an abnormality/number of subjects at risk (percentage). Number of subjects at risk is the number of subjects who had a baseline assessment, at least one post-baseline assessment and at risk for that vital sign criteria.

SOURCE: BG12MS/109MS305/PART1/T-VS-ABN.SAS DATE: 25SEP2015

Table 251: Summary of Body Weight (kg) – Actual Values by Visit: Studies 109MS301 and 109MS302

Summary of body weight (kg) - actual values by visit:
Studies 109MS301 and 109MS302
Page 1 of 2

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Baseline					
n	764	766	757	1523	351
Mean	71.85	71.24	71.82	71.53	71.37
SD	16.960	18.236	17.334	17.790	19.110
Median	70.00	68.00	69.00	68.00	67.30
Min, Max	37.0, 152.3	34.0, 162.3	40.0, 151.0	34.0, 162.3	35.2, 143.5
Week 24					
n	728	723	712	1435	339
Mean	72.18	70.99	71.08	71.04	71.90
SD	16.999	18.456	17.074	17.778	19.385
Median	70.00	67.00	68.00	67.70	68.00
Min, Max	36.0, 152.3	36.2, 184.5	38.0, 149.2	36.2, 184.5	37.0, 150.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-VS-WT-A.SAS DATE: 30NOV2011

Summary of body weight (kg) - actual values by visit:
Studies 109MS301 and 109MS302
Page 2 of 2

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 48					
n	633	630	621	1251	309
Mean	72.29	70.45	70.84	70.64	72.34
SD	16.805	18.108	16.730	17.431	19.272
Median	70.00	66.40	68.40	67.50	68.80
Min, Max	39.5, 152.3	34.9, 156.4	35.0, 152.9	34.9, 156.4	37.0, 147.2
Week 72					
n	552	585	575	1160	286
Mean	72.21	70.63	71.48	71.05	72.82
SD	16.645	17.917	16.953	17.444	18.765
Median	70.00	67.00	69.30	68.00	70.00
Min, Max	39.0, 152.3	39.5, 148.9	38.0, 157.4	38.0, 157.4	37.0, 149.5
Week 96					
n	345	364	365	729	182
Mean	72.36	70.68	72.26	71.47	72.22
SD	16.389	17.928	17.620	17.780	19.479
Median	70.00	67.00	70.00	68.80	68.70
Min, Max	40.0, 140.2	36.4, 158.6	40.0, 166.5	36.4, 166.5	38.0, 158.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-VS-WT-A.SAS DATE: 30NOV2011

Table 252: Summary of Body Weight (kg) - Change From Baseline by Visit: Studies 109MS301 and 109MS302

Summary of body weight (kg) - change from baseline by visit:
Studies 109MS301 and 109MS302
Page 1 of 2

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Week 24					
n	721	721	710	1431	339
Mean	0.08	-0.42	-0.59	-0.50	0.30
SD	3.287	3.298	3.345	3.322	3.464
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-19.7, 15.8	-16.7, 22.2	-21.0, 20.0	-21.0, 22.2	-12.5, 24.0
Week 48					
n	628	627	619	1246	309
Mean	0.37	-0.65	-0.77	-0.71	0.45
SD	3.977	4.125	4.101	4.112	3.973
Median	0.00	0.00	-0.40	0.00	0.00
Min, Max	-22.1, 19.0	-23.2, 18.7	-22.2, 17.0	-23.2, 18.7	-14.7, 18.5

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-VS-WT-CHG-A.SAS DATE: 30NOV2011

Summary of body weight (kg) - change from baseline by visit:
Studies 109MS301 and 109MS302
Page 2 of 2

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	547	583	574	1157	286
Mean	0.26	-0.22	-0.55	-0.39	0.39
SD	4.367	4.249	4.596	4.426	4.618
Median	0.00	0.00	0.00	0.00	0.05
Min, Max	-20.0, 25.0	-22.7, 21.7	-20.8, 21.0	-22.7, 21.7	-22.5, 14.0
Week 96					
n	343	362	364	726	182
Mean	-0.12	-0.10	0.17	0.04	0.90
SD	5.193	4.937	6.411	5.721	8.573
Median	0.20	0.00	0.00	0.00	0.50
Min, Max	-25.6, 19.0	-28.6, 23.9	-19.9, 47.0	-28.6, 47.0	-30.0, 87.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/ISS/CSR/T-VS-WT-CHG-A.SAS DATE: 30NOV2011

Table 254: Summary of Weight (kg): Actual Values by Visit – Part I (Placebo-Controlled Period)

Summary of weight (kg): actual values by visit - Part I (placebo-controlled period)

Visit/Parameters	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113	111
Baseline		
n	113	111
Mean	63.42	64.30
SD	15.510	15.641
Median	61.00	59.80
Min, Max	41.7, 116.0	36.7, 110.0
Week 24		
n	108	105
Mean	64.33	63.46
SD	15.495	15.251
Median	62.50	58.30
Min, Max	40.7, 113.0	39.5, 110.0

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-WT-VISIT.SAS DATE: 25SEP2015

Table 255: Summary of Weight (kg): Change From Baseline by Visit – Part I (Placebo-Controlled Period)

Summary of weight (kg): change from baseline by visit - Part I (placebo-controlled period)

Visit/Parameters	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113	111
Week 24		
n	108	105
Mean	0.41	-0.74
SD	2.640	2.264
Median	0.00	-0.50
Min, Max	-5.0, 10.0	-8.2, 4.4

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-WT-CHG-VISIT.SAS DATE: 25SEP2015

Table 256: Summary of Worst Post-Baseline Values for Select Qualitative Urinalysis Parameters That Require Further Evaluation: 24 Weeks of Studies 109MS301 and 109MS302

Summary of worst post-baseline values for select qualitative urinalysis parameters that require further evaluation:
24 weeks of studies 109MS301 and 109MS302
Page 1 of 4

Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Urine Blood					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
Normal/Neg	490 (64)	508 (67)	455 (61)	963 (64)	235 (68)
Trace	55 (7)	65 (9)	72 (10)	137 (9)	36 (10)
1+	79 (10)	52 (7)	79 (11)	131 (9)	18 (5)
2+	99 (13)	85 (11)	95 (13)	180 (12)	29 (8)
3+	43 (6)	46 (6)	45 (6)	91 (6)	29 (8)
Urine Protein					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
Normal/Neg	252 (33)	254 (34)	208 (28)	462 (31)	108 (31)
Trace	337 (44)	313 (41)	320 (43)	633 (42)	146 (42)
1+	150 (20)	164 (22)	196 (26)	360 (24)	86 (25)
2+	23 (3)	19 (3)	18 (2)	37 (2)	7 (2)
3+	1 (<1)	2 (<1)	3 (<1)	5 (<1)	0
4+	3 (<1)	4 (<1)	1 (<1)	5 (<1)	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/JAPAN/ISS/T-LB-UR-WORST-SUM-A-24W.SAS DATE: 16OCT2015

Summary of worst post-baseline values for select qualitative urinalysis parameters that require further evaluation:
24 weeks of studies 109MS301 and 109MS302
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Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Urine Glucose					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
Normal/Neg	725 (95)	739 (98)	718 (96)	1457 (97)	334 (96)
Trace	13 (2)	4 (<1)	6 (<1)	10 (<1)	4 (1)
1+	6 (<1)	5 (<1)	5 (<1)	10 (<1)	3 (<1)
2+	4 (<1)	1 (<1)	3 (<1)	4 (<1)	2 (<1)
3+	9 (1)	3 (<1)	5 (<1)	8 (<1)	2 (<1)
4+	9 (1)	4 (<1)	9 (1)	13 (<1)	2 (<1)
Urine Ketone					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
Normal/Neg	680 (89)	438 (58)	384 (51)	822 (55)	314 (90)
Trace	54 (7)	101 (13)	91 (12)	192 (13)	21 (6)
1+	26 (3)	153 (20)	176 (24)	329 (22)	9 (3)
2+	5 (<1)	55 (7)	78 (10)	133 (9)	3 (<1)
3+	1 (<1)	8 (1)	13 (2)	21 (1)	0
4+	0	1 (<1)	4 (<1)	5 (<1)	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/JAPAN/ISS/T-LB-UR-WORST-SUM-A-24W.SAS DATE: 16OCT2015

Summary of worst post-baseline values for select qualitative urinalysis parameters that require further evaluation:
24 weeks of studies 109MS301 and 109MS302
Page 3 of 4

Parameters/Categories		Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Urine Microscopy						
RBC /HPF						
Male						
Total n		150 (100)	167 (100)	133 (100)	300 (100)	64 (100)
Normal/Neg:	0 - 3	123 (82)	129 (77)	100 (75)	229 (76)	56 (88)
Positive:	4 - 10	20 (13)	31 (19)	24 (18)	55 (18)	5 (8)
	11 - 20	4 (3)	2 (1)	3 (2)	5 (2)	1 (2)
	21 - 149	2 (1)	5 (3)	5 (4)	10 (3)	0
	>=150	1 (<1)	0	1 (<1)	1 (<1)	2 (3)
Female						
Total n		457 (100)	436 (100)	459 (100)	895 (100)	199 (100)
Normal/Neg:	0 - 8	365 (80)	355 (81)	351 (76)	706 (79)	154 (77)
Positive:	9 - 20	16 (4)	20 (5)	30 (7)	50 (6)	11 (6)
	21 - 30	4 (<1)	6 (1)	13 (3)	19 (2)	5 (3)
	31 - 149	41 (9)	26 (6)	39 (8)	65 (7)	13 (7)
	>=150	31 (7)	29 (7)	26 (6)	55 (6)	16 (8)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/JAPAN/ISS/T-LB-UR-WORST-SUM-A-24W.SAS DATE: 16OCT2015

Summary of worst post-baseline values for select qualitative urinalysis parameters that require further evaluation:
24 weeks of studies 109MS301 and 109MS302
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Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
CASTS (excl.Hyaline)					
Total n	1 (100)	0	2 (100)	2 (100)	0
Normal/Neg	0	0	0	0	0
CASTS Present	1 (100)	0	2 (100)	2 (100)	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/JAPAN/ISS/T-LB-UR-WORST-SUM-A-24W.SAS DATE: 16OCT2015

Table 257: Summary of Worst Post-Baseline Values for Selected Urinalysis Parameters That Require Further Evaluation: Studies 109MS301 and 109MS302

Summary of worst post-baseline values for selected urinalysis parameters that require further evaluation:
Studies 109MS301 and 109MS302
Page 1 of 4

Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Urine Blood					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
Normal/Neg	345 (45)	351 (46)	324 (43)	675 (45)	163 (47)
Trace	64 (8)	72 (10)	76 (10)	148 (10)	43 (12)
1+	99 (13)	83 (11)	100 (13)	183 (12)	32 (9)
2+	169 (22)	129 (17)	151 (20)	280 (19)	61 (18)
3+	89 (12)	121 (16)	95 (13)	216 (14)	48 (14)
Urine Protein					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
Normal/Neg	126 (16)	126 (17)	111 (15)	237 (16)	50 (14)
Trace	312 (41)	306 (40)	277 (37)	583 (39)	136 (39)
1+	277 (36)	265 (35)	313 (42)	578 (38)	140 (40)
2+	45 (6)	46 (6)	37 (5)	83 (6)	20 (6)
3+	2 (<1)	7 (<1)	7 (<1)	14 (<1)	0
4+	4 (<1)	6 (<1)	1 (<1)	7 (<1)	1 (<1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-WORST-SUM2-A.SAS DATE: 24JAN2012

Summary of worst post-baseline values for selected urinalysis parameters that require further evaluation:
Studies 109MS301 and 109MS302
Page 2 of 4

Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Urine Glucose					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
Normal/Neg	682 (89)	716 (95)	704 (94)	1420 (95)	314 (90)
Trace	28 (4)	14 (2)	11 (1)	25 (2)	10 (3)
1+	17 (2)	9 (1)	4 (<1)	13 (<1)	7 (2)
2+	9 (1)	5 (<1)	8 (1)	13 (<1)	9 (3)
3+	13 (2)	6 (<1)	8 (1)	14 (<1)	5 (1)
4+	17 (2)	6 (<1)	11 (1)	17 (1)	2 (<1)
Urine Ketone					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
Normal/Neg	554 (72)	279 (37)	222 (30)	501 (33)	237 (68)
Trace	134 (17)	139 (18)	108 (14)	247 (16)	64 (18)
1+	65 (8)	224 (30)	231 (31)	455 (30)	36 (10)
2+	9 (1)	98 (13)	146 (20)	244 (16)	10 (3)
3+	4 (<1)	15 (2)	33 (4)	48 (3)	0
4+	0	1 (<1)	6 (<1)	7 (<1)	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-WORST-SUM2-A.SAS DATE: 24JAN2012

Summary of worst post-baseline values for selected urinalysis parameters that require further evaluation:
Studies 109MS301 and 109MS302
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Parameters/Categories		Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Urine Microscopy						
RBC /HPF						
Male						
Total n		190 (100)	207 (100)	179 (100)	386 (100)	98 (100)
Normal/Neg:	0 - 3	136 (72)	132 (64)	118 (66)	250 (65)	80 (82)
Positive:	4 - 10	41 (22)	58 (28)	46 (26)	104 (27)	12 (12)
	11 - 20	9 (5)	6 (3)	6 (3)	12 (3)	2 (2)
	21 - 149	3 (2)	8 (4)	8 (4)	16 (4)	2 (2)
	>=150	1 (<1)	3 (1)	1 (<1)	4 (1)	2 (2)
Female						
Total n		515 (100)	498 (100)	508 (100)	1006 (100)	230 (100)
Normal/Neg:	0 - 8	320 (62)	288 (58)	304 (60)	592 (59)	145 (63)
Positive:	9 - 20	41 (8)	58 (12)	45 (9)	103 (10)	11 (5)
	21 - 30	13 (3)	11 (2)	22 (4)	33 (3)	12 (5)
	31 - 149	78 (15)	61 (12)	76 (15)	137 (14)	22 (10)
	>=150	63 (12)	80 (16)	61 (12)	141 (14)	40 (17)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-WORST-SUM2-A.SAS DATE: 24JAN2012

Summary of worst post-baseline values for selected urinalysis parameters that require further evaluation:
Studies 109MS301 and 109MS302
Page 4 of 4

Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
CASTS (excl.Hyaline)					
Total n	2 (100)	0	2 (100)	2 (100)	1 (100)
Normal/Neg	0	0	0	0	0
CASTS Present	2 (100)	0	2 (100)	2 (100)	1 (100)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-WORST-SUM2-A.SAS DATE: 24JAN2012

Table 258: Summary of Subjects With Two Consecutive Positive Test Results on Urinalysis: 24 Weeks of Studies 109MS301 and 109MS302

Summary of subjects with two consecutive positive test results on urinalysis:
24 weeks of studies 109MS301 and 109MS302
Page 1 of 2

Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Urine Blood					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
>=2 pos. tests (a)	40 (5)	59 (8)	69 (9)	128 (9)	32 (9)
Urine Protein					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
>=2 pos. tests (a)	246 (32)	235 (31)	248 (33)	483 (32)	133 (38)
Urine Glucose					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
>=2 pos. tests (a)	12 (2)	5 (<1)	5 (<1)	10 (<1)	4 (1)
Urine Ketone					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
>=2 pos. tests (a)	13 (2)	84 (11)	126 (17)	210 (14)	4 (1)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.
(a) >=2 consecutive positive test results in post-baseline visits. A trace value is considered positive for all parameters except for urine blood for females.

SOURCE: BG12MS/JAPAN/ISS/T-LB-UR-2CONS-A-24W.SAS DATE: 16OCT2015

Summary of subjects with two consecutive positive test results on urinalysis:
24 weeks of studies 109MS301 and 109MS302
Page 2 of 2

Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Urine Microscopy RBC /HPF					
Total n	607 (100)	603 (100)	592 (100)	1195 (100)	263 (100)
>=2 pos. tests (a)	25 (4)	26 (4)	33 (6)	59 (5)	12 (5)
CASTS (excl.Hyaline)					
Total n	1 (100)	0	2 (100)	2 (100)	0
>=2 pos. tests (a)	0	0	0	0	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.
(a) >=2 consecutive positive test results in post-baseline visits. A trace value is considered positive for all parameters except for urine blood for females.

SOURCE: BG12MS/JAPAN/ISS/T-LB-UR-2CONS-A-24W.SAS DATE: 16OCT2015

Table 259: Summary of Subjects With Two Consecutive Positive Test Results on Urinalysis: Studies 109MS301 and 109MS302

Summary of subjects with two consecutive positive test results on urinalysis:
Studies 109MS301 and 109MS302
Page 1 of 2

Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771	769	760	1529	351
Urine Blood					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
>=2 pos. tests (a)	103 (13)	131 (17)	153 (21)	284 (19)	62 (18)
Urine Protein					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
>=2 pos. tests (a)	387 (51)	384 (51)	426 (57)	810 (54)	194 (56)
Urine Glucose					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
>=2 pos. tests (a)	13 (2)	6 (<1)	7 (<1)	13 (<1)	8 (2)
Urine Ketone					
Total n	766 (100)	756 (100)	746 (100)	1502 (100)	347 (100)
>=2 pos. tests (a)	39 (5)	162 (21)	236 (32)	398 (26)	15 (4)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.
(a) >=2 consecutive positive test results in post-baseline visits. A trace value is considered positive for all parameters except for urine blood for females.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-2CONS2-A.SAS DATE: 24JAN2012

Summary of subjects with two consecutive positive test results on urinalysis:
Studies 109MS301 and 109MS302
Page 2 of 2

Parameters/Categories	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Urine Microscopy RBC /HPF					
Total n	705 (100)	705 (100)	687 (100)	1392 (100)	328 (100)
>=2 pos. tests (a)	71 (10)	64 (9)	76 (11)	140 (10)	32 (10)
CASTS (excl.Hyaline)					
Total n	2 (100)	0	2 (100)	2 (100)	1 (100)
>=2 pos. tests (a)	0	0	0	0	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.
(a) >=2 consecutive positive test results in post-baseline visits. A trace value is considered positive for all parameters except for urine blood for females.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-2CONS2-A.SAS DATE: 24JAN2012

Table 260: Summary of Shifts From Baseline - Urinalysis: Studies 109MS301 and 109MS302

Summary of shifts from baseline - Urinalysis: Studies 109MS301 and 109MS302
Page 1 of 2

Laboratory Parameters	Placebo		BG00012 240 mg BID		BG00012 240 mg TID	
	Shift to Low (a)	Shift to High/Pos (b)	Shift to Low (a)	Shift to High/Pos (b)	Shift to Low (a)	Shift to High/Pos (b)
Urine Specific Gravity	8/765(1)	18/764(2)	9/756(1)	17/755(2)	11/746(1)	10/745(1)
Urine pH	0/766	5/765(<1)	0/756	6/756(<1)	0/746	6/746(<1)
Urine Color		121/755(16)		130/742(18)		146/737(20)
Urine Blood		329/709(46)		304/689(44)		320/691(46)
Urine Glucose		77/756(10)		37/750(5)		34/733(5)
Urine Ketones		205/750(27)		463/737(63)		508/726(70)
Urine Protein		450/564(80)		429/546(79)		431/528(82)
Urine RBC		217/653(33)		260/661(39)		240/644(37)
Urine WBC		191/717(27)		199/689(29)		191/672(28)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Numbers in parentheses are percentages based on numbers at risk. Number at risk for shift to low (or high/positive) are those subjects whose baseline value was not low (or high/positive) and who had at least one post-baseline value.
(a) Shift to low includes normal to low, high to low, and unknown to low.
(b) Shift to high/pos includes normal/unknown to high/positive or negative/unknown to high/positive.

SOURCE: BG12MS/JAPAN/ISS/T-LB-UR-SHFT-A.SAS DATE: 28SEP2015

Summary of shifts from baseline - Urinalysis: Studies 109MS301 and 109MS302
Page 2 of 2

Laboratory Parameters	Total BG00012		GA	
	Shift to Low (a)	Shift to High/Pos (b)	Shift to Low (a)	Shift to High/Pos (b)
Urine Specific Gravity	20/1502(1)	27/1500(2)	7/347 (2)	6/346 (2)
Urine pH	0/1502	12/1502(<1)	0/347	3/347 (<1)
Urine Color		276/1479(19)		77/338 (23)
Urine Blood		624/1380(45)		126/318 (40)
Urine Glucose		71/1483(5)		30/343 (9)
Urine Ketones		971/1463(66)		108/340 (32)
Urine Protein		860/1074(80)		201/246 (82)
Urine RBC		500/1305(38)		90/307 (29)
Urine WBC		390/1361(29)		95/309 (31)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.
3: Numbers in parentheses are percentages based on numbers at risk. Number at risk for shift to low (or high/positive) are those subjects whose baseline value was not low (or high/positive) and who had at least one post-baseline value.
(a) Shift to low includes normal to low, high to low, and unknown to low.
(b) Shift to high/pos includes normal/unknown to high/positive or negative/unknown to high/positive.

SOURCE: BG12MS/JAPAN/ISS/T-LB-UR-SHFT-A.SAS DATE: 28SEP2015

Table 261: Summary of Shifts From Baseline – Urinalysis – Part I (Placebo-Controlled Period)

Summary of shifts from baseline - urinalysis
- Part I (placebo-controlled period)

	Placebo		BG00012 240 mg BID	
Laboratory Parameters	Shift to Low (a)	Shift to High/Positive (b)	Shift to Low (a)	Shift to High/Positive (b)
Urine Specific Gravity	2/113 (2)	4/113 (4)	1/111 (<1)	3/111 (3)
Urine pH	0/113	0/111	0/111	1/111 (<1)
Urine Blood		37/102 (36)		18/99 (18)
Urine Color		3/113 (3)		4/111 (4)
Urine Glucose		4/112 (4)		5/111 (5)
Urine Ketones		14/107 (13)		57/108 (53)
Urine Protein		50/82 (61)		60/86 (70)
Urine RBC		7/55 (13)		6/62 (10)
Urine WBC		7/77 (9)		11/88 (13)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Entries are number with shifts/number at risk. Number at risk for shift to high/positive (low) are those subjects whose baseline value was not high/positive (low) and who had at least one post baseline value.
3: Numbers in parentheses are percentages based on numbers at risk. Number at risk for shift to low are those subjects whose baseline value was not low and who had at least one post-baseline value.
(a) Shift to low includes normal to low, high to low, and unknown to low.
(b) Shift to high/positive includes normal/unknown to high/positive, or negative/unknown to high/positive.

SOURCE: BG12MS/109MS305/PART1/T-LB-SHIFT-UR.SAS DATE: 25SEP2015

Table 262: Summary of Subjects With Two Consecutive Positive Test Results on Urinalysis – Part I (Placebo-Controlled Period)

Summary of subjects with two consecutive positive test results on urinalysis
- Part I (placebo-controlled period)
Page 1 of 2

Parameters/Categories	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113	111
Urine Blood		
Total n	113 (100)	110 (100)
>=2 pos. tests (a)	9 (8)	5 (5)
Urine Protein		
Total n	113 (100)	110 (100)
>=2 pos. tests (a)	39 (35)	36 (33)
Urine Glucose		
Total n	113 (100)	110 (100)
>=2 pos. tests (a)	0	0
Urine Ketone		
Total n	113 (100)	110 (100)
>=2 pos. tests (a)	1 (<1)	20 (18)
Urine Microscopy RBC /HPF		
Total n	48 (100)	55 (100)

NOTE: Data after subjects switched to alternative MS medications are excluded. Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.
(a) >=2 consecutive positive test results in post-baseline visits. A trace value is considered positive for all parameters except for urine blood for females.

SOURCE: BG12MS/109MS305/PART1/T-LB-UR-2CONS-POS.SAS DATE: 25SEP2015

Summary of subjects with two consecutive positive test results on urinalysis
- Part I (placebo-controlled period)
Page 2 of 2

Parameters/Categories	Placebo	BG00012 240 mg BID
>=2 pos. tests (a)	0	1 (2)

NOTE: Data after subjects switched to alternative MS medications are excluded. Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.
(a) >=2 consecutive positive test results in post-baseline visits. A trace value is considered positive for all parameters except for urine blood for females.

SOURCE: BG12MS/109MS305/PART1/T-LB-UR-2CONS-POS.SAS DATE: 25SEP2015

Table 263: Summary of Worst Post-Baseline Values for Selected Urinalysis Parameters That Require Further Evaluation – Part I (Placebo-Controlled Period)

Summary of worst post-baseline values for selected urinalysis parameters that require further evaluation
-Part I (placebo-controlled period)
Page 1 of 3

Parameters/Categories	Placebo	BG00012 240mg BID
Number of subjects in the safety population	113	111
Urine Blood		
Total n	113 (100)	110 (100)
Normal/Neg	63 (56)	78 (71)
Trace	8 (7)	4 (4)
1+	15 (13)	6 (5)
2+	9 (8)	8 (7)
3+	18 (16)	14 (13)
4+	0	0
Urine Protein		
Total n	113 (100)	110 (100)
Normal/Neg	36 (32)	26 (24)
Trace	49 (43)	55 (50)
1+	26 (23)	28 (25)
2+	1 (<1)	1 (<1)
3+	1 (<1)	0
4+	0	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/109MS305/PART1/T-LB-SUM-WORST-URINE.SAS DATE: 25SEP2015

Summary of worst post-baseline values for selected urinalysis parameters that require further evaluation
-Part I (placebo-controlled period)
Page 2 of 3

Parameters/Categories	Placebo	BG00012 240mg BID
Urine Glucose		
Total n	113 (100)	110 (100)
Normal/Neg	109 (96)	105 (95)
Trace	3 (3)	1 (<1)
1+	0	0
2+	0	2 (2)
3+	1 (<1)	0
4+	0	2 (2)
Urine Ketones		
Total n	113 (100)	110 (100)
Normal/Neg	97 (86)	50 (45)
Trace	8 (7)	12 (11)
1+	6 (5)	24 (22)
2+	0	17 (15)
3+	2 (2)	4 (4)
4+	0	3 (3)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/109MS305/PART1/T-LB-SUM-WORST-URINE.SAS DATE: 25SEP2015

Summary of worst post-baseline values for selected urinalysis parameters that require further evaluation
-Part I (placebo-controlled period)
Page 3 of 3

Parameters/Categories		Placebo	BG00012 240mg BID
Urine Microscopy			
RBC/HPF			
Male			
Total n		6 (100)	15 (100)
Normal/Neg	0-3	6 (100)	15 (100)
Positive:	4-10	0	0
	11-20	0	0
	21-149	0	0
	>=150	0	0
Female			
Total n		42 (100)	40 (100)
Normal/Neg	0-8	34 (81)	34 (85)
Positive:	9-20	4 (10)	3 (8)
	21-30	0	0
	31-149	1 (2)	0
	>=150	3 (7)	3 (8)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: A 'Trace' result is considered high/positive for all urine lab parameters except for Urine Blood for females.
3: Total n is the number of subjects in the safety population with at least one post-baseline value. This is the denominator for percentages in parentheses.

SOURCE: BG12MS/109MS305/PART1/T-LB-SUM-WORST-URINE.SAS DATE: 25SEP2015

Table 264: Summary of Quantitative Urinalysis Laboratory Parameters: Actual Values by Visit – Part I (Placebo-Controlled Period)

Summary of quantitative urinalysis laboratory parameters: actual values by visit
Part I (placebo-controlled period)
Page 1 of 2
Lab test: Urine Beta-2 Microglobulin (mg/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Baseline		
n	111	110
Mean	0.086	0.086
SD	0.0669	0.0887
Median	0.073	0.066
Min, Max	0.01, 0.49	0.01, 0.78
Week 12		
n	110	107
Mean	0.085	0.147
SD	0.0823	0.4328
Median	0.066	0.073
Min, Max	0.01, 0.70	0.01, 4.37
Week 24		
n	107	104
Mean	0.082	0.115
SD	0.0708	0.1682
Median	0.060	0.071
Min, Max	0.01, 0.35	0.01, 1.46

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-SUM-UR.SAS DATE: 25SEP2015

Summary of quantitative urinalysis laboratory parameters: actual values by visit
Part I (placebo-controlled period)
Page 2 of 2
Lab test: Urine Microalbumin (mg/dL)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Baseline		
n	113	111
Mean	1.080	1.100
SD	1.6204	2.1616
Median	0.600	0.400
Min, Max	0.30, 11.30	0.30, 19.10
Week 12		
n	110	107
Mean	0.980	0.975
SD	1.4571	1.1751
Median	0.600	0.700
Min, Max	0.30, 10.90	0.30, 8.90
Week 24		
n	108	104
Mean	0.817	0.841
SD	0.9258	0.9378
Median	0.500	0.600
Min, Max	0.30, 6.20	0.30, 7.60

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-SUM-UR.SAS DATE: 25SEP2015

Table 265: Summary of Quantitative Urinalysis Laboratory Parameters: Change From Baseline by Visit – Part I (Placebo-Controlled Period)

Summary of quantitative urinalysis laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 1 of 2
Lab test: Urine Beta-2 Microglobulin (mg/L)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 12		
n	108	106
Mean	-0.001	0.062
SD	0.0883	0.3670
Median	-0.011	0.006
Min, Max	-0.35, 0.52	-0.13, 3.59
Week 24		
n	106	103
Mean	-0.003	0.029
SD	0.0782	0.1738
Median	-0.006	0.001
Min, Max	-0.21, 0.24	-0.66, 1.38

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-UR.SAS DATE: 25SEP2015

Summary of quantitative urinalysis laboratory parameters: change from baseline by visit
Part I (placebo-controlled period)
Page 2 of 2
Lab test: Urine Microalbumin (mg/dL)

Parameters/Visit	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Week 12		
n	110	107
Mean	-0.115	0.029
SD	1.8873	1.6442
Median	0.000	0.000
Min, Max	-10.90, 8.70	-6.90, 8.60
Week 24		
n	108	104
Mean	-0.269	-0.117
SD	1.5996	1.5932
Median	0.000	0.000
Min, Max	-9.80, 3.30	-6.90, 7.30

NOTE: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-LB-CHG-UR.SAS DATE: 25SEP2015

Table 266: Summary of Shift From Baseline – Beta 2 Microglobulin and Microalbumin – Part I (Placebo-Controlled Period)

Summary of shifts from baseline - beta2-microglobulin and microalbumin
- Part I (placebo-controlled period)

	Placebo		BG00012 240 mg BID	
Laboratory Parameters	Shift to Low (a)	Shift to High (b)	Shift to Low (a)	Shift to High (b)
Urine Beta-2 Microglobulin (-20)		5/112 (4)		10/110 (9)
Urine Microalbumin		14/100 (14)		12/98 (12)

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Entries are number with shifts/number at risk. Number at risk for shift to high/positive (low) are those subjects whose baseline value was not high/positive (low) and who had at least one post baseline value. Numbers in parentheses are percentages based on numbers at risk.
(a) Shift to low includes normal to low, high to low, and unknown to low.
(b) Shift to high includes normal/unknown to high, or negative/unknown to high.

SOURCE: BG12MS/109MS305/PART1/T-LB-SHFT-SC.SAS DATE: 25SEP2015

Table 268: Summary of Urine Cytology Evaluation: Studies 109MS301 and 109MS302

Summary of urine cytology evaluation: Studies 109MS301 and 109MS302

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Number of subjects evaluated by urine cytology	58 (8)	67 (9)	98 (13)	165 (11)	20 (6)
Number of subjects evaluated by urine cytology with >=2 evaluations	13 (2)	16 (2)	25 (3)	41 (3)	6 (2)
Number of subjects with an abnormal result	0	0	0	0	0

NOTE 1: Data after subjects switched to alternative MS medications are excluded.
2: Numbers in parentheses are percentages.

SOURCE: BG12MS/ISS/CSR/T-LB-UR-CYTC-SUM-A.SAS DATE: 30NOV2011

Table 269: Summary of Urine Cytology Evaluation – Part I (Placebo-Controlled Period)

Summary of urine cytology evaluation- Part I (placebo-controlled period)

	Placebo	BG00012 240 mg BID
Number of subjects in the safety population	113 (100)	111 (100)
Number of subjects evaluated by urine cytology	5 (4)	0
Number of subjects evaluated by urine cytology with >=2 evaluations	1 (<1)	0
Number of subjects with an abnormal result	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS medications are excluded.

SOURCE: BG12MS/109MS305/PART1/T-SUMMARY-URCYT.SAS DATE: 25SEP2015

Table 271: Summary of Vital Signs Over Time - Actual Values by Visit: Studies 109MS301 and 109MS302

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
Page 1 of 32
Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Baseline					
n	758	756	748	1504	345
Mean	36.57	36.55	36.56	36.56	36.54
SD	0.389	0.410	0.393	0.401	0.343
Median	36.60	36.50	36.60	36.60	36.60
Min, Max	34.9, 38.4	34.7, 38.0	35.1, 38.0	34.7, 38.0	35.0, 38.2
Week 4					
n	736	713	709	1422	333
Mean	36.55	36.56	36.59	36.57	36.50
SD	0.390	0.406	0.399	0.402	0.336
Median	36.50	36.60	36.60	36.60	36.60
Min, Max	34.9, 38.0	34.9, 38.5	35.0, 38.2	34.9, 38.5	34.9, 37.8
Week 8					
n	720	692	664	1356	324
Mean	36.56	36.54	36.56	36.55	36.52
SD	0.391	0.396	0.386	0.391	0.338
Median	36.60	36.60	36.60	36.60	36.50
Min, Max	34.7, 38.0	34.9, 38.0	35.1, 38.0	34.9, 38.0	35.0, 37.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	718	687	662	1349	322
Mean	36.57	36.55	36.56	36.56	36.53
SD	0.384	0.384	0.382	0.383	0.360
Median	36.60	36.50	36.60	36.60	36.60
Min, Max	35.3, 38.8	34.6, 38.2	35.1, 38.0	34.6, 38.2	34.3, 37.6
Week 16					
n	697	656	637	1293	314
Mean	36.53	36.53	36.57	36.55	36.53
SD	0.387	0.381	0.413	0.398	0.348
Median	36.60	36.50	36.60	36.60	36.50
Min, Max	34.7, 37.8	34.8, 37.7	34.3, 38.2	34.3, 38.2	35.0, 37.6
Week 20					
n	684	646	635	1281	310
Mean	36.55	36.54	36.54	36.54	36.52
SD	0.383	0.391	0.399	0.395	0.370
Median	36.60	36.50	36.50	36.50	36.60
Min, Max	34.8, 38.4	34.9, 37.9	34.9, 39.6	34.9, 39.6	35.1, 37.9
Week 24					
n	673	646	625	1271	313
Mean	36.55	36.54	36.55	36.54	36.53

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	0.379	0.381	0.375	0.378	0.360
Median	36.60	36.55	36.60	36.60	36.60
Min, Max	34.6, 38.0	34.9, 38.2	35.1, 38.0	34.9, 38.2	35.2, 37.7
Week 28					
n	660	626	611	1237	303
Mean	36.53	36.53	36.55	36.54	36.54
SD	0.383	0.392	0.385	0.389	0.381
Median	36.50	36.50	36.50	36.50	36.50
Min, Max	34.9, 38.8	34.1, 38.0	34.6, 38.6	34.1, 38.6	35.1, 39.4
Week 32					
n	646	627	598	1225	300
Mean	36.54	36.51	36.56	36.54	36.51
SD	0.381	0.393	0.395	0.394	0.300
Median	36.60	36.50	36.60	36.50	36.50
Min, Max	35.1, 38.3	34.5, 38.1	34.7, 38.0	34.5, 38.1	35.5, 37.6
Week 36					
n	645	628	618	1246	307
Mean	36.55	36.54	36.55	36.54	36.53
SD	0.376	0.372	0.402	0.387	0.327
Median	36.50	36.50	36.60	36.50	36.50
Min, Max	35.1, 38.5	35.1, 37.7	34.3, 38.0	34.3, 38.0	35.5, 37.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 40					
n	631	604	595	1199	296
Mean	36.53	36.52	36.56	36.54	36.52
SD	0.360	0.370	0.381	0.376	0.351
Median	36.50	36.50	36.60	36.50	36.50
Min, Max	34.6, 38.0	35.0, 37.7	35.1, 37.7	35.0, 37.7	35.1, 37.9
Week 44					
n	606	589	588	1177	292
Mean	36.54	36.51	36.54	36.52	36.53
SD	0.378	0.376	0.377	0.377	0.331
Median	36.60	36.50	36.50	36.50	36.50
Min, Max	34.0, 37.8	35.0, 37.7	35.2, 37.9	35.0, 37.9	34.9, 37.6
Week 48					
n	598	596	600	1196	297
Mean	36.54	36.52	36.55	36.54	36.50
SD	0.373	0.367	0.380	0.374	0.348
Median	36.60	36.50	36.60	36.50	36.50
Min, Max	35.0, 38.0	35.3, 37.8	35.0, 37.8	35.0, 37.8	34.9, 37.6
Week 52					
n	567	581	577	1158	283
Mean	36.53	36.52	36.54	36.53	36.51

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	0.379	0.377	0.357	0.367	0.333
Median	36.50	36.50	36.60	36.50	36.50
Min, Max	35.1, 37.8	34.6, 37.8	34.6, 38.0	34.6, 38.0	35.4, 37.6
Week 56					
n	559	562	562	1124	278
Mean	36.51	36.52	36.55	36.54	36.49
SD	0.377	0.392	0.378	0.386	0.338
Median	36.50	36.50	36.60	36.50	36.50
Min, Max	35.0, 38.0	34.4, 38.0	34.8, 38.6	34.4, 38.6	34.6, 37.6
Week 60					
n	557	571	583	1154	285
Mean	36.52	36.52	36.54	36.53	36.49
SD	0.371	0.396	0.399	0.397	0.352
Median	36.60	36.50	36.60	36.50	36.50
Min, Max	35.2, 38.0	34.8, 38.0	35.1, 37.9	34.8, 38.0	35.2, 37.7
Week 64					
n	538	559	553	1112	271
Mean	36.51	36.50	36.54	36.52	36.49
SD	0.382	0.366	0.380	0.373	0.341
Median	36.50	36.50	36.60	36.50	36.50
Min, Max	34.6, 38.0	34.9, 37.6	34.8, 37.6	34.8, 37.6	35.0, 37.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 68					
n	524	552	547	1099	275
Mean	36.55	36.51	36.51	36.51	36.47
SD	0.372	0.366	0.367	0.366	0.348
Median	36.60	36.50	36.50	36.50	36.50
Min, Max	35.2, 38.0	35.1, 38.0	34.7, 37.6	34.7, 38.0	34.7, 37.7
Week 72					
n	514	562	555	1117	272
Mean	36.52	36.51	36.52	36.51	36.47
SD	0.373	0.385	0.476	0.433	0.364
Median	36.50	36.50	36.50	36.50	36.50
Min, Max	34.7, 37.5	34.7, 37.7	29.9, 37.8	29.9, 37.8	35.2, 37.7
Week 76					
n	505	539	539	1078	267
Mean	36.52	36.52	36.53	36.53	36.49
SD	0.407	0.367	0.393	0.380	0.341
Median	36.50	36.50	36.50	36.50	36.50
Min, Max	34.4, 38.0	35.0, 37.6	33.3, 37.6	33.3, 37.6	35.2, 37.6
Week 80					
n	504	540	534	1074	267
Mean	36.51	36.51	36.52	36.52	36.48

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	0.387	0.409	0.413	0.411	0.364
Median	36.50	36.50	36.50	36.50	36.50
Min, Max	34.7, 38.0	33.6, 38.4	32.5, 38.0	32.5, 38.4	35.0, 37.7
Week 84					
n	513	554	547	1101	271
Mean	36.53	36.52	36.52	36.52	36.48
SD	0.374	0.373	0.393	0.383	0.358
Median	36.50	36.50	36.50	36.50	36.50
Min, Max	34.9, 38.2	35.2, 38.0	35.0, 37.8	35.0, 38.0	35.2, 37.7
Week 88					
n	500	531	529	1060	261
Mean	36.52	36.51	36.52	36.52	36.48
SD	0.361	0.372	0.357	0.365	0.345
Median	36.50	36.50	36.50	36.50	36.50
Min, Max	35.1, 38.0	34.0, 38.0	34.0, 37.6	34.0, 38.0	34.8, 37.6
Week 92					
n	488	519	523	1042	257
Mean	36.53	36.52	36.51	36.52	36.48
SD	0.370	0.391	0.359	0.375	0.356
Median	36.60	36.50	36.50	36.50	36.50
Min, Max	35.2, 38.0	34.2, 38.0	34.5, 37.8	34.2, 38.0	34.8, 37.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	482	529	515	1044	260
Mean	36.52	36.55	36.56	36.55	36.49
SD	0.372	0.381	0.391	0.386	0.348
Median	36.50	36.60	36.60	36.60	36.50
Min, Max	34.7, 37.6	34.9, 38.0	33.1, 37.8	33.1, 38.0	34.9, 37.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Baseline					
n	770	769	760	1529	351
Mean	73.3	72.6	73.3	72.9	74.1
SD	9.63	9.40	9.24	9.32	9.27
Median	72.0	72.0	72.0	72.0	74.0
Min, Max	43, 115	45, 116	46, 111	45, 116	40, 113
Week 4					
n	751	730	724	1454	340
Mean	74.6	75.1	76.2	75.6	74.1
SD	9.83	9.53	9.86	9.71	9.11
Median	74.0	74.0	76.0	75.0	72.0
Min, Max	47, 118	52, 120	54, 119	52, 120	50, 102
Week 8					
n	733	706	676	1382	331
Mean	74.1	75.0	75.3	75.1	74.6
SD	9.20	9.52	9.57	9.54	9.07
Median	74.0	74.0	74.0	74.0	74.0
Min, Max	48, 114	50, 115	39, 122	39, 122	48, 109

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	729	697	675	1372	329
Mean	74.3	75.0	75.3	75.2	74.3
SD	9.53	9.70	9.52	9.61	9.17
Median	74.0	74.0	75.0	74.0	74.0
Min, Max	48, 114	47, 110	49, 117	47, 117	44, 110
Week 16					
n	709	667	649	1316	319
Mean	74.6	75.0	75.9	75.5	74.5
SD	9.57	9.68	9.83	9.76	9.11
Median	74.0	74.0	75.0	74.0	74.0
Min, Max	44, 115	53, 108	54, 120	53, 120	48, 134
Week 20					
n	697	656	647	1303	316
Mean	74.3	75.4	75.8	75.6	74.0
SD	9.72	9.91	9.20	9.56	9.10
Median	74.0	75.0	75.0	75.0	72.0
Min, Max	41, 121	49, 164	54, 107	49, 164	49, 109
Week 24					
n	686	660	640	1300	318
Mean	73.7	74.3	75.0	74.6	74.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	9.65	10.10	9.87	9.99	10.05
Median	74.0	73.0	74.0	74.0	73.0
Min, Max	36, 123	50, 124	48, 133	48, 133	53, 125
Week 28					
n	677	637	625	1262	308
Mean	74.5	74.8	75.5	75.2	74.7
SD	9.98	9.79	9.29	9.55	9.69
Median	74.0	74.0	75.0	74.0	74.0
Min, Max	44, 142	48, 120	47, 112	47, 120	48, 129
Week 32					
n	658	639	612	1251	307
Mean	74.8	75.4	75.7	75.6	74.2
SD	9.36	9.76	9.21	9.49	9.05
Median	74.0	75.0	76.0	75.0	74.0
Min, Max	44, 111	42, 116	51, 120	42, 120	53, 105
Week 36					
n	654	636	628	1264	313
Mean	74.4	74.9	75.4	75.1	74.6
SD	9.44	9.37	9.19	9.28	9.00
Median	74.0	74.0	74.0	74.0	74.0
Min, Max	46, 131	46, 128	52, 110	46, 128	54, 120

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 40					
n	644	613	609	1222	302
Mean	74.4	74.8	75.6	75.2	73.7
SD	9.12	9.35	9.28	9.32	9.38
Median	74.0	74.0	75.0	74.0	73.0
Min, Max	47, 114	51, 126	49, 112	49, 126	55, 121
Week 44					
n	620	600	602	1202	297
Mean	74.2	75.4	75.9	75.6	73.5
SD	9.41	9.74	9.28	9.51	8.81
Median	74.0	74.0	75.0	75.0	72.0
Min, Max	44, 121	48, 116	49, 113	48, 116	49, 114
Week 48					
n	611	609	612	1221	300
Mean	73.2	74.1	74.3	74.2	73.4
SD	10.20	9.60	9.54	9.57	9.59
Median	72.0	74.0	73.0	74.0	72.0
Min, Max	43, 168	49, 108	50, 108	49, 108	53, 120
Week 52					
n	578	588	584	1172	288
Mean	73.4	74.6	75.4	75.0	73.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	9.52	9.17	8.66	8.93	8.84
Median	72.0	74.0	75.0	74.0	72.0
Min, Max	45, 122	50, 105	52, 118	50, 118	52, 116
Week 56					
n	574	573	574	1147	284
Mean	73.9	74.5	75.6	75.1	74.3
SD	9.33	9.40	9.06	9.25	10.03
Median	74.0	74.0	75.0	74.0	74.0
Min, Max	50, 116	50, 118	51, 105	50, 118	40, 118
Week 60					
n	570	582	594	1176	291
Mean	74.1	74.2	75.5	74.8	74.5
SD	9.06	9.36	9.17	9.28	9.53
Median	74.0	74.0	76.0	74.0	74.0
Min, Max	48, 115	50, 116	52, 126	50, 126	48, 107
Week 64					
n	551	572	565	1137	278
Mean	74.2	74.6	75.9	75.3	74.4
SD	9.42	9.37	8.95	9.18	9.81
Median	73.0	74.0	76.0	75.0	74.0
Min, Max	47, 103	47, 118	51, 107	47, 118	50, 109

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 68					
n	536	563	559	1122	281
Mean	74.1	74.5	75.5	75.0	73.9
SD	9.87	9.10	9.61	9.37	9.17
Median	74.0	75.0	75.0	75.0	74.0
Min, Max	47, 147	47, 115	52, 124	47, 124	48, 107
Week 72					
n	526	571	566	1137	279
Mean	73.9	74.5	75.3	74.9	73.5
SD	9.75	9.74	9.64	9.69	9.97
Median	74.0	73.0	74.0	74.0	72.0
Min, Max	24, 107	48, 128	40, 107	40, 128	48, 107
Week 76					
n	518	549	550	1099	272
Mean	74.3	74.4	76.1	75.3	74.3
SD	10.04	9.07	9.68	9.42	9.49
Median	74.0	74.0	76.0	74.0	73.0
Min, Max	48, 153	50, 103	53, 129	50, 129	52, 115
Week 80					
n	516	548	546	1094	272
Mean	73.8	75.2	75.9	75.6	73.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	9.66	9.19	9.67	9.43	9.35
Median	74.0	74.0	75.0	75.0	72.0
Min, Max	47, 119	48, 114	54, 116	48, 116	48, 120
Week 84					
n	523	564	559	1123	277
Mean	74.2	74.5	75.6	75.0	73.6
SD	9.38	8.95	9.69	9.34	9.47
Median	74.0	74.0	76.0	74.0	72.0
Min, Max	48, 109	52, 122	51, 108	51, 122	50, 126
Week 88					
n	510	544	541	1085	265
Mean	74.4	75.4	75.3	75.3	73.7
SD	10.08	9.58	9.66	9.62	9.48
Median	74.0	75.0	74.0	74.0	73.0
Min, Max	50, 137	48, 127	50, 103	48, 127	50, 118
Week 92					
n	500	534	535	1069	262
Mean	74.6	74.9	75.4	75.2	73.9
SD	9.21	9.61	9.31	9.46	9.50
Median	74.5	74.0	75.0	74.0	72.5
Min, Max	50, 103	45, 104	51, 116	45, 116	48, 106

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	494	540	526	1066	265
Mean	73.8	73.9	75.0	74.4	72.9
SD	10.59	9.72	9.80	9.77	10.29
Median	72.0	72.0	74.0	74.0	72.0
Min, Max	48, 167	50, 122	44, 118	44, 122	47, 109

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Baseline					
n	770	769	760	1529	351
Mean	118.1	119.2	119.9	119.5	118.9
SD	13.32	13.42	14.20	13.82	12.85
Median	118.0	120.0	120.0	120.0	120.0
Min, Max	85, 190	80, 177	80, 200	80, 200	88, 161
Week 4					
n	751	729	724	1453	339
Mean	118.5	118.4	119.0	118.7	118.9
SD	13.05	13.38	13.84	13.61	13.25
Median	119.0	120.0	120.0	120.0	120.0
Min, Max	85, 196	65, 170	80, 176	65, 176	90, 168
Week 8					
n	734	706	676	1382	331
Mean	118.0	118.1	118.7	118.4	119.1
SD	12.97	13.73	13.50	13.62	13.20
Median	120.0	120.0	120.0	120.0	120.0
Min, Max	84, 169	80, 185	82, 180	80, 185	90, 170

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	729	697	675	1372	329
Mean	118.5	117.9	118.4	118.1	119.0
SD	12.35	13.27	13.17	13.22	13.23
Median	120.0	120.0	120.0	120.0	120.0
Min, Max	90, 180	80, 162	78, 160	78, 162	90, 157
Week 16					
n	709	667	649	1316	320
Mean	118.5	118.5	117.8	118.1	118.4
SD	12.84	13.07	13.92	13.50	13.13
Median	120.0	120.0	118.0	120.0	120.0
Min, Max	80, 186	86, 170	83, 180	83, 180	90, 163
Week 20					
n	697	657	647	1304	316
Mean	118.6	118.6	117.6	118.1	118.9
SD	13.23	12.80	13.20	13.00	13.06
Median	120.0	120.0	118.0	120.0	118.0
Min, Max	80, 162	82, 163	79, 162	79, 163	90, 164
Week 24					
n	686	660	639	1299	319
Mean	118.1	118.4	117.4	117.9	118.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	13.55	13.27	13.47	13.38	12.74
Median	120.0	120.0	116.0	118.0	118.0
Min, Max	81, 194	90, 177	82, 160	82, 177	84, 161
Week 28					
n	678	637	624	1261	308
Mean	118.1	118.2	118.2	118.2	118.6
SD	12.45	12.84	14.01	13.43	13.80
Median	118.0	120.0	118.0	119.0	117.5
Min, Max	80, 167	80, 162	74, 176	74, 176	90, 172
Week 32					
n	659	638	612	1250	307
Mean	118.7	117.9	117.8	117.8	118.6
SD	12.71	12.87	13.55	13.20	12.71
Median	120.0	120.0	118.0	118.5	118.0
Min, Max	84, 172	88, 179	84, 181	84, 181	82, 160
Week 36					
n	654	636	628	1264	313
Mean	117.8	118.4	117.5	117.9	118.0
SD	13.03	12.92	13.33	13.13	12.65
Median	118.0	120.0	117.0	118.0	118.0
Min, Max	87, 167	80, 170	89, 163	80, 170	90, 162

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 40					
n	644	613	609	1222	302
Mean	118.2	117.1	118.1	117.6	119.0
SD	12.66	12.35	13.10	12.73	12.95
Median	119.0	117.0	118.0	118.0	120.0
Min, Max	85, 164	84, 164	85, 171	84, 171	90, 157
Week 44					
n	620	601	602	1203	298
Mean	118.3	116.7	118.0	117.3	118.9
SD	13.14	12.59	13.06	12.84	13.71
Median	118.0	117.0	118.5	118.0	120.0
Min, Max	81, 175	82, 162	85, 170	82, 170	90, 170
Week 48					
n	611	609	613	1222	300
Mean	117.9	117.7	118.4	118.0	118.5
SD	13.37	12.36	13.73	13.07	12.65
Median	117.0	118.0	119.0	119.0	120.0
Min, Max	75, 177	86, 156	86, 170	86, 170	90, 154
Week 52					
n	578	588	584	1172	287
Mean	118.2	117.1	116.7	116.9	118.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	13.02	12.22	12.81	12.51	12.76
Median	118.0	118.0	116.5	117.0	119.0
Min, Max	72, 174	82, 173	86, 162	82, 173	90, 167
Week 56					
n	574	573	574	1147	284
Mean	119.0	116.8	117.7	117.3	118.7
SD	12.83	11.67	13.10	12.41	13.34
Median	120.0	116.0	118.0	117.0	120.0
Min, Max	90, 165	85, 151	80, 160	80, 160	90, 168
Week 60					
n	570	582	595	1177	291
Mean	118.2	117.1	117.8	117.4	118.4
SD	12.99	12.18	13.29	12.75	13.25
Median	118.5	118.0	118.0	118.0	118.0
Min, Max	86, 158	85, 160	80, 169	80, 169	85, 175
Week 64					
n	551	572	565	1137	278
Mean	118.3	117.2	117.5	117.4	118.2
SD	13.18	11.88	13.15	12.52	13.63
Median	118.0	118.0	117.0	118.0	120.0
Min, Max	90, 173	85, 159	76, 180	76, 180	80, 160

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 68					
n	537	564	559	1123	281
Mean	118.3	117.9	117.8	117.8	118.4
SD	12.70	13.14	13.07	13.10	12.82
Median	120.0	120.0	118.0	119.0	120.0
Min, Max	82, 165	80, 169	80, 166	80, 169	89, 160
Week 72					
n	527	573	566	1139	279
Mean	118.4	117.6	117.7	117.6	118.1
SD	13.00	12.52	12.90	12.71	12.72
Median	120.0	118.0	118.0	118.0	118.0
Min, Max	85, 167	88, 158	90, 170	88, 170	85, 161
Week 76					
n	518	550	550	1100	272
Mean	118.9	117.7	117.5	117.6	117.9
SD	12.69	12.89	13.30	13.09	12.67
Median	120.0	118.0	118.0	118.0	119.0
Min, Max	90, 160	83, 162	87, 165	83, 165	90, 160
Week 80					
n	516	549	547	1096	272
Mean	119.4	117.6	118.0	117.8	118.7

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	12.95	12.63	13.04	12.83	13.01
Median	120.0	119.0	120.0	120.0	120.0
Min, Max	80, 172	85, 168	85, 164	85, 168	90, 154
Week 84					
n	523	564	560	1124	277
Mean	119.4	117.7	117.7	117.7	118.6
SD	12.97	12.53	13.24	12.88	11.71
Median	120.0	118.0	119.0	118.0	120.0
Min, Max	83, 170	80, 156	88, 170	80, 170	88, 153
Week 88					
n	510	544	541	1085	265
Mean	119.5	117.5	118.1	117.8	119.3
SD	13.06	12.25	12.97	12.61	12.92
Median	120.0	119.5	119.0	119.0	120.0
Min, Max	85, 165	78, 161	89, 161	78, 161	90, 179
Week 92					
n	501	533	535	1068	262
Mean	119.6	118.3	118.1	118.2	118.6
SD	13.28	11.49	12.90	12.21	12.47
Median	120.0	120.0	118.0	120.0	120.0
Min, Max	80, 180	90, 160	89, 161	89, 161	90, 156

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	494	540	526	1066	265
Mean	119.3	118.7	118.4	118.6	119.5
SD	13.22	12.73	13.54	13.13	12.54
Median	120.0	120.0	120.0	120.0	120.0
Min, Max	85, 165	88, 164	89, 180	88, 180	90, 160

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Baseline					
n	770	769	760	1529	351
Mean	75.1	75.6	75.8	75.7	75.4
SD	9.32	9.31	9.63	9.47	9.25
Median	75.0	75.0	76.0	76.0	75.0
Min, Max	50, 110	47, 107	45, 140	45, 140	45, 104
Week 4					
n	751	729	724	1453	339
Mean	75.2	75.1	75.0	75.1	75.4
SD	9.12	9.62	9.52	9.57	9.71
Median	75.0	76.0	75.0	75.0	75.0
Min, Max	48, 116	40, 110	50, 110	40, 110	42, 103
Week 8					
n	734	706	676	1382	331
Mean	74.9	75.0	74.9	75.0	75.2
SD	9.43	9.49	9.40	9.44	9.37
Median	75.0	75.0	75.0	75.0	75.0
Min, Max	40, 120	45, 105	42, 110	42, 110	50, 103

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 12					
n	729	697	675	1372	329
Mean	75.5	74.7	75.1	74.9	75.2
SD	9.30	9.77	9.19	9.49	8.84
Median	75.0	75.0	75.0	75.0	75.0
Min, Max	40, 103	50, 113	52, 108	50, 113	53, 100
Week 16					
n	709	667	649	1316	320
Mean	75.0	75.1	74.8	74.9	75.1
SD	9.13	9.36	9.44	9.40	8.36
Median	75.0	75.0	75.0	75.0	75.0
Min, Max	40, 105	48, 110	49, 108	48, 110	50, 98
Week 20					
n	697	657	647	1304	316
Mean	75.4	74.9	74.6	74.8	75.5
SD	9.34	9.15	9.39	9.27	9.45
Median	75.0	75.0	75.0	75.0	76.0
Min, Max	47, 115	40, 106	46, 110	40, 110	50, 104
Week 24					
n	686	660	639	1299	319
Mean	75.1	74.8	74.0	74.4	75.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	9.21	9.91	9.27	9.60	8.89
Median	75.0	75.0	73.0	74.0	75.0
Min, Max	50, 110	42, 115	49, 110	42, 115	55, 104
Week 28					
n	678	637	624	1261	308
Mean	75.1	75.0	74.6	74.8	75.0
SD	9.11	9.20	9.74	9.47	9.02
Median	75.0	75.0	75.0	75.0	75.0
Min, Max	44, 110	49, 101	50, 137	49, 137	51, 105
Week 32					
n	659	638	612	1250	307
Mean	75.2	74.2	74.7	74.4	74.9
SD	9.08	9.23	9.70	9.46	9.07
Median	75.0	74.0	75.0	75.0	75.0
Min, Max	40, 108	50, 108	49, 113	49, 113	54, 106
Week 36					
n	654	635	628	1263	313
Mean	75.1	74.7	74.7	74.7	74.8
SD	9.34	9.45	9.27	9.36	9.01
Median	75.0	75.0	75.0	75.0	75.0
Min, Max	45, 127	40, 110	48, 111	40, 111	50, 110

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 40					
n	644	613	609	1222	302
Mean	75.1	74.1	74.4	74.3	74.2
SD	9.32	9.06	9.24	9.15	9.50
Median	75.0	74.0	74.0	74.0	73.5
Min, Max	41, 111	44, 106	50, 110	44, 110	52, 100
Week 44					
n	620	601	602	1203	298
Mean	75.1	74.4	74.6	74.5	74.6
SD	9.35	9.00	9.17	9.08	9.66
Median	75.0	75.0	75.0	75.0	74.5
Min, Max	40, 108	48, 105	50, 112	48, 112	50, 116
Week 48					
n	611	609	613	1222	300
Mean	74.8	74.5	74.6	74.5	74.8
SD	9.72	9.38	9.28	9.33	9.48
Median	75.0	75.0	74.0	74.0	72.0
Min, Max	55, 140	42, 110	50, 108	42, 110	55, 107
Week 52					
n	578	588	584	1172	287
Mean	75.0	74.1	74.3	74.2	75.1

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	9.13	8.59	9.38	8.99	9.27
Median	75.0	75.0	74.0	74.0	75.0
Min, Max	46, 100	50, 104	50, 110	50, 110	50, 102
Week 56					
n	574	573	574	1147	284
Mean	75.9	73.9	74.1	74.0	74.8
SD	9.41	8.94	9.11	9.02	9.51
Median	76.0	74.0	73.0	73.0	75.0
Min, Max	38, 113	41, 101	50, 110	41, 110	50, 106
Week 60					
n	570	582	595	1177	291
Mean	75.4	74.3	74.9	74.6	75.4
SD	9.42	8.97	9.30	9.14	9.41
Median	75.0	75.0	75.0	75.0	78.0
Min, Max	48, 111	49, 101	50, 100	49, 101	50, 109
Week 64					
n	551	572	565	1137	278
Mean	75.4	73.8	74.1	74.0	75.1
SD	9.25	8.54	8.85	8.69	9.65
Median	75.0	74.0	74.0	74.0	75.0
Min, Max	36, 120	52, 102	50, 100	50, 102	48, 103

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 68					
n	537	564	559	1123	281
Mean	75.8	74.0	74.3	74.1	75.3
SD	9.18	8.79	8.54	8.66	9.54
Median	76.0	74.0	75.0	74.0	74.0
Min, Max	47, 110	47, 102	50, 100	47, 102	50, 103
Week 72					
n	527	573	566	1139	279
Mean	75.3	74.2	74.4	74.3	75.5
SD	9.40	9.04	9.14	9.09	9.67
Median	75.0	74.0	74.0	74.0	75.0
Min, Max	47, 122	44, 104	50, 105	44, 105	50, 105
Week 76					
n	517	550	550	1100	272
Mean	75.3	74.1	74.5	74.3	74.6
SD	9.34	9.35	9.17	9.26	8.87
Median	75.0	75.0	75.0	75.0	75.0
Min, Max	50, 105	44, 110	50, 113	44, 113	55, 101
Week 80					
n	516	549	547	1096	272
Mean	75.5	74.4	74.7	74.6	74.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	9.77	9.21	8.82	9.02	9.46
Median	75.0	74.0	75.0	75.0	74.0
Min, Max	40, 118	49, 100	50, 109	49, 109	50, 100
Week 84					
n	523	564	560	1124	277
Mean	75.7	74.6	74.4	74.5	75.3
SD	9.13	9.11	8.97	9.04	9.29
Median	76.0	75.0	75.0	75.0	75.0
Min, Max	49, 106	46, 100	52, 104	46, 104	54, 104
Week 88					
n	510	544	541	1085	265
Mean	75.7	74.7	74.5	74.6	75.1
SD	9.63	9.07	8.99	9.03	9.76
Median	75.0	75.0	75.0	75.0	75.0
Min, Max	46, 109	50, 108	50, 106	50, 108	50, 119
Week 92					
n	501	533	535	1068	262
Mean	76.2	74.9	74.7	74.8	75.3
SD	9.28	9.02	8.62	8.82	8.75
Median	76.0	75.0	75.0	75.0	74.0
Min, Max	50, 111	49, 106	52, 107	49, 107	59, 100

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Summary of vital signs over time - actual values by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 96					
n	494	540	526	1066	265
Mean	76.0	74.7	74.7	74.7	75.8
SD	9.22	8.94	8.87	8.90	9.33
Median	76.0	75.0	75.0	75.0	75.0
Min, Max	51, 110	53, 100	50, 110	50, 110	48, 107

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-A.SAS DATE: 01OCT2015

Table 272: Summary of Vital Signs Over Time - Change From Baseline by Visit: Studies 109MS301 and 109MS302

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Week 4					
n	735	713	709	1422	333
Mean	-0.02	0.01	0.02	0.01	-0.04
SD	0.362	0.391	0.351	0.371	0.318
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-2.0, 1.9	-1.5, 2.5	-1.3, 1.6	-1.5, 2.5	-1.3, 1.1
Week 8					
n	719	692	663	1355	324
Mean	-0.02	-0.01	-0.01	-0.01	-0.03
SD	0.361	0.425	0.353	0.391	0.325
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.6, 1.7	-2.5, 1.9	-1.6, 1.4	-2.5, 1.9	-1.6, 1.4
Week 12					
n	716	684	661	1345	322
Mean	0.00	0.00	0.00	0.00	-0.01
SD	0.367	0.410	0.335	0.375	0.339
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.7, 2.0	-1.8, 1.8	-1.3, 1.5	-1.8, 1.8	-1.6, 1.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 16					
n	693	652	634	1286	314
Mean	-0.04	-0.02	0.00	-0.01	-0.01
SD	0.394	0.375	0.376	0.376	0.365
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-2.0, 1.8	-1.7, 1.6	-2.4, 1.7	-2.4, 1.7	-1.7, 1.4
Week 20					
n	683	644	634	1278	310
Mean	-0.03	-0.01	-0.03	-0.02	-0.02
SD	0.406	0.410	0.380	0.395	0.371
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-2.1, 1.8	-1.7, 1.7	-1.8, 3.1	-1.8, 3.1	-1.3, 1.8
Week 24					
n	673	644	625	1269	313
Mean	-0.02	0.00	-0.02	-0.01	-0.01
SD	0.395	0.399	0.354	0.377	0.392
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-2.0, 1.6	-1.7, 2.0	-1.5, 1.4	-1.7, 2.0	-1.4, 1.6
Week 28					
n	658	624	609	1233	302
Mean	-0.03	-0.02	-0.01	-0.02	0.01

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	0.405	0.429	0.389	0.410	0.373
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.9, 2.6	-2.4, 1.6	-1.8, 2.1	-2.4, 2.1	-1.4, 2.0
Week 32					
n	645	624	597	1221	300
Mean	-0.02	-0.03	-0.01	-0.02	-0.02
SD	0.414	0.405	0.378	0.392	0.345
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.7, 1.7	-2.3, 1.9	-1.9, 1.2	-2.3, 1.9	-1.5, 1.3
Week 36					
n	642	624	614	1238	307
Mean	-0.02	-0.01	-0.02	-0.02	-0.01
SD	0.409	0.421	0.385	0.403	0.354
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.4, 2.1	-1.8, 1.7	-2.0, 1.5	-2.0, 1.7	-1.4, 1.3
Week 40					
n	630	601	593	1194	296
Mean	-0.04	-0.03	-0.01	-0.02	-0.02
SD	0.396	0.410	0.365	0.388	0.383
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.5, 1.5	-1.7, 1.9	-1.4, 1.3	-1.7, 1.9	-1.8, 1.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 44					
n	605	587	587	1174	290
Mean	-0.02	-0.03	-0.03	-0.03	-0.01
SD	0.387	0.426	0.383	0.405	0.391
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.7, 1.6	-1.7, 1.9	-1.5, 1.2	-1.7, 1.9	-1.5, 1.7
Week 48					
n	598	593	597	1190	294
Mean	-0.03	-0.03	-0.02	-0.02	-0.05
SD	0.406	0.428	0.382	0.406	0.355
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.6, 1.6	-1.7, 1.9	-1.4, 1.6	-1.7, 1.9	-1.3, 1.5
Week 52					
n	562	576	573	1149	282
Mean	-0.04	-0.02	-0.02	-0.02	-0.02
SD	0.411	0.406	0.398	0.402	0.369
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.9, 1.8	-2.1, 1.7	-2.2, 1.3	-2.2, 1.7	-1.5, 1.7
Week 56					
n	558	561	562	1123	277
Mean	-0.06	-0.03	-0.02	-0.02	-0.03

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	0.403	0.433	0.385	0.409	0.350
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-2.0, 1.7	-2.1, 2.2	-1.7, 1.6	-2.1, 2.2	-1.5, 1.0
Week 60					
n	557	569	583	1152	285
Mean	-0.06	-0.04	-0.03	-0.04	-0.05
SD	0.405	0.442	0.393	0.418	0.412
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.8, 1.8	-1.8, 1.9	-1.4, 1.7	-1.8, 1.9	-2.0, 1.4
Week 64					
n	538	558	553	1111	271
Mean	-0.06	-0.05	-0.03	-0.04	-0.04
SD	0.416	0.421	0.385	0.403	0.385
Median	-0.10	0.00	0.00	0.00	0.00
Min, Max	-1.9, 2.2	-1.8, 2.3	-1.5, 1.5	-1.8, 2.3	-1.3, 1.6
Week 68					
n	524	551	547	1098	275
Mean	-0.02	-0.04	-0.06	-0.05	-0.06
SD	0.401	0.430	0.413	0.421	0.367
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.5, 1.9	-1.6, 2.3	-1.8, 1.3	-1.8, 2.3	-1.4, 2.0

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	514	561	554	1115	272
Mean	-0.05	-0.04	-0.06	-0.05	-0.07
SD	0.409	0.427	0.488	0.458	0.376
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.4, 1.7	-1.8, 2.1	-6.8, 1.3	-6.8, 2.1	-1.5, 1.1
Week 76					
n	505	538	537	1075	267
Mean	-0.05	-0.03	-0.04	-0.04	-0.04
SD	0.432	0.426	0.417	0.421	0.382
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-2.0, 2.0	-2.1, 2.2	-2.9, 1.1	-2.9, 2.2	-1.3, 1.4
Week 80					
n	504	537	534	1071	267
Mean	-0.05	-0.03	-0.05	-0.04	-0.05
SD	0.439	0.449	0.441	0.445	0.385
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-2.2, 1.4	-2.9, 2.6	-3.7, 1.5	-3.7, 2.6	-1.4, 1.6
Week 84					
n	512	552	547	1099	271
Mean	-0.04	-0.04	-0.04	-0.04	-0.05

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Body Temperature (C)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	0.416	0.432	0.446	0.439	0.390
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.7, 1.6	-1.7, 1.7	-1.9, 1.5	-1.9, 1.7	-1.5, 1.1
Week 88					
n	499	530	528	1058	261
Mean	-0.06	-0.03	-0.05	-0.04	-0.05
SD	0.415	0.425	0.383	0.404	0.393
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.9, 1.8	-2.5, 1.8	-2.2, 1.3	-2.5, 1.8	-1.7, 1.7
Week 92					
n	488	518	523	1041	256
Mean	-0.04	-0.02	-0.06	-0.04	-0.05
SD	0.448	0.449	0.419	0.435	0.367
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.8, 1.9	-2.3, 2.2	-2.1, 1.5	-2.3, 2.2	-1.6, 1.1
Week 96					
n	482	528	515	1043	260
Mean	-0.06	-0.01	-0.02	-0.01	-0.05
SD	0.436	0.434	0.429	0.431	0.391
Median	0.00	0.00	0.00	0.00	0.00
Min, Max	-1.6, 1.9	-1.7, 2.2	-3.1, 1.6	-3.1, 2.2	-1.4, 1.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Week 4					
n	750	730	724	1454	340
Mean	1.3	2.5	2.8	2.6	0.1
SD	9.61	9.37	9.76	9.57	8.91
Median	0.0	2.0	2.0	2.0	0.0
Min, Max	-36, 33	-28, 38	-28, 35	-28, 38	-30, 35
Week 8					
n	732	706	676	1382	331
Mean	0.8	2.3	1.9	2.1	0.5
SD	9.60	9.54	10.14	9.84	10.14
Median	0.0	2.0	2.0	2.0	1.0
Min, Max	-37, 30	-33, 45	-42, 39	-42, 45	-34, 45
Week 12					
n	729	697	675	1372	329
Mean	1.1	2.4	2.0	2.2	0.2
SD	9.76	9.83	10.04	9.93	9.76
Median	0.0	2.0	2.0	2.0	0.0
Min, Max	-30, 42	-30, 44	-42, 47	-42, 47	-35, 35

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 16					
n	708	667	649	1316	319
Mean	1.2	2.5	2.4	2.4	0.4
SD	10.14	9.95	10.54	10.24	9.82
Median	0.0	2.0	2.0	2.0	0.0
Min, Max	-36, 37	-33, 34	-34, 56	-34, 56	-38, 40
Week 20					
n	697	656	647	1303	316
Mean	1.0	2.9	2.4	2.7	-0.1
SD	10.15	10.60	10.41	10.51	9.94
Median	0.0	2.0	2.0	2.0	0.0
Min, Max	-39, 44	-33, 86	-36, 35	-36, 86	-38, 36
Week 24					
n	686	660	640	1300	318
Mean	0.5	1.7	1.6	1.6	0.5
SD	10.26	10.42	10.30	10.36	10.39
Median	0.0	1.0	0.5	1.0	0.0
Min, Max	-40, 38	-34, 42	-38, 37	-38, 42	-35, 47
Week 28					
n	677	637	625	1262	308
Mean	1.2	2.3	2.1	2.2	0.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	10.53	10.62	10.58	10.59	10.55
Median	0.0	2.0	2.0	2.0	0.0
Min, Max	-45, 66	-33, 48	-47, 34	-47, 48	-31, 59
Week 32					
n	658	639	612	1251	307
Mean	1.6	2.8	2.2	2.5	0.2
SD	10.37	10.38	10.56	10.47	10.95
Median	2.0	2.0	2.0	2.0	0.0
Min, Max	-37, 36	-32, 44	-29, 52	-32, 52	-35, 40
Week 36					
n	654	636	628	1264	313
Mean	1.2	2.2	2.0	2.1	0.7
SD	10.08	9.82	10.63	10.23	9.82
Median	1.0	2.0	2.0	2.0	0.0
Min, Max	-36, 37	-29, 32	-28, 37	-29, 37	-32, 34
Week 40					
n	644	613	609	1222	302
Mean	1.2	2.3	2.1	2.2	-0.2
SD	10.20	10.32	10.73	10.52	9.96
Median	1.0	2.0	2.0	2.0	0.0
Min, Max	-32, 39	-28, 44	-31, 42	-31, 44	-35, 30

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 44					
n	620	600	602	1202	297
Mean	1.0	2.7	2.4	2.6	-0.6
SD	10.38	10.08	11.17	10.64	10.21
Median	0.0	2.0	2.0	2.0	0.0
Min, Max	-40, 46	-24, 40	-30, 45	-30, 45	-34, 33
Week 48					
n	611	609	612	1221	300
Mean	0.1	1.5	1.0	1.2	-0.5
SD	10.36	10.58	10.45	10.51	10.42
Median	0.0	2.0	0.0	1.0	-0.5
Min, Max	-29, 67	-32, 40	-30, 45	-32, 45	-33, 35
Week 52					
n	578	588	584	1172	288
Mean	0.3	2.1	1.9	2.0	-0.5
SD	10.19	10.29	10.29	10.28	10.45
Median	0.0	2.0	2.0	2.0	0.0
Min, Max	-34, 40	-34, 40	-39, 36	-39, 40	-35, 36
Week 56					
n	574	573	574	1147	284
Mean	0.8	2.0	2.1	2.1	0.3

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	10.61	10.65	10.52	10.58	10.10
Median	0.0	1.0	2.0	2.0	0.0
Min, Max	-52, 36	-28, 43	-24, 38	-28, 43	-39, 34
Week 60					
n	570	582	594	1176	291
Mean	0.9	1.5	2.0	1.8	0.6
SD	10.56	10.32	10.69	10.51	9.91
Median	0.0	2.0	0.0	1.0	0.0
Min, Max	-37, 60	-36, 36	-28, 42	-36, 42	-36, 32
Week 64					
n	551	572	565	1137	278
Mean	0.9	2.2	2.2	2.2	0.5
SD	10.42	10.27	10.53	10.40	10.72
Median	0.0	2.0	1.0	2.0	0.0
Min, Max	-42, 38	-32, 38	-28, 40	-32, 40	-30, 33
Week 68					
n	536	563	559	1122	281
Mean	0.9	2.1	2.2	2.1	0.0
SD	10.76	10.36	11.26	10.81	10.41
Median	0.0	2.0	2.0	2.0	0.0
Min, Max	-38, 46	-29, 52	-32, 43	-32, 52	-40, 24

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	526	571	566	1137	279
Mean	0.5	2.1	1.8	1.9	-0.4
SD	10.71	10.59	10.33	10.46	10.02
Median	0.0	2.0	1.0	2.0	0.0
Min, Max	-56, 41	-33, 48	-34, 40	-34, 48	-38, 28
Week 76					
n	518	549	550	1099	272
Mean	1.0	2.1	2.6	2.4	0.4
SD	10.87	10.10	11.12	10.62	10.36
Median	0.0	1.0	2.0	2.0	0.0
Min, Max	-45, 52	-31, 37	-28, 43	-31, 43	-34, 35
Week 80					
n	516	548	546	1094	272
Mean	0.4	3.0	2.4	2.7	-0.1
SD	10.59	10.32	11.10	10.72	10.01
Median	0.0	2.5	2.0	2.0	0.0
Min, Max	-45, 41	-32, 36	-28, 48	-32, 48	-35, 32
Week 84					
n	523	564	559	1123	277
Mean	0.9	2.2	2.0	2.1	-0.2

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Pulse Rate (beats/min)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	10.26	10.18	10.75	10.46	10.15
Median	0.0	2.0	1.0	2.0	0.0
Min, Max	-50, 39	-29, 42	-30, 39	-30, 42	-36, 36
Week 88					
n	510	544	541	1085	265
Mean	1.0	3.0	1.8	2.4	-0.1
SD	11.31	10.84	10.55	10.71	10.63
Median	0.5	3.0	1.0	2.0	0.0
Min, Max	-46, 52	-28, 47	-30, 32	-30, 47	-33, 34
Week 92					
n	500	534	535	1069	262
Mean	1.3	2.7	1.9	2.3	0.0
SD	10.75	10.87	10.63	10.76	9.94
Median	2.0	2.0	2.0	2.0	0.0
Min, Max	-44, 30	-36, 47	-29, 40	-36, 47	-31, 26
Week 96					
n	494	540	526	1066	265
Mean	0.6	1.5	1.4	1.5	-0.6
SD	10.96	10.62	10.68	10.64	10.72
Median	0.0	1.0	1.0	1.0	0.0
Min, Max	-40, 66	-56, 42	-34, 36	-56, 42	-30, 33

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Week 4					
n	750	729	724	1453	339
Mean	0.4	-0.8	-1.0	-0.9	0.0
SD	11.67	11.31	12.21	11.77	10.80
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-67, 43	-40, 34	-50, 55	-50, 55	-54, 31
Week 8					
n	733	706	676	1382	331
Mean	-0.1	-0.9	-1.3	-1.1	0.1
SD	12.69	11.71	12.37	12.04	11.85
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-60, 51	-40, 45	-60, 55	-60, 55	-30, 50
Week 12					
n	729	697	675	1372	329
Mean	0.3	-1.2	-1.7	-1.5	-0.1
SD	12.13	11.92	12.72	12.32	12.99
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-60, 48	-43, 44	-60, 70	-60, 70	-61, 43

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 16					
n	708	667	649	1316	320
Mean	0.5	-0.6	-2.3	-1.4	-0.7
SD	13.20	11.69	13.08	12.41	11.25
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-60, 50	-35, 42	-60, 45	-60, 45	-40, 36
Week 20					
n	697	657	647	1304	316
Mean	0.5	-0.8	-2.4	-1.6	-0.2
SD	13.10	12.32	13.08	12.72	11.73
Median	0.0	0.0	-1.0	0.0	0.0
Min, Max	-60, 49	-37, 45	-60, 34	-60, 45	-31, 34
Week 24					
n	686	660	639	1299	319
Mean	-0.1	-1.0	-2.8	-1.9	-0.8
SD	13.11	12.27	12.28	12.30	12.51
Median	0.0	0.0	-1.0	0.0	0.0
Min, Max	-52, 75	-40, 52	-60, 55	-60, 55	-50, 55
Week 28					
n	678	637	624	1261	308
Mean	0.0	-1.1	-1.6	-1.4	-0.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	13.31	12.28	13.60	12.95	13.29
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-61, 50	-46, 38	-86, 58	-86, 58	-41, 51
Week 32					
n	659	638	612	1250	307
Mean	0.4	-1.2	-2.3	-1.8	-0.7
SD	12.97	11.93	13.61	12.78	11.70
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-58, 51	-50, 49	-51, 53	-51, 53	-35, 36
Week 36					
n	654	636	628	1264	313
Mean	-0.6	-0.8	-2.6	-1.7	-1.2
SD	12.70	12.58	13.02	12.83	13.45
Median	0.0	0.0	-2.0	0.0	0.0
Min, Max	-52, 50	-45, 40	-60, 37	-60, 40	-50, 30
Week 40					
n	644	613	609	1222	302
Mean	-0.3	-2.1	-2.1	-2.1	-0.2
SD	12.85	12.65	12.84	12.74	12.26
Median	0.0	0.0	-1.0	0.0	0.0
Min, Max	-52, 50	-52, 36	-51, 53	-52, 53	-44, 39

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 44					
n	620	601	602	1203	298
Mean	-0.2	-2.3	-2.1	-2.2	-0.1
SD	13.27	12.44	13.07	12.75	13.01
Median	0.0	-1.0	-1.0	-1.0	0.0
Min, Max	-60, 48	-60, 30	-80, 50	-80, 50	-40, 41
Week 48					
n	611	609	613	1222	300
Mean	-0.6	-1.7	-1.8	-1.7	-0.8
SD	13.27	12.34	13.84	13.11	13.45
Median	0.0	0.0	-1.0	0.0	0.0
Min, Max	-58, 51	-50, 41	-55, 60	-55, 60	-48, 54
Week 52					
n	578	588	584	1172	287
Mean	-0.6	-2.3	-3.4	-2.9	-0.9
SD	13.53	12.15	13.15	12.67	12.06
Median	0.0	-0.5	-3.0	-1.5	0.0
Min, Max	-60, 51	-40, 40	-50, 40	-50, 40	-40, 30
Week 56					
n	574	573	574	1147	284
Mean	0.3	-2.3	-2.7	-2.5	-0.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	13.15	11.78	13.42	12.62	12.50
Median	0.0	0.0	-2.0	-1.0	0.0
Min, Max	-58, 61	-52, 29	-60, 41	-60, 41	-48, 42
Week 60					
n	570	582	595	1177	291
Mean	-0.6	-2.1	-2.3	-2.2	-0.9
SD	13.70	12.19	13.10	12.66	12.72
Median	0.0	0.0	-1.0	0.0	0.0
Min, Max	-48, 39	-42, 50	-60, 32	-60, 50	-44, 37
Week 64					
n	551	572	565	1137	278
Mean	-0.5	-2.0	-2.8	-2.4	-1.1
SD	13.15	12.61	14.18	13.41	12.46
Median	0.0	0.0	-1.0	0.0	0.0
Min, Max	-46, 50	-49, 35	-60, 41	-60, 41	-52, 40
Week 68					
n	537	564	559	1123	281
Mean	-0.5	-1.5	-2.6	-2.0	-0.9
SD	13.64	12.31	14.36	13.38	12.72
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-50, 48	-40, 35	-80, 33	-80, 35	-47, 50

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	527	573	566	1139	279
Mean	-0.5	-1.6	-2.6	-2.1	-1.2
SD	13.09	12.18	14.30	13.28	13.70
Median	0.0	0.0	-2.0	-1.0	0.0
Min, Max	-42, 59	-41, 41	-63, 38	-63, 41	-54, 51
Week 76					
n	518	550	550	1100	272
Mean	-0.1	-1.4	-2.8	-2.1	-1.2
SD	13.17	12.77	14.24	13.54	13.15
Median	0.0	0.0	-2.0	-1.0	0.0
Min, Max	-50, 52	-43, 37	-50, 41	-50, 41	-44, 50
Week 80					
n	516	549	547	1096	272
Mean	0.4	-1.6	-2.3	-2.0	-0.7
SD	12.94	13.16	14.38	13.78	13.15
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-46, 49	-43, 39	-50, 47	-50, 47	-43, 36
Week 84					
n	523	564	560	1124	277
Mean	0.4	-1.7	-2.6	-2.1	-0.8

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Systolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	13.51	13.25	14.64	13.96	13.28
Median	0.0	0.0	-1.0	-1.0	0.0
Min, Max	-42, 44	-51, 49	-50, 40	-51, 49	-47, 43
Week 88					
n	510	544	541	1085	265
Mean	0.4	-1.8	-2.3	-2.0	-0.2
SD	13.59	12.77	14.50	13.65	13.30
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-40, 50	-52, 39	-60, 40	-60, 40	-50, 42
Week 92					
n	501	533	535	1068	262
Mean	0.5	-1.0	-2.3	-1.6	-0.8
SD	13.72	12.54	14.67	13.66	12.56
Median	0.0	0.0	-2.0	0.0	0.0
Min, Max	-50, 48	-40, 54	-55, 44	-55, 54	-34, 43
Week 96					
n	494	540	526	1066	265
Mean	-0.1	-0.5	-2.0	-1.3	0.0
SD	13.81	13.17	14.55	13.88	13.02
Median	0.0	0.0	-1.0	0.0	0.0
Min, Max	-40, 52	-63, 41	-60, 42	-63, 42	-37, 40

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	771 (100)	769 (100)	760 (100)	1529 (100)	351 (100)
Week 4					
n	750	729	724	1453	339
Mean	0.0	-0.5	-0.8	-0.6	0.0
SD	9.10	8.33	9.49	8.92	8.38
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-57, 30	-33, 30	-30, 50	-33, 50	-30, 25
Week 8					
n	733	706	676	1382	331
Mean	-0.2	-0.6	-0.9	-0.7	-0.2
SD	9.37	9.09	9.23	9.16	8.73
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-32, 30	-35, 35	-50, 36	-50, 36	-25, 26
Week 12					
n	729	697	675	1372	329
Mean	0.3	-1.0	-0.5	-0.8	-0.3
SD	9.58	9.10	9.04	9.07	9.12
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-40, 38	-32, 30	-40, 32	-40, 32	-38, 25

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 16					
n	708	667	649	1316	320
Mean	-0.2	-0.5	-0.9	-0.7	-0.4
SD	9.63	9.15	9.95	9.55	8.64
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-36, 38	-32, 31	-40, 40	-40, 40	-25, 37
Week 20					
n	697	657	647	1304	316
Mean	0.2	-0.7	-1.1	-0.9	0.0
SD	10.19	9.71	10.01	9.86	9.41
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-50, 38	-35, 32	-50, 36	-50, 36	-32, 32
Week 24					
n	686	660	639	1299	319
Mean	0.0	-0.9	-1.7	-1.3	-0.1
SD	9.61	9.39	9.52	9.46	8.90
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-34, 30	-29, 35	-40, 35	-40, 35	-25, 31
Week 28					
n	678	637	624	1261	308
Mean	-0.1	-0.5	-0.9	-0.7	-0.6

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	10.11	9.38	10.18	9.78	9.39
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-37, 35	-30, 33	-60, 54	-60, 54	-35, 26
Week 32					
n	659	638	612	1250	307
Mean	0.0	-1.3	-1.0	-1.2	-0.7
SD	9.48	9.46	10.18	9.82	9.19
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-33, 31	-28, 36	-50, 40	-50, 40	-40, 32
Week 36					
n	654	635	628	1263	313
Mean	-0.1	-0.9	-0.9	-0.9	-0.8
SD	9.67	9.49	9.61	9.54	9.58
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-32, 35	-35, 30	-50, 37	-50, 37	-26, 30
Week 40					
n	644	613	609	1222	302
Mean	-0.2	-1.4	-1.3	-1.3	-1.3
SD	9.94	9.43	9.71	9.57	8.77
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-31, 40	-30, 34	-40, 25	-40, 34	-32, 23

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 44					
n	620	601	602	1203	298
Mean	0.0	-1.2	-1.1	-1.1	-1.0
SD	10.07	9.51	9.89	9.70	10.13
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-50, 36	-30, 30	-60, 30	-60, 30	-30, 28
Week 48					
n	611	609	613	1222	300
Mean	-0.4	-1.2	-1.2	-1.2	-0.9
SD	10.05	9.89	9.69	9.79	10.01
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-40, 35	-35, 41	-45, 26	-45, 41	-29, 30
Week 52					
n	578	588	584	1172	287
Mean	-0.4	-1.6	-1.4	-1.5	-0.5
SD	9.80	9.23	9.54	9.38	9.75
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-50, 30	-29, 30	-30, 26	-30, 30	-28, 25
Week 56					
n	574	573	574	1147	284
Mean	0.5	-1.8	-1.7	-1.7	-0.9

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	10.08	9.72	9.47	9.59	9.49
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-39, 32	-35, 39	-30, 30	-35, 39	-31, 22
Week 60					
n	570	582	595	1177	291
Mean	0.0	-1.4	-0.8	-1.1	-0.3
SD	10.47	9.32	9.81	9.57	9.64
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-35, 40	-36, 34	-50, 30	-50, 34	-34, 23
Week 64					
n	551	572	565	1137	278
Mean	0.0	-1.9	-1.7	-1.8	-0.7
SD	10.39	9.69	10.11	9.90	9.73
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-33, 42	-35, 31	-80, 34	-80, 34	-34, 31
Week 68					
n	537	564	559	1123	281
Mean	0.4	-1.8	-1.4	-1.6	-0.4
SD	10.36	9.68	10.50	10.10	10.32
Median	0.0	-1.0	0.0	0.0	0.0
Min, Max	-40, 40	-30, 34	-70, 35	-70, 35	-31, 33

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Week 72					
n	527	573	566	1139	279
Mean	-0.2	-1.6	-1.3	-1.4	-0.2
SD	10.15	9.24	10.39	9.83	10.64
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-35, 32	-36, 28	-55, 33	-55, 33	-30, 31
Week 76					
n	517	550	550	1100	272
Mean	-0.2	-1.6	-1.2	-1.4	-1.0
SD	10.46	9.96	10.26	10.11	10.13
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-50, 40	-30, 30	-50, 35	-50, 35	-31, 29
Week 80					
n	516	549	547	1096	272
Mean	0.0	-1.4	-1.0	-1.2	-1.4
SD	10.79	10.04	10.37	10.20	10.19
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-35, 40	-35, 33	-45, 34	-45, 34	-28, 25
Week 84					
n	523	564	560	1124	277
Mean	0.1	-1.3	-1.4	-1.3	-0.4

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Summary of vital signs over time - change from baseline by visit: Studies 109MS301 and 109MS302
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Diastolic Blood Pressure (mmHg)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
SD	10.79	9.86	10.15	10.00	10.09
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-40, 39	-35, 32	-45, 32	-45, 32	-25, 30
Week 88					
n	510	544	541	1085	265
Mean	0.1	-1.1	-1.3	-1.2	-0.8
SD	10.73	10.04	10.06	10.05	10.41
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-30, 38	-30, 34	-50, 32	-50, 34	-31, 33
Week 92					
n	501	533	535	1068	262
Mean	0.8	-0.9	-1.0	-0.9	-0.7
SD	11.13	9.79	10.02	9.90	10.10
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-33, 40	-28, 31	-50, 43	-50, 43	-30, 38
Week 96					
n	494	540	526	1066	265
Mean	0.4	-1.0	-1.1	-1.0	-0.1
SD	10.35	9.68	9.89	9.78	10.41
Median	0.0	0.0	0.0	0.0	0.0
Min, Max	-30, 40	-28, 26	-50, 26	-50, 26	-35, 32

NOTE: Data after subjects switched to alternative MS medications are excluded. Baseline is defined as the latest available value prior to or on the date of first exposure to study treatment.

SOURCE: BG12MS/JAPAN/ISS/T-VS-SUM-CHG-A.SAS DATE: 01OCT2015

Table 274: Incidence of Adverse Events by System Organ Class and Preferred Term - by Age Group: Studies 109MS301 and 109MS302

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302

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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	419 (100)	432 (100)	406 (100)	838 (100)	216 (100)
Number of subjects with an event	393 (94)	410 (95)	384 (95)	794 (95)	187 (87)
感染症および寄生虫症	241 (58)	263 (61)	254 (63)	517 (62)	107 (50)
鼻咽頭炎	84 (20)	100 (23)	96 (24)	196 (23)	31 (14)
上気道感染	43 (10)	63 (15)	55 (14)	118 (14)	18 (8)
尿路感染	50 (12)	57 (13)	51 (13)	108 (13)	26 (12)
インフルエンザ	31 (7)	25 (6)	50 (12)	75 (9)	10 (5)
胃腸炎	16 (4)	24 (6)	24 (6)	48 (6)	5 (2)
気管支炎	20 (5)	20 (5)	27 (7)	47 (6)	6 (3)
副鼻腔炎	17 (4)	19 (4)	28 (7)	47 (6)	4 (2)
咽頭炎	25 (6)	20 (5)	20 (5)	40 (5)	11 (5)
鼻炎	15 (4)	16 (4)	14 (3)	30 (4)	7 (3)
ウイルス感染	12 (3)	12 (3)	9 (2)	21 (3)	2 (<1)
口腔ヘルペス	13 (3)	11 (3)	8 (2)	19 (2)	3 (1)
気道感染	9 (2)	9 (2)	9 (2)	18 (2)	6 (3)
扁桃炎	9 (2)	9 (2)	9 (2)	18 (2)	1 (<1)
耳感染	6 (1)	3 (<1)	13 (3)	16 (2)	2 (<1)
膀胱炎	11 (3)	5 (1)	9 (2)	14 (2)	3 (1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
中耳炎	1 (<1)	7 (2)	7 (2)	14 (2)	0
ウイルス性上気道感染	7 (2)	7 (2)	5 (1)	12 (1)	6 (3)
ウイルス性胃腸炎	9 (2)	4 (<1)	7 (2)	11 (1)	5 (2)
喉頭炎	4 (<1)	6 (1)	5 (1)	11 (1)	1 (<1)
腟感染	1 (<1)	5 (1)	6 (1)	11 (1)	3 (1)
外陰腟真菌感染	8 (2)	3 (<1)	7 (2)	10 (1)	3 (1)
消化管感染	6 (1)	3 (<1)	6 (1)	9 (1)	1 (<1)
歯膿瘍	6 (1)	4 (<1)	5 (1)	9 (1)	1 (<1)
感染性結膜炎	2 (<1)	3 (<1)	5 (1)	8 (<1)	0
ウイルス性消化管感染	3 (<1)	5 (1)	3 (<1)	8 (<1)	0
帯状疱疹	1 (<1)	2 (<1)	6 (1)	8 (<1)	1 (<1)
気管炎	1 (<1)	6 (1)	1 (<1)	7 (<1)	1 (<1)
蜂巣炎	0	4 (<1)	2 (<1)	6 (<1)	1 (<1)
麦粒腫	2 (<1)	4 (<1)	2 (<1)	6 (<1)	0
外陰部腟カンジダ症	3 (<1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
下気道感染	2 (<1)	1 (<1)	4 (<1)	5 (<1)	1 (<1)
咽頭扁桃炎	1 (<1)	4 (<1)	1 (<1)	5 (<1)	1 (<1)
ウイルス性気道感染	4 (<1)	3 (<1)	2 (<1)	5 (<1)	0
外耳炎	1 (<1)	3 (<1)	1 (<1)	4 (<1)	1 (<1)
急性扁桃炎	4 (<1)	3 (<1)	0	3 (<1)	2 (<1)
遊走性紅斑	0	1 (<1)	2 (<1)	3 (<1)	0
せつ	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Ｈ１Ｎ１インフルエンザ	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
シラミ寄生	0	2 (<1)	1 (<1)	3 (<1)	0
爪真菌症	1 (<1)	3 (<1)	0	3 (<1)	0
レンサ球菌性咽頭炎	7 (2)	1 (<1)	2 (<1)	3 (<1)	0
肺炎	2 (<1)	1 (<1)	2 (<1)	3 (<1)	2 (<1)
皮下組織膿瘍	0	2 (<1)	1 (<1)	3 (<1)	0
癜風	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
歯感染	1 (<1)	0	3 (<1)	3 (<1)	3 (1)
細菌性膣炎	1 (<1)	3 (<1)	0	3 (<1)	1 (<1)
急性副鼻腔炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
眼感染	3 (<1)	2 (<1)	0	2 (<1)	0
性器カンジダ症	0	2 (<1)	0	2 (<1)	0
単純ヘルペス	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
咬傷感染	1 (<1)	2 (<1)	0	2 (<1)	0
口腔カンジダ症	0	0	2 (<1)	2 (<1)	0
口腔真菌感染	0	1 (<1)	1 (<1)	2 (<1)	0
骨盤内炎症性疾患	0	0	2 (<1)	2 (<1)	0
術後創感染	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
細菌性副鼻腔炎	0	2 (<1)	0	2 (<1)	0
ブドウ球菌感染	0	0	2 (<1)	2 (<1)	0
腸チフス熱	0	0	2 (<1)	2 (<1)	0
虫垂炎	0	1 (<1)	0	1 (<1)	1 (<1)

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
無症候性細菌尿	0	1 (<1)	0	1 (<1)	0
細菌感染	0	1 (<1)	0	1 (<1)	0
細菌尿	0	1 (<1)	0	1 (<1)	1 (<1)
ボレリア感染	2 (<1)	1 (<1)	0	1 (<1)	0
乳房膿瘍	0	0	1 (<1)	1 (<1)	0
子宮頚管炎	0	1 (<1)	0	1 (<1)	0
細菌性結膜炎	0	0	1 (<1)	1 (<1)	0
ウイルス性結膜炎	0	0	1 (<1)	1 (<1)	0
ダグラス窩膿瘍	0	0	1 (<1)	1 (<1)	0
感染性湿疹	0	0	1 (<1)	1 (<1)	0
毛包炎	0	1 (<1)	0	1 (<1)	0
真菌感染	0	1 (<1)	0	1 (<1)	0
陰部ヘルペス	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
細菌性性器感染	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
泌尿生殖器感染	1 (<1)	1 (<1)	0	1 (<1)	0
ジアルジア症	0	1 (<1)	0	1 (<1)	0
ヘリコバクター性胃炎	0	1 (<1)	0	1 (<1)	0
神経合併症を伴う帯状疱疹感染	0	1 (<1)	0	1 (<1)	0
膿痂疹	0	0	1 (<1)	1 (<1)	0
感染性嚢腫	1 (<1)	1 (<1)	0	1 (<1)	0
感染性皮脂嚢腫	1 (<1)	0	1 (<1)	1 (<1)	0
感染	0	0	1 (<1)	1 (<1)	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
伝染性単核症	0	1 (<1)	0	1 (<1)	0
迷路炎	2 (<1)	1 (<1)	0	1 (<1)	0
限局性感染	2 (<1)	1 (<1)	0	1 (<1)	0
マイコプラズマ感染	0	0	1 (<1)	1 (<1)	0
爪感染	0	0	1 (<1)	1 (<1)	0
急性中耳炎	0	0	1 (<1)	1 (<1)	0
爪囲炎	0	1 (<1)	0	1 (<1)	0
扁桃周囲膿瘍	0	0	1 (<1)	1 (<1)	0
ウイルス感染後疲労症候群	1 (<1)	1 (<1)	0	1 (<1)	0
歯髄炎	0	0	1 (<1)	1 (<1)	0
腎盂腎炎	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
急性腎盂腎炎	0	0	1 (<1)	1 (<1)	0
膿皮症	0	1 (<1)	0	1 (<1)	0
卵管卵巣炎	2 (<1)	1 (<1)	0	1 (<1)	0
陰嚢膿瘍	0	0	1 (<1)	1 (<1)	0
皮膚感染	0	1 (<1)	0	1 (<1)	0
軟部組織感染	0	1 (<1)	0	1 (<1)	0
細菌性上気道感染	0	1 (<1)	0	1 (<1)	0
細菌性尿路感染	0	0	1 (<1)	1 (<1)	0
外陰部膿瘍	0	0	1 (<1)	1 (<1)	0
外陰部炎	0	1 (<1)	0	1 (<1)	0
顎膿瘍	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
四肢膿瘍	1 (<1)	0	0	0	0
慢性副鼻腔炎	0	0	0	0	1 (<1)
デング熱	0	0	0	0	1 (<1)
皮膚真菌感染	1 (<1)	0	0	0	0
真菌性消化管感染	1 (<1)	0	0	0	0
ヘルペスウイルス感染	0	0	0	0	1 (<1)
乳腺炎	1 (<1)	0	0	0	0
乳様突起炎	0	0	0	0	1 (<1)
ムンプス	1 (<1)	0	0	0	0
子宮傍組織炎	0	0	0	0	1 (<1)
歯周感染	1 (<1)	0	0	0	1 (<1)
細菌性咽頭炎	1 (<1)	0	0	0	0
毛巣嚢胞	1 (<1)	0	0	0	0
猩紅熱	1 (<1)	0	0	0	0
敗血症	1 (<1)	0	0	0	0
レンサ球菌感染	1 (<1)	0	0	0	0
白癬感染	1 (<1)	0	0	0	0
足部白癬	3 (<1)	0	0	0	0
気管気管支炎	1 (<1)	0	0	0	1 (<1)
消化器結核	1 (<1)	0	0	0	0
尿路性敗血症	2 (<1)	0	0	0	0
膣膿瘍	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
水痘	0	0	0	0	1 (<1)
創傷感染	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	7 (2)	10 (2)	4 (<1)	14 (2)	2 (<1)
脂肪腫	0	2 (<1)	1 (<1)	3 (<1)	1 (<1)
メラノサイト性母斑	1 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
皮膚乳頭腫	1 (<1)	2 (<1)	0	2 (<1)	0
子宮平滑筋腫	0	1 (<1)	1 (<1)	2 (<1)	0
乳腺線維腺腫	0	1 (<1)	0	1 (<1)	0
線維腫	1 (<1)	1 (<1)	0	1 (<1)	0
肝臓血管腫	0	0	1 (<1)	1 (<1)	0
外陰腟ヒト乳頭腫ウイルス感染	0	1 (<1)	0	1 (<1)	0
アクロコルドン	1 (<1)	0	0	0	0
乳癌	1 (<1)	0	0	0	0
乳房新生物	1 (<1)	0	0	0	0
血管腫	1 (<1)	0	0	0	0
良性副甲状腺腫瘍	1 (<1)	0	0	0	0
血液およびリンパ系障害	23 (5)	29 (7)	26 (6)	55 (7)	7 (3)
貧血	8 (2)	6 (1)	9 (2)	15 (2)	2 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
リンパ球減少症	2 (<1)	8 (2)	7 (2)	15 (2)	0
白血球減少症	1 (<1)	3 (<1)	7 (2)	10 (1)	0
リンパ節症	2 (<1)	4 (<1)	3 (<1)	7 (<1)	3 (1)
好中球増加症	4 (<1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
好酸球増加症	1 (<1)	3 (<1)	2 (<1)	5 (<1)	0
白血球増加症	3 (<1)	4 (<1)	1 (<1)	5 (<1)	0
鉄欠乏性貧血	2 (<1)	2 (<1)	0	2 (<1)	0
好中球減少症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
血小板減少症	0	2 (<1)	0	2 (<1)	1 (<1)
正色素性正球性貧血	0	0	1 (<1)	1 (<1)	0
脾腫	0	0	1 (<1)	1 (<1)	0
妊娠貧血	1 (<1)	0	0	0	0
低色素性貧血	1 (<1)	0	0	0	0
リンパ節炎	1 (<1)	0	0	0	0
免疫系障害	10 (2)	12 (3)	10 (2)	22 (3)	2 (<1)
季節性アレルギー	5 (1)	5 (1)	4 (<1)	9 (1)	1 (<1)
食物アレルギー	0	5 (1)	1 (<1)	6 (<1)	0
過敏症	1 (<1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
薬物過敏症	3 (<1)	1 (<1)	1 (<1)	2 (<1)	0
アナフィラキシー様反応	0	0	1 (<1)	1 (<1)	0
造影剤アレルギー	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
家塵アレルギー	0	0	1 (<1)	1 (<1)	0
化学物質アレルギー	1 (<1)	0	0	0	0
内分泌障害	5 (1)	4 (<1)	4 (<1)	8 (<1)	1 (<1)
甲状腺腫	0	2 (<1)	1 (<1)	3 (<1)	0
甲状腺機能低下症	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
間脳性内分泌障害	0	0	1 (<1)	1 (<1)	0
続発性副甲状腺機能亢進症	0	1 (<1)	0	1 (<1)	0
甲状腺機能亢進症	1 (<1)	0	1 (<1)	1 (<1)	0
副甲状腺機能亢進症	1 (<1)	0	0	0	0
代謝および栄養障害	26 (6)	28 (6)	22 (5)	50 (6)	10 (5)
食欲減退	6 (1)	10 (2)	6 (1)	16 (2)	3 (1)
ビタミンD欠乏	0	2 (<1)	6 (1)	8 (<1)	0
高コレステロール血症	1 (<1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
高血糖	3 (<1)	2 (<1)	3 (<1)	5 (<1)	0
脱水	0	2 (<1)	1 (<1)	3 (<1)	0
脂質異常症	0	0	3 (<1)	3 (<1)	0
耐糖能障害	0	1 (<1)	2 (<1)	3 (<1)	0
ビタミン欠乏症	1 (<1)	2 (<1)	0	2 (<1)	0
２型糖尿病	0	2 (<1)	0	2 (<1)	0
糖尿病	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
糖尿病性ケトアシドーシス	2 (<1)	0	1 (<1)	1 (<1)	0
高トリグリセリド血症	3 (<1)	1 (<1)	0	1 (<1)	3 (1)
高尿酸血症	0	1 (<1)	0	1 (<1)	2 (<1)
低血糖症	0	0	1 (<1)	1 (<1)	0
低カリウム血症	1 (<1)	1 (<1)	0	1 (<1)	0
過小食	0	0	1 (<1)	1 (<1)	0
低リン酸血症	0	0	1 (<1)	1 (<1)	0
食欲亢進	1 (<1)	1 (<1)	0	1 (<1)	0
鉄欠乏	1 (<1)	1 (<1)	0	1 (<1)	0
ケトーシス	0	0	1 (<1)	1 (<1)	0
１型糖尿病	0	1 (<1)	0	1 (<1)	0
ビタミンＢ１２欠乏	0	0	1 (<1)	1 (<1)	0
妊娠糖尿病	1 (<1)	0	0	0	0
高カルシウム血症	1 (<1)	0	0	0	0
高カリウム血症	1 (<1)	0	0	0	1 (<1)
高脂血症	2 (<1)	0	0	0	0
ビタミンＤ過剰症	1 (<1)	0	0	0	0
肥満	0	0	0	0	1 (<1)
多飲症	1 (<1)	0	0	0	0
精神障害	75 (18)	70 (16)	74 (18)	144 (17)	32 (15)
うつ病	29 (7)	27 (6)	25 (6)	52 (6)	16 (7)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
不安	12 (3)	19 (4)	19 (5)	38 (5)	4 (2)
不眠症	22 (5)	18 (4)	20 (5)	38 (5)	6 (3)
抑うつ気分	7 (2)	6 (1)	5 (1)	11 (1)	1 (<1)
気分動揺	1 (<1)	2 (<1)	4 (<1)	6 (<1)	0
睡眠障害	4 (<1)	4 (<1)	0	4 (<1)	1 (<1)
初期不眠症	0	0	3 (<1)	3 (<1)	0
パニック発作	1 (<1)	0	3 (<1)	3 (<1)	0
ストレス	2 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
感情不安定	1 (<1)	0	2 (<1)	2 (<1)	2 (<1)
抑うつ症状	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
リビドー減退	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
大うつ病	0	0	2 (<1)	2 (<1)	0
気分変化	0	0	2 (<1)	2 (<1)	0
異常行動	0	1 (<1)	0	1 (<1)	0
感情障害	0	1 (<1)	0	1 (<1)	1 (<1)
不安障害	2 (<1)	1 (<1)	0	1 (<1)	0
双極１型障害	0	1 (<1)	0	1 (<1)	0
歯ぎしり	0	0	1 (<1)	1 (<1)	0
全般性不安障害	0	1 (<1)	0	1 (<1)	0
幻聴	0	1 (<1)	0	1 (<1)	0
自己愛性人格障害	0	1 (<1)	0	1 (<1)	0
神経過敏	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
パニック障害	0	1 (<1)	0	1 (<1)	0
人格変化	0	1 (<1)	0	1 (<1)	0
精神症状	0	1 (<1)	0	1 (<1)	0
精神病性障害	0	0	1 (<1)	1 (<1)	0
落ち着きのなさ	0	1 (<1)	0	1 (<1)	0
睡眠発作	0	0	1 (<1)	1 (<1)	0
身体表現性障害	1 (<1)	1 (<1)	0	1 (<1)	0
自殺念慮	0	1 (<1)	0	1 (<1)	2 (<1)
攻撃性	1 (<1)	0	0	0	0
怒り	1 (<1)	0	0	0	0
自殺既遂	0	0	0	0	1 (<1)
錯乱状態	1 (<1)	0	0	0	0
性的興奮障害	1 (<1)	0	0	0	0
不快気分	1 (<1)	0	0	0	0
躁病	1 (<1)	0	0	0	0
精神障害	0	0	0	0	1 (<1)
中期不眠症	1 (<1)	0	0	0	0
強迫性障害	1 (<1)	0	0	0	0
緊張	1 (<1)	0	0	0	0
タバコ乱用	1 (<1)	0	0	0	0
神経系障害	295 (70)	237 (55)	199 (49)	436 (52)	105 (49)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
多発性硬化症再発	221 (53)	128 (30)	107 (26)	235 (28)	70 (32)
頭痛	68 (16)	73 (17)	74 (18)	147 (18)	29 (13)
錯感覚	40 (10)	32 (7)	25 (6)	57 (7)	4 (2)
感覚鈍麻	21 (5)	21 (5)	25 (6)	46 (5)	11 (5)
浮動性めまい	19 (5)	17 (4)	12 (3)	29 (3)	5 (2)
片頭痛	13 (3)	12 (3)	12 (3)	24 (3)	5 (2)
灼熱感	7 (2)	9 (2)	10 (2)	19 (2)	0
筋痙直	16 (4)	9 (2)	9 (2)	18 (2)	5 (2)
振戦	7 (2)	8 (2)	3 (<1)	11 (1)	2 (<1)
平衡障害	4 (<1)	4 (<1)	6 (1)	10 (1)	0
レルミット徴候	6 (1)	3 (<1)	7 (2)	10 (1)	1 (<1)
異常感覚	2 (<1)	5 (1)	3 (<1)	8 (<1)	0
坐骨神経痛	1 (<1)	6 (1)	2 (<1)	8 (<1)	1 (<1)
感覚障害	6 (1)	3 (<1)	5 (1)	8 (<1)	0
傾眠	3 (<1)	4 (<1)	4 (<1)	8 (<1)	1 (<1)
多発性硬化症	9 (2)	3 (<1)	4 (<1)	7 (<1)	6 (3)
前兆を伴う片頭痛	1 (<1)	5 (1)	1 (<1)	6 (<1)	0
緊張性頭痛	5 (1)	1 (<1)	4 (<1)	5 (<1)	1 (<1)
ウートホフ現象	2 (<1)	3 (<1)	2 (<1)	5 (<1)	0
味覚異常	1 (<1)	3 (<1)	1 (<1)	4 (<1)	0
三叉神経痛	1 (<1)	4 (<1)	0	4 (<1)	0
健忘	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
運動失調	0	0	3 (<1)	3 (<1)	0
認知障害	0	0	3 (<1)	3 (<1)	0
構語障害	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
知覚過敏	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
記憶障害	2 (<1)	3 (<1)	0	3 (<1)	0
神経圧迫	0	0	3 (<1)	3 (<1)	0
神経痛	4 (<1)	3 (<1)	0	3 (<1)	1 (<1)
眼振	0	1 (<1)	2 (<1)	3 (<1)	0
下肢静止不能症候群	2 (<1)	0	3 (<1)	3 (<1)	1 (<1)
失神	2 (<1)	0	3 (<1)	3 (<1)	2 (<1)
手根管症候群	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
頚原性頭痛	0	1 (<1)	1 (<1)	2 (<1)	0
痙攣	3 (<1)	1 (<1)	1 (<1)	2 (<1)	0
注意力障害	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
てんかん	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
顔面不全麻痺	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
大発作痙攣	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
頭部動揺	0	1 (<1)	1 (<1)	2 (<1)	0
過眠症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
運動機能障害	0	1 (<1)	1 (<1)	2 (<1)	0
不随意性筋収縮	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
視神経炎	0	1 (<1)	1 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
失神寸前の状態	1 (<1)	0	2 (<1)	2 (<1)	2 (<1)
意識変容状態	0	0	1 (<1)	1 (<1)	0
帯状感	0	1 (<1)	0	1 (<1)	0
良性頭蓋内圧亢進	0	0	1 (<1)	1 (<1)	0
小脳症候群	0	0	1 (<1)	1 (<1)	0
頚髄神経根痛	1 (<1)	0	1 (<1)	1 (<1)	2 (<1)
振動覚低下	1 (<1)	1 (<1)	0	1 (<1)	0
てんかんの前兆	0	1 (<1)	0	1 (<1)	0
顔面部神経痛	0	1 (<1)	0	1 (<1)	0
片側頭痛	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
不全片麻痺	1 (<1)	0	1 (<1)	1 (<1)	0
反射亢進	3 (<1)	1 (<1)	0	1 (<1)	0
思考散乱	0	0	1 (<1)	1 (<1)	0
脳圧低下	0	0	1 (<1)	1 (<1)	0
意識消失	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
腰髄神経根障害	0	1 (<1)	0	1 (<1)	0
感覚異常性大腿神経痛	0	0	1 (<1)	1 (<1)	0
神経学的症状	0	0	1 (<1)	1 (<1)	0
後頭神経痛	0	0	1 (<1)	1 (<1)	0
部分発作	0	1 (<1)	0	1 (<1)	1 (<1)
睡眠の質低下	0	1 (<1)	0	1 (<1)	1 (<1)
頚髄神経根炎	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
逆行性健忘	0	1 (<1)	0	1 (<1)	0
鎮静	0	0	1 (<1)	1 (<1)	0
副鼻腔炎に伴う頭痛	0	1 (<1)	0	1 (<1)	1 (<1)
会話障害	0	1 (<1)	0	1 (<1)	0
舌の麻痺	0	1 (<1)	0	1 (<1)	0
一過性全健忘	0	0	1 (<1)	1 (<1)	0
一過性脳虚血発作	0	0	1 (<1)	1 (<1)	0
横静脈洞血栓症	0	0	1 (<1)	1 (<1)	0
血管性頭痛	0	0	1 (<1)	1 (<1)	0
第７脳神経麻痺	1 (<1)	1 (<1)	0	1 (<1)	0
失語症	0	0	0	0	1 (<1)
脳血管障害	0	0	0	0	1 (<1)
不器用	1 (<1)	0	0	0	0
複雑部分発作	1 (<1)	0	0	0	0
よだれ	1 (<1)	0	0	0	0
脳症	1 (<1)	0	0	0	0
顔面痙攣	0	0	0	0	1 (<1)
痙性歩行	1 (<1)	0	0	0	0
ホルネル症候群	1 (<1)	0	0	0	0
筋緊張亢進	1 (<1)	0	0	0	0
仮面状顔貌	0	0	0	0	1 (<1)
末梢性ニューロパチー	2 (<1)	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
錐体路症候群	1 (<1)	0	0	0	0
温度覚鈍麻	1 (<1)	0	0	0	0
振動覚亢進	1 (<1)	0	0	0	0
眼障害	43 (10)	39 (9)	40 (10)	79 (9)	13 (6)
眼痛	8 (2)	6 (1)	8 (2)	14 (2)	4 (2)
霧視	10 (2)	5 (1)	8 (2)	13 (2)	2 (<1)
視力障害	3 (<1)	6 (1)	3 (<1)	9 (1)	0
複視	5 (1)	3 (<1)	5 (1)	8 (<1)	2 (<1)
眼瞼痙攣	5 (1)	2 (<1)	5 (1)	7 (<1)	0
結膜炎	3 (<1)	4 (<1)	3 (<1)	7 (<1)	2 (<1)
視力低下	4 (<1)	3 (<1)	1 (<1)	4 (<1)	3 (1)
眼の異常感	0	2 (<1)	1 (<1)	3 (<1)	0
眼乾燥	0	2 (<1)	1 (<1)	3 (<1)	0
眼充血	0	2 (<1)	1 (<1)	3 (<1)	0
霰粒腫	1 (<1)	2 (<1)	0	2 (<1)	0
眼瞼下垂	0	1 (<1)	1 (<1)	2 (<1)	0
流涙増加	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
屈折障害	0	2 (<1)	0	2 (<1)	0
眼精疲労	1 (<1)	0	1 (<1)	1 (<1)	0
両眼球運動障害	0	0	1 (<1)	1 (<1)	0
眼瞼炎	0	0	1 (<1)	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
アレルギー性眼瞼炎	0	0	1 (<1)	1 (<1)	0
白内障	1 (<1)	0	1 (<1)	1 (<1)	0
アレルギー性結膜炎	2 (<1)	0	1 (<1)	1 (<1)	0
眼瞼湿疹	0	1 (<1)	0	1 (<1)	0
眼出血	0	0	1 (<1)	1 (<1)	0
眼刺激	1 (<1)	0	1 (<1)	1 (<1)	0
眼運動障害	0	0	1 (<1)	1 (<1)	0
眼部腫脹	0	0	1 (<1)	1 (<1)	1 (<1)
眼瞼嚢胞	0	1 (<1)	0	1 (<1)	0
眼瞼浮腫	0	0	1 (<1)	1 (<1)	0
開放隅角緑内障	0	0	1 (<1)	1 (<1)	0
眼筋麻痺	0	1 (<1)	0	1 (<1)	0
視神経萎縮	0	0	1 (<1)	1 (<1)	0
動揺視	0	1 (<1)	0	1 (<1)	0
全眼球炎	0	1 (<1)	0	1 (<1)	0
羞明	0	0	1 (<1)	1 (<1)	0
光視症	0	0	1 (<1)	1 (<1)	0
強膜炎	0	1 (<1)	0	1 (<1)	0
乾燥症候群	0	1 (<1)	0	1 (<1)	0
ブドウ膜炎	0	0	1 (<1)	1 (<1)	1 (<1)
硝子体浮遊物	0	1 (<1)	0	1 (<1)	0
一過性失明	1 (<1)	0	0	0	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
結膜出血	1 (<1)	0	0	0	1 (<1)
眼そう痒症	1 (<1)	0	0	0	0
ホームズ・アディー瞳孔	1 (<1)	0	0	0	0
遠視	1 (<1)	0	0	0	0
虹彩毛様体炎	0	0	0	0	1 (<1)
近視	1 (<1)	0	0	0	1 (<1)
耳および迷路障害	33 (8)	28 (6)	29 (7)	57 (7)	12 (6)
回転性めまい	20 (5)	15 (3)	18 (4)	33 (4)	10 (5)
耳痛	1 (<1)	3 (<1)	5 (1)	8 (<1)	0
耳鳴	4 (<1)	3 (<1)	2 (<1)	5 (<1)	0
耳閉	0	0	2 (<1)	2 (<1)	0
乗物酔い	1 (<1)	2 (<1)	0	2 (<1)	0
頭位性回転性めまい	4 (<1)	0	2 (<1)	2 (<1)	0
耳垢栓塞	1 (<1)	1 (<1)	0	1 (<1)	0
難聴	2 (<1)	1 (<1)	0	1 (<1)	0
耳不快感	0	0	1 (<1)	1 (<1)	1 (<1)
耳出血	0	1 (<1)	0	1 (<1)	0
耳そう痒症	0	1 (<1)	0	1 (<1)	0
外耳痛	0	1 (<1)	0	1 (<1)	0
聴覚過敏	0	0	1 (<1)	1 (<1)	0
聴力低下	2 (<1)	0	1 (<1)	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
鼓膜充血	0	1 (<1)	0	1 (<1)	0
中耳の炎症	1 (<1)	0	0	0	0
前庭性運動失調	0	0	0	0	1 (<1)
前庭障害	1 (<1)	0	0	0	0
心臓障害	17 (4)	16 (4)	24 (6)	40 (5)	12 (6)
頻脈	2 (<1)	5 (1)	3 (<1)	8 (<1)	4 (2)
動悸	6 (1)	3 (<1)	4 (<1)	7 (<1)	3 (1)
上室性期外収縮	0	3 (<1)	2 (<1)	5 (<1)	1 (<1)
徐脈	1 (<1)	0	4 (<1)	4 (<1)	0
洞性頻脈	2 (<1)	0	3 (<1)	3 (<1)	0
心室性期外収縮	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
心臓瘤	0	1 (<1)	1 (<1)	2 (<1)	0
心筋症	0	1 (<1)	1 (<1)	2 (<1)	0
期外収縮	0	2 (<1)	0	2 (<1)	0
僧帽弁逸脱	0	1 (<1)	1 (<1)	2 (<1)	0
洞性徐脈	1 (<1)	0	2 (<1)	2 (<1)	0
狭心症	0	0	1 (<1)	1 (<1)	0
第一度房室ブロック	0	1 (<1)	0	1 (<1)	1 (<1)
うっ血性心不全	0	0	1 (<1)	1 (<1)	0
伝導障害	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
頻脈性不整脈	0	0	1 (<1)	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心房細動	0	0	0	0	1 (<1)
心筋炎	0	0	0	0	1 (<1)
発作性頻脈	1 (<1)	0	0	0	1 (<1)
血管障害	27 (6)	165 (38)	142 (35)	307 (37)	15 (7)
潮紅	17 (4)	143 (33)	118 (29)	261 (31)	5 (2)
ほてり	4 (<1)	20 (5)	20 (5)	40 (5)	4 (2)
高血圧	5 (1)	3 (<1)	7 (2)	10 (1)	6 (3)
充血	0	1 (<1)	4 (<1)	5 (<1)	0
低血圧	3 (<1)	3 (<1)	1 (<1)	4 (<1)	0
静脈瘤	0	2 (<1)	1 (<1)	3 (<1)	0
血腫	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
静脈不全	0	1 (<1)	1 (<1)	2 (<1)	0
深部静脈血栓症	0	0	1 (<1)	1 (<1)	0
高血圧クリーゼ	0	0	1 (<1)	1 (<1)	0
起立性低血圧	0	0	1 (<1)	1 (<1)	0
静脈炎	0	0	1 (<1)	1 (<1)	0
レイノー現象	0	0	1 (<1)	1 (<1)	0
静脈痛	0	1 (<1)	0	1 (<1)	0
腹腔内血腫	0	0	0	0	1 (<1)
蒼白	1 (<1)	0	0	0	0
末梢冷感	1 (<1)	0	0	0	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
呼吸器、胸郭および縦隔障害	59 (14)	72 (17)	71 (17)	143 (17)	25 (12)
口腔咽頭痛	21 (5)	26 (6)	22 (5)	48 (6)	10 (5)
咳嗽	19 (5)	19 (4)	21 (5)	40 (5)	5 (2)
鼻漏	4 (<1)	13 (3)	8 (2)	21 (3)	0
鼻閉	4 (<1)	7 (2)	3 (<1)	10 (1)	0
副鼻腔うっ血	0	1 (<1)	6 (1)	7 (<1)	0
呼吸困難	3 (<1)	2 (<1)	4 (<1)	6 (<1)	5 (2)
鼻出血	4 (<1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
喘息	1 (<1)	4 (<1)	0	4 (<1)	0
口腔咽頭不快感	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
アレルギー性鼻炎	4 (<1)	1 (<1)	2 (<1)	3 (<1)	2 (<1)
喘鳴	0	2 (<1)	1 (<1)	3 (<1)	0
息詰まり	2 (<1)	0	2 (<1)	2 (<1)	0
発声障害	1 (<1)	0	2 (<1)	2 (<1)	0
しゃっくり	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
咽頭紅斑	0	1 (<1)	1 (<1)	2 (<1)	0
上気道うっ血	0	0	2 (<1)	2 (<1)	1 (<1)
上気道咳症候群	1 (<1)	0	2 (<1)	2 (<1)	0
アレルギー性気管支炎	0	0	1 (<1)	1 (<1)	0
アレルギー性咽頭炎	2 (<1)	1 (<1)	0	1 (<1)	0
咽喉乾燥	1 (<1)	1 (<1)	0	1 (<1)	0
労作性呼吸困難	0	1 (<1)	0	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
過換気	1 (<1)	0	1 (<1)	1 (<1)	0
鼻中隔弯曲	0	1 (<1)	0	1 (<1)	0
口腔咽頭腫脹	0	0	1 (<1)	1 (<1)	0
呼吸時疼痛	0	0	1 (<1)	1 (<1)	0
副鼻腔嚢胞	0	0	1 (<1)	1 (<1)	0
副鼻腔分泌過多	0	0	1 (<1)	1 (<1)	0
胸水	0	1 (<1)	0	1 (<1)	0
誤嚥性肺炎	0	1 (<1)	0	1 (<1)	0
気胸	0	0	1 (<1)	1 (<1)	0
湿性咳嗽	2 (<1)	1 (<1)	0	1 (<1)	0
気道うっ血	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
睡眠時無呼吸症候群	0	0	1 (<1)	1 (<1)	1 (<1)
咽喉刺激感	1 (<1)	1 (<1)	0	1 (<1)	0
咽喉絞扼感	0	0	1 (<1)	1 (<1)	0
アレルギー性咳嗽	1 (<1)	0	0	0	0
アレルギー性呼吸器疾患	1 (<1)	0	0	0	0
アレルギー性呼吸器症状	1 (<1)	0	0	0	0
アレルギー性副鼻腔炎	1 (<1)	0	0	0	0
慢性気管支炎	1 (<1)	0	0	0	0
低換気	0	0	0	0	1 (<1)
鼻部不快感	1 (<1)	0	0	0	0
鼻茸	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
季節性鼻炎	0	0	0	0	1 (<1)
低音性連続性ラ音	2 (<1)	0	0	0	0
くしゃみ	1 (<1)	0	0	0	0
扁桃障害	1 (<1)	0	0	0	0
胃腸障害	145 (35)	195 (45)	207 (51)	402 (48)	36 (17)
下痢	39 (9)	57 (13)	66 (16)	123 (15)	7 (3)
悪心	37 (9)	52 (12)	55 (14)	107 (13)	9 (4)
上腹部痛	25 (6)	40 (9)	49 (12)	89 (11)	3 (1)
腹痛	20 (5)	42 (10)	32 (8)	74 (9)	1 (<1)
嘔吐	19 (5)	40 (9)	27 (7)	67 (8)	5 (2)
消化不良	7 (2)	20 (5)	15 (4)	35 (4)	3 (1)
胃腸障害	4 (<1)	10 (2)	20 (5)	30 (4)	2 (<1)
歯痛	11 (3)	12 (3)	15 (4)	27 (3)	1 (<1)
胃炎	8 (2)	11 (3)	12 (3)	23 (3)	3 (1)
便秘	16 (4)	10 (2)	11 (3)	21 (3)	2 (<1)
胃食道逆流性疾患	5 (1)	10 (2)	11 (3)	21 (3)	0
腹部不快感	5 (1)	9 (2)	9 (2)	18 (2)	1 (<1)
口内乾燥	1 (<1)	8 (2)	4 (<1)	12 (1)	0
腹部膨満	4 (<1)	2 (<1)	6 (1)	8 (<1)	0
鼓腸	3 (<1)	3 (<1)	4 (<1)	7 (<1)	1 (<1)
痔核	1 (<1)	5 (1)	2 (<1)	7 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
歯周炎	2 (<1)	0	7 (2)	7 (<1)	0
嚥下障害	2 (<1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
食中毒	2 (<1)	4 (<1)	2 (<1)	6 (<1)	1 (<1)
下腹部痛	2 (<1)	2 (<1)	3 (<1)	5 (<1)	0
齲歯	0	3 (<1)	2 (<1)	5 (<1)	3 (1)
便失禁	1 (<1)	2 (<1)	3 (<1)	5 (<1)	0
腹部硬直	0	1 (<1)	2 (<1)	3 (<1)	0
大腸炎	0	1 (<1)	2 (<1)	3 (<1)	0
便意切迫	0	0	3 (<1)	3 (<1)	0
胃障害	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
歯肉炎	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
口内炎	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
異常便	0	2 (<1)	0	2 (<1)	0
小腸炎	0	1 (<1)	1 (<1)	2 (<1)	0
心窩部不快感	1 (<1)	0	2 (<1)	2 (<1)	0
おくび	0	1 (<1)	1 (<1)	2 (<1)	0
歯肉出血	0	2 (<1)	0	2 (<1)	0
吐血	0	1 (<1)	1 (<1)	2 (<1)	0
裂孔ヘルニア	0	2 (<1)	0	2 (<1)	0
胃酸過多	2 (<1)	2 (<1)	0	2 (<1)	0
口の感覚鈍麻	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
流涎過多	0	2 (<1)	0	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腹部ヘルニア	0	1 (<1)	0	1 (<1)	0
腹部圧痛	1 (<1)	0	1 (<1)	1 (<1)	0
アフタ性口内炎	0	0	1 (<1)	1 (<1)	0
唾液欠乏	0	1 (<1)	0	1 (<1)	0
口腔灼熱感症候群	0	0	1 (<1)	1 (<1)	0
便習慣変化	0	0	1 (<1)	1 (<1)	0
口唇炎	0	1 (<1)	0	1 (<1)	0
十二指腸潰瘍	0	0	1 (<1)	1 (<1)	0
十二指腸炎	0	0	1 (<1)	1 (<1)	0
変色便	0	0	1 (<1)	1 (<1)	0
排便回数増加	0	0	1 (<1)	1 (<1)	0
胃十二指腸炎	0	0	1 (<1)	1 (<1)	0
歯肉痛	0	0	1 (<1)	1 (<1)	0
歯肉腫脹	0	1 (<1)	0	1 (<1)	0
腰ヘルニア	0	0	1 (<1)	1 (<1)	0
マロリー・ワイス症候群	0	1 (<1)	0	1 (<1)	0
嚥下痛	0	0	1 (<1)	1 (<1)	0
食道炎	0	1 (<1)	0	1 (<1)	0
口腔内痛	0	1 (<1)	0	1 (<1)	0
膵機能不全	0	0	1 (<1)	1 (<1)	0
膵炎	0	1 (<1)	0	1 (<1)	0
口の錯感覚	2 (<1)	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
直腸出血	0	1 (<1)	0	1 (<1)	0
逆流性食道炎	0	0	1 (<1)	1 (<1)	0
唾液管閉塞	0	0	1 (<1)	1 (<1)	0
歯の磨耗	0	1 (<1)	0	1 (<1)	0
埋伏歯	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
臍ヘルニア	0	0	1 (<1)	1 (<1)	0
便通不規則	1 (<1)	0	0	0	0
口唇のひび割れ	1 (<1)	0	0	0	0
腸炎	1 (<1)	0	0	0	0
胃ポリープ	1 (<1)	0	0	0	0
胃腸出血	1 (<1)	0	0	0	0
消化器痛	1 (<1)	0	0	0	1 (<1)
歯肉紅斑	0	0	0	0	1 (<1)
舌痛	1 (<1)	0	0	0	0
痔出血	0	0	0	0	1 (<1)
口唇乾燥	1 (<1)	0	0	0	0
口腔内潰瘍形成	3 (<1)	0	0	0	0
脆弱歯	1 (<1)	0	0	0	0
舌障害	1 (<1)	0	0	0	0
歯の発育障害	1 (<1)	0	0	0	0
肝胆道系障害	7 (2)	4 (<1)	6 (1)	10 (1)	5 (2)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
肝障害	1 (<1)	1 (<1)	3 (<1)	4 (<1)	2 (<1)
胆道ジスキネジー	0	1 (<1)	0	1 (<1)	1 (<1)
胆石症	2 (<1)	1 (<1)	0	1 (<1)	2 (<1)
胆嚢浮腫	0	0	1 (<1)	1 (<1)	0
肝炎	0	0	1 (<1)	1 (<1)	0
高ビリルビン血症	2 (<1)	0	1 (<1)	1 (<1)	0
高トランスアミナーゼ血症	0	1 (<1)	0	1 (<1)	0
胆管結石	1 (<1)	0	0	0	0
脂肪肝	1 (<1)	0	0	0	0
皮膚および皮下組織障害	72 (17)	136 (31)	131 (32)	267 (32)	34 (16)
発疹	14 (3)	34 (8)	28 (7)	62 (7)	5 (2)
そう痒症	14 (3)	31 (7)	29 (7)	60 (7)	5 (2)
紅斑	6 (1)	19 (4)	26 (6)	45 (5)	4 (2)
多汗症	4 (<1)	6 (1)	17 (4)	23 (3)	3 (1)
脱毛症	10 (2)	10 (2)	6 (1)	16 (2)	6 (3)
アレルギー性皮膚炎	1 (<1)	8 (2)	7 (2)	15 (2)	0
蕁麻疹	5 (1)	6 (1)	8 (2)	14 (2)	1 (<1)
全身性そう痒症	1 (<1)	9 (2)	4 (<1)	13 (2)	1 (<1)
ざ瘡	7 (2)	6 (1)	5 (1)	11 (1)	4 (2)
寝汗	3 (<1)	6 (1)	5 (1)	11 (1)	1 (<1)
皮膚乾燥	1 (<1)	5 (1)	5 (1)	10 (1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚灼熱感	0	4 (<1)	4 (<1)	8 (<1)	0
斑状皮疹	0	1 (<1)	6 (1)	7 (<1)	0
そう痒性皮疹	0	4 (<1)	3 (<1)	7 (<1)	0
皮膚炎	2 (<1)	2 (<1)	4 (<1)	6 (<1)	0
湿疹	2 (<1)	4 (<1)	2 (<1)	6 (<1)	0
全身性皮疹	0	3 (<1)	2 (<1)	5 (<1)	0
全身紅斑	0	3 (<1)	1 (<1)	4 (<1)	0
紅斑性皮疹	0	2 (<1)	2 (<1)	4 (<1)	0
薬疹	0	1 (<1)	2 (<1)	3 (<1)	0
光線過敏性反応	0	2 (<1)	1 (<1)	3 (<1)	0
アレルギー性そう痒症	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
乾癬	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
皮膚病変	2 (<1)	3 (<1)	0	3 (<1)	0
顔面腫脹	0	1 (<1)	2 (<1)	3 (<1)	2 (<1)
接触性皮膚炎	2 (<1)	2 (<1)	0	2 (<1)	1 (<1)
斑状出血	0	1 (<1)	1 (<1)	2 (<1)	0
過角化	0	2 (<1)	0	2 (<1)	0
丘疹性皮疹	0	0	2 (<1)	2 (<1)	0
酒さ	2 (<1)	2 (<1)	0	2 (<1)	0
皮膚剥脱	1 (<1)	2 (<1)	0	2 (<1)	0
皮膚刺激	1 (<1)	0	2 (<1)	2 (<1)	0
皮膚反応	0	1 (<1)	1 (<1)	2 (<1)	2 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚のつっぱり感	0	0	2 (<1)	2 (<1)	0
皮膚熱感	0	1 (<1)	1 (<1)	2 (<1)	0
水疱	0	1 (<1)	0	1 (<1)	0
冷汗	1 (<1)	0	1 (<1)	1 (<1)	0
皮膚嚢腫	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
ざ瘡様皮膚炎	1 (<1)	1 (<1)	0	1 (<1)	0
紅色症	0	0	1 (<1)	1 (<1)	0
剥脱性発疹	0	1 (<1)	0	1 (<1)	0
掌蹠角化症	0	1 (<1)	0	1 (<1)	0
顔面感覚鈍麻	4 (<1)	1 (<1)	0	1 (<1)	0
特発性蕁麻疹	0	1 (<1)	0	1 (<1)	0
内出血発生の増加傾向	0	0	1 (<1)	1 (<1)	0
爪破損	0	1 (<1)	0	1 (<1)	0
色素沈着障害	1 (<1)	1 (<1)	0	1 (<1)	0
痒疹	0	1 (<1)	0	1 (<1)	0
脂腺障害	0	0	1 (<1)	1 (<1)	0
脂漏	0	1 (<1)	0	1 (<1)	0
皮膚色素過剰	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
皮膚色素減少	0	1 (<1)	0	1 (<1)	0
皮膚硬結	0	0	1 (<1)	1 (<1)	0
皮膚潰瘍	0	0	1 (<1)	1 (<1)	0
スティーブンス・ジョンソン症候群	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮下結節	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
血管浮腫	0	0	0	0	1 (<1)
アトピー性皮膚炎	1 (<1)	0	0	0	0
発汗障害	1 (<1)	0	0	0	0
皮下出血	0	0	0	0	1 (<1)
嵌入爪	0	0	0	0	1 (<1)
黒子	1 (<1)	0	0	0	0
爪床障害	1 (<1)	0	0	0	0
神経皮膚炎	0	0	0	0	1 (<1)
点状出血	1 (<1)	0	0	0	0
ばら色粃糠疹	2 (<1)	0	0	0	0
前癌性皮膚病変	1 (<1)	0	0	0	0
脂漏性皮膚炎	0	0	0	0	1 (<1)
裂毛	1 (<1)	0	0	0	0
乾皮症	1 (<1)	0	0	0	0
筋骨格系および結合組織障害	112 (27)	120 (28)	121 (30)	241 (29)	43 (20)
背部痛	43 (10)	43 (10)	38 (9)	81 (10)	14 (6)
関節痛	30 (7)	31 (7)	33 (8)	64 (8)	8 (4)
四肢痛	26 (6)	26 (6)	29 (7)	55 (7)	11 (5)
筋痙縮	10 (2)	11 (3)	28 (7)	39 (5)	1 (<1)
頚部痛	8 (2)	19 (4)	14 (3)	33 (4)	4 (2)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋力低下	18 (4)	11 (3)	13 (3)	24 (3)	3 (1)
筋骨格痛	13 (3)	4 (<1)	10 (2)	14 (2)	5 (2)
筋肉痛	10 (2)	6 (1)	7 (2)	13 (2)	3 (1)
筋骨格硬直	6 (1)	4 (<1)	3 (<1)	7 (<1)	5 (2)
滑液包炎	2 (<1)	3 (<1)	3 (<1)	6 (<1)	0
重感	2 (<1)	3 (<1)	2 (<1)	5 (<1)	1 (<1)
骨痛	1 (<1)	1 (<1)	3 (<1)	4 (<1)	0
筋骨格系胸痛	5 (1)	3 (<1)	1 (<1)	4 (<1)	0
腱炎	4 (<1)	1 (<1)	3 (<1)	4 (<1)	0
関節炎	0	2 (<1)	1 (<1)	3 (<1)	1 (<1)
関節硬直	0	1 (<1)	2 (<1)	3 (<1)	0
関節腫脹	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
筋緊張	0	2 (<1)	1 (<1)	3 (<1)	0
腱鞘炎	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
関節障害	0	1 (<1)	1 (<1)	2 (<1)	0
側腹部痛	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
椎間板突出	1 (<1)	0	2 (<1)	2 (<1)	0
関節滲出液	0	0	2 (<1)	2 (<1)	0
変形性関節症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
骨壊死	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
肩回旋筋腱板症候群	0	0	2 (<1)	2 (<1)	0
シェーグレン症候群	0	2 (<1)	0	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
変形性脊椎症	0	1 (<1)	1 (<1)	2 (<1)	0
腋窩腫瘤	1 (<1)	1 (<1)	0	1 (<1)	0
尾骨痛	1 (<1)	0	1 (<1)	1 (<1)	0
腱付着部症	0	1 (<1)	0	1 (<1)	0
肛径部痛	1 (<1)	1 (<1)	0	1 (<1)	0
四肢不快感	1 (<1)	0	1 (<1)	1 (<1)	0
中足骨痛	0	1 (<1)	0	1 (<1)	0
筋肉内出血	0	0	1 (<1)	1 (<1)	0
筋攣縮	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
筋骨格不快感	1 (<1)	0	1 (<1)	1 (<1)	0
ミオキミア	0	0	1 (<1)	1 (<1)	0
筋炎	0	0	1 (<1)	1 (<1)	0
骨減少症	0	1 (<1)	0	1 (<1)	0
骨粗鬆症	1 (<1)	0	1 (<1)	1 (<1)	0
顎痛	1 (<1)	1 (<1)	0	1 (<1)	0
関節周囲炎	0	0	1 (<1)	1 (<1)	0
乾癬性関節症	0	0	1 (<1)	1 (<1)	0
足根洞症候群	0	1 (<1)	0	1 (<1)	0
脊椎障害	0	1 (<1)	0	1 (<1)	0
腱障害	0	1 (<1)	0	1 (<1)	0
弾発指	0	0	1 (<1)	1 (<1)	0
線維筋痛	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
運動性低下	0	0	0	0	1 (<1)
筋拘縮	0	0	0	0	1 (<1)
筋肉疲労	1 (<1)	0	0	0	0
筋固縮	0	0	0	0	1 (<1)
多発性関節炎	1 (<1)	0	0	0	0
脊柱変形	1 (<1)	0	0	0	0
滑膜炎	1 (<1)	0	0	0	0
腎および尿路障害	79 (19)	81 (19)	91 (22)	172 (21)	35 (16)
蛋白尿	40 (10)	43 (10)	48 (12)	91 (11)	18 (8)
ミクロアルブミン尿	14 (3)	20 (5)	23 (6)	43 (5)	11 (5)
血尿	14 (3)	18 (4)	19 (5)	37 (4)	5 (2)
ケトン尿	5 (1)	4 (<1)	10 (2)	14 (2)	1 (<1)
排尿困難	4 (<1)	4 (<1)	7 (2)	11 (1)	1 (<1)
尿意切迫	4 (<1)	5 (1)	4 (<1)	9 (1)	4 (2)
頻尿	4 (<1)	4 (<1)	3 (<1)	7 (<1)	3 (1)
腎結石症	4 (<1)	0	5 (1)	5 (<1)	1 (<1)
糖尿	7 (2)	3 (<1)	1 (<1)	4 (<1)	0
排尿躊躇	2 (<1)	1 (<1)	3 (<1)	4 (<1)	0
尿閉	2 (<1)	1 (<1)	3 (<1)	4 (<1)	0
切迫性尿失禁	0	1 (<1)	2 (<1)	3 (<1)	1 (<1)
尿失禁	3 (<1)	3 (<1)	0	3 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
アルブミン尿	0	1 (<1)	1 (<1)	2 (<1)	0
膀胱刺激症状	0	1 (<1)	1 (<1)	2 (<1)	0
グロブリン尿	0	2 (<1)	0	2 (<1)	0
緊張性膀胱	0	1 (<1)	1 (<1)	2 (<1)	0
白血球尿	2 (<1)	0	2 (<1)	2 (<1)	1 (<1)
神経因性膀胱	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
起立性蛋白尿症	0	1 (<1)	1 (<1)	2 (<1)	0
腎仙痛	1 (<1)	0	2 (<1)	2 (<1)	0
尿臭異常	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
膀胱穿孔	0	0	1 (<1)	1 (<1)	0
出血性膀胱炎	0	1 (<1)	0	1 (<1)	0
排尿異常	0	1 (<1)	0	1 (<1)	0
腎下垂症	1 (<1)	1 (<1)	0	1 (<1)	0
腎障害	0	1 (<1)	0	1 (<1)	0
慢性腎不全	0	0	1 (<1)	1 (<1)	0
腎臓痛	0	1 (<1)	0	1 (<1)	0
有痛性排尿困難	0	1 (<1)	0	1 (<1)	0
膀胱機能障害	1 (<1)	0	0	0	0
膀胱痙縮	1 (<1)	0	0	0	0
尿路結石	1 (<1)	0	0	0	0
非感染性膀胱炎	2 (<1)	0	0	0	0
ネフローゼ症候群	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
夜間頻尿	1 (<1)	0	0	0	0
膿尿	0	0	0	0	1 (<1)
尿路痛	1 (<1)	0	0	0	0
妊娠、産褥および周産期の状態	3 (<1)	1 (<1)	0	1 (<1)	0
妊娠	0	1 (<1)	0	1 (<1)	0
自然流産	2 (<1)	0	0	0	0
妊娠浮腫	1 (<1)	0	0	0	0
生殖系および乳房障害	41 (10)	43 (10)	40 (10)	83 (10)	15 (7)
月経困難症	6 (1)	10 (2)	8 (2)	18 (2)	3 (1)
不規則月経	5 (1)	4 (<1)	5 (1)	9 (1)	2 (<1)
不正子宮出血	2 (<1)	4 (<1)	4 (<1)	8 (<1)	3 (1)
月経過多	1 (<1)	3 (<1)	4 (<1)	7 (<1)	1 (<1)
卵巣嚢胞	3 (<1)	5 (1)	2 (<1)	7 (<1)	2 (<1)
無月経	4 (<1)	2 (<1)	4 (<1)	6 (<1)	2 (<1)
腟出血	2 (<1)	4 (<1)	2 (<1)	6 (<1)	0
乳房痛	1 (<1)	1 (<1)	4 (<1)	5 (<1)	0
勃起不全	3 (<1)	2 (<1)	2 (<1)	4 (<1)	0
月経障害	1 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
頻発月経	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
乳房嚢胞	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)

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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
乳房圧痛	0	0	2 (<1)	2 (<1)	0
子宮頚部上皮異形成	1 (<1)	2 (<1)	0	2 (<1)	0
月経遅延	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
骨盤痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
多嚢胞性卵巣	0	1 (<1)	1 (<1)	2 (<1)	0
乳房不快感	0	1 (<1)	0	1 (<1)	0
乳房障害	0	1 (<1)	0	1 (<1)	0
子宮頚部の炎症	0	1 (<1)	0	1 (<1)	0
性交困難	0	0	1 (<1)	1 (<1)	0
乳汁漏出症	0	1 (<1)	0	1 (<1)	0
希発月経	1 (<1)	1 (<1)	0	1 (<1)	0
卵巣嚢胞破裂	0	1 (<1)	0	1 (<1)	0
早発閉経	0	1 (<1)	0	1 (<1)	0
前立腺炎	0	0	1 (<1)	1 (<1)	0
精巣痛	3 (<1)	1 (<1)	0	1 (<1)	0
子宮の炎症	0	1 (<1)	0	1 (<1)	0
腟分泌物	0	0	1 (<1)	1 (<1)	0
外陰腟乾燥	0	1 (<1)	0	1 (<1)	0
外陰腟そう痒症	0	0	1 (<1)	1 (<1)	0
バルトリン嚢腫	1 (<1)	0	0	0	0
乳房腫大	0	0	0	0	1 (<1)
乳房腫瘤	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
生殖器病変	1 (<1)	0	0	0	0
機能性子宮出血	0	0	0	0	1 (<1)
性機能不全	1 (<1)	0	0	0	0
子宮頚部びらん	1 (<1)	0	0	0	0
子宮出血	1 (<1)	0	0	0	0
外陰腟痛	1 (<1)	0	0	0	0
先天性、家族性および遺伝性障害	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
角膜ジストロフィー	0	0	1 (<1)	1 (<1)	0
先天性心臓疾患	0	1 (<1)	0	1 (<1)	0
陰嚢水瘤	0	0	1 (<1)	1 (<1)	0
ジルベール症候群	1 (<1)	0	0	0	0
過誤腫	0	0	0	0	1 (<1)
一般・全身障害および投与部位の状態	93 (22)	79 (18)	114 (28)	193 (23)	79 (37)
疲労	45 (11)	35 (8)	48 (12)	83 (10)	12 (6)
発熱	25 (6)	18 (4)	31 (8)	49 (6)	11 (5)
無力症	8 (2)	8 (2)	9 (2)	17 (2)	7 (3)
疼痛	4 (<1)	4 (<1)	10 (2)	14 (2)	3 (1)
胸痛	3 (<1)	8 (2)	4 (<1)	12 (1)	1 (<1)
インフルエンザ様疾患	6 (1)	4 (<1)	8 (2)	12 (1)	2 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
末梢性浮腫	3 (<1)	4 (<1)	8 (2)	12 (1)	3 (1)
熱感	2 (<1)	4 (<1)	4 (<1)	8 (<1)	3 (1)
胸部不快感	1 (<1)	3 (<1)	4 (<1)	7 (<1)	0
悪寒	2 (<1)	3 (<1)	4 (<1)	7 (<1)	2 (<1)
歩行障害	6 (1)	2 (<1)	4 (<1)	6 (<1)	2 (<1)
易刺激性	4 (<1)	3 (<1)	2 (<1)	5 (<1)	0
非心臓性胸痛	0	1 (<1)	4 (<1)	5 (<1)	1 (<1)
顔面痛	2 (<1)	1 (<1)	3 (<1)	4 (<1)	0
倦怠感	0	1 (<1)	2 (<1)	3 (<1)	0
炎症	0	0	2 (<1)	2 (<1)	0
浮腫	0	2 (<1)	0	2 (<1)	1 (<1)
腫脹	0	1 (<1)	1 (<1)	2 (<1)	0
圧痛	0	0	2 (<1)	2 (<1)	0
腋窩痛	0	0	1 (<1)	1 (<1)	0
脂肪壊死	0	1 (<1)	0	1 (<1)	0
異常感	1 (<1)	0	1 (<1)	1 (<1)	0
高熱	0	0	1 (<1)	1 (<1)	0
注入部位血腫	0	1 (<1)	0	1 (<1)	0
注射部位血腫	0	0	1 (<1)	1 (<1)	0
腫瘤	0	1 (<1)	0	1 (<1)	0
医療機器による疼痛	0	0	1 (<1)	1 (<1)	0
粘膜乾燥	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
粘膜の炎症	0	0	1 (<1)	1 (<1)	0
温度変化不耐症	0	1 (<1)	0	1 (<1)	0
口渇	0	0	1 (<1)	1 (<1)	0
血管穿刺部位出血	0	1 (<1)	0	1 (<1)	0
血管穿刺部位疼痛	0	1 (<1)	0	1 (<1)	0
血管穿刺部位反応	0	1 (<1)	0	1 (<1)	0
嚢胞破裂	0	0	0	0	1 (<1)
医療機器関連眼合併症	1 (<1)	0	0	0	0
体温変動感	1 (<1)	0	0	0	0
ヘルニア痛	1 (<1)	0	0	0	0
空腹	1 (<1)	0	0	0	0
注射直後反応	0	0	0	0	1 (<1)
注射部位変色	0	0	0	0	1 (<1)
注射部位知覚不全	0	0	0	0	1 (<1)
注射部位紅斑	0	0	0	0	17 (8)
注射部位血管外漏出	0	0	0	0	1 (<1)
注射部位出血	0	0	0	0	1 (<1)
注射部位過敏反応	0	0	0	0	1 (<1)
注射部位肥厚	0	0	0	0	2 (<1)
注射部位硬結	0	0	0	0	5 (2)
注射部位炎症	0	0	0	0	1 (<1)
注射部位腫瘤	0	0	0	0	2 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
注射部位浮腫	0	0	0	0	3 (1)
注射部位疼痛	0	0	0	0	19 (9)
注射部位そう痒感	0	0	0	0	7 (3)
注射部位発疹	0	0	0	0	2 (<1)
注射部位反応	0	0	0	0	3 (1)
注射部位瘢痕	0	0	0	0	1 (<1)
注射部位腫脹	0	0	0	0	5 (2)
注射部位蕁麻疹	0	0	0	0	3 (1)
注射部位熱感	0	0	0	0	2 (<1)
微石症	0	0	0	0	1 (<1)
臨床検査	112 (27)	121 (28)	109 (27)	230 (27)	63 (29)
アラニン・アミノトランスフェラーゼ増加	21 (5)	20 (5)	28 (7)	48 (6)	12 (6)
尿中アルブミン陽性	16 (4)	31 (7)	16 (4)	47 (6)	12 (6)
アスパラギン酸アミノトランスフェラーゼ増加	12 (3)	16 (4)	15 (4)	31 (4)	10 (5)
尿中蛋白陽性	11 (3)	19 (4)	12 (3)	31 (4)	9 (4)
尿中血陽性	3 (<1)	13 (3)	11 (3)	24 (3)	2 (<1)
血中副甲状腺ホルモン増加	4 (<1)	8 (2)	9 (2)	17 (2)	1 (<1)
γ－グルタミルトランスフェラーゼ増加	4 (<1)	8 (2)	7 (2)	15 (2)	3 (1)
白血球数減少	0	7 (2)	6 (1)	13 (2)	1 (<1)
尿中白血球陽性	6 (1)	5 (1)	8 (2)	13 (2)	7 (3)
尿中β２ミクログロブリン増加	9 (2)	7 (2)	4 (<1)	11 (1)	2 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
リンパ球数減少	1 (<1)	6 (1)	4 (<1)	10 (1)	1 (<1)
血中ブドウ糖増加	2 (<1)	3 (<1)	6 (1)	9 (1)	4 (2)
ヘモグロビン減少	5 (1)	5 (1)	4 (<1)	9 (1)	0
体重減少	1 (<1)	6 (1)	3 (<1)	9 (1)	1 (<1)
血中トリグリセリド増加	3 (<1)	5 (1)	3 (<1)	8 (<1)	5 (2)
尿中ケトン体陽性	1 (<1)	3 (<1)	5 (1)	8 (<1)	1 (<1)
体重増加	7 (2)	2 (<1)	6 (1)	8 (<1)	1 (<1)
好中球数増加	7 (2)	4 (<1)	3 (<1)	7 (<1)	2 (<1)
尿中赤血球陽性	2 (<1)	5 (1)	2 (<1)	7 (<1)	1 (<1)
ヘマトクリット減少	4 (<1)	4 (<1)	2 (<1)	6 (<1)	1 (<1)
肝酵素上昇	5 (1)	3 (<1)	3 (<1)	6 (<1)	5 (2)
白血球数増加	8 (2)	3 (<1)	3 (<1)	6 (<1)	3 (1)
血中コレステロール増加	2 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
β２ミクログロブリン増加	1 (<1)	1 (<1)	3 (<1)	4 (<1)	0
血中ビリルビン増加	6 (1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
血中クレアチニン増加	3 (<1)	4 (<1)	0	4 (<1)	2 (<1)
血中カリウム増加	0	2 (<1)	2 (<1)	4 (<1)	1 (<1)
肝機能検査異常	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
リンパ球形態異常	0	2 (<1)	2 (<1)	4 (<1)	0
好中球数減少	1 (<1)	3 (<1)	1 (<1)	4 (<1)	1 (<1)
ビタミンＤ増加	1 (<1)	0	4 (<1)	4 (<1)	0
血中クレアチン増加	0	2 (<1)	1 (<1)	3 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
体温上昇	1 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
心電図ＳＴ部分下降	1 (<1)	2 (<1)	1 (<1)	3 (<1)	2 (<1)
好酸球数増加	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
尿中ブドウ糖陽性	2 (<1)	2 (<1)	1 (<1)	3 (<1)	2 (<1)
高比重リポ蛋白増加	1 (<1)	0	3 (<1)	3 (<1)	0
低比重リポ蛋白増加	0	1 (<1)	2 (<1)	3 (<1)	0
血小板数減少	2 (<1)	3 (<1)	0	3 (<1)	3 (1)
ビタミンＤ減少	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
血中アルカリホスファターゼ増加	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
血中葉酸減少	0	1 (<1)	1 (<1)	2 (<1)	0
血中乳酸脱水素酵素増加	3 (<1)	2 (<1)	0	2 (<1)	0
血中ナトリウム増加	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
血中尿酸増加	0	0	2 (<1)	2 (<1)	1 (<1)
尿中結晶陽性	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
心電図ＱＴ延長	3 (<1)	0	2 (<1)	2 (<1)	1 (<1)
リンパ球数増加	2 (<1)	2 (<1)	0	2 (<1)	0
アラニン・アミノトランスフェラーゼ異常	0	0	1 (<1)	1 (<1)	2 (<1)
アレルギー検査	0	0	1 (<1)	1 (<1)	0
抗ＳＳＡ抗体陽性	0	1 (<1)	0	1 (<1)	0
細菌検査陽性	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
血中重炭酸塩減少	1 (<1)	1 (<1)	0	1 (<1)	0
血中カルシウム減少	0	1 (<1)	0	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血中クロール増加	0	0	1 (<1)	1 (<1)	0
血中クレアチニン異常	0	1 (<1)	0	1 (<1)	0
血中ブドウ糖減少	0	0	1 (<1)	1 (<1)	1 (<1)
血中鉄減少	0	1 (<1)	0	1 (<1)	0
血中カリウム減少	1 (<1)	0	1 (<1)	1 (<1)	0
血圧低下	1 (<1)	1 (<1)	0	1 (<1)	0
血圧上昇	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
血中甲状腺刺激ホルモン増加	0	0	1 (<1)	1 (<1)	0
血中尿素増加	0	0	1 (<1)	1 (<1)	0
好酸球百分率増加	0	1 (<1)	0	1 (<1)	0
γ－グルタミルトランスフェラーゼ異常	1 (<1)	0	1 (<1)	1 (<1)	0
γ－グルタミルトランスフェラーゼ減少	0	1 (<1)	0	1 (<1)	0
胃内ｐＨ上昇	0	0	1 (<1)	1 (<1)	0
心拍数増加	1 (<1)	1 (<1)	0	1 (<1)	0
ヒト乳頭腫ウイルス検査陽性	0	1 (<1)	0	1 (<1)	0
ヒステロスコピー	0	1 (<1)	0	1 (<1)	0
眼圧上昇	0	1 (<1)	0	1 (<1)	0
リンパ節触知	0	0	1 (<1)	1 (<1)	0
単球数減少	0	0	1 (<1)	1 (<1)	1 (<1)
単球数増加	0	0	1 (<1)	1 (<1)	0
脳核磁気共鳴画像異常	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血小板数増加	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
赤血球数減少	2 (<1)	0	1 (<1)	1 (<1)	0
赤血球数増加	0	0	1 (<1)	1 (<1)	0
腎機能検査異常	0	1 (<1)	0	1 (<1)	0
残尿量増加	0	1 (<1)	0	1 (<1)	0
呼吸数増加	0	0	1 (<1)	1 (<1)	0
つぎ足歩行検査異常	0	1 (<1)	0	1 (<1)	0
尿円柱	0	0	1 (<1)	1 (<1)	0
ビタミンＢ１２減少	1 (<1)	1 (<1)	0	1 (<1)	0
動脈雑音	1 (<1)	0	0	0	0
アスパラギン酸アミノトランスフェラーゼ異常	0	0	0	0	1 (<1)
細菌検査	1 (<1)	0	0	0	0
血中アルカリホスファターゼ異常	0	0	0	0	1 (<1)
血中ビリルビン異常	0	0	0	0	1 (<1)
血中ビリルビン減少	1 (<1)	0	0	0	0
血中カルシウム増加	1 (<1)	0	0	0	1 (<1)
血中クレアチン異常	1 (<1)	0	0	0	0
血中ケトン体増加	0	0	0	0	1 (<1)
血中乳酸脱水素酵素異常	0	0	0	0	1 (<1)
血中マグネシウム減少	1 (<1)	0	0	0	0
血中副甲状腺ホルモン減少	1 (<1)	0	0	0	0
血中リン減少	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血中リン増加	1 (<1)	0	0	0	0
収縮期血圧上昇	1 (<1)	0	0	0	0
心雑音	1 (<1)	0	0	0	0
中枢神経系機能検査異常	1 (<1)	0	0	0	0
心電図異常	1 (<1)	0	0	0	0
心電図ＰＲ延長	1 (<1)	0	0	0	0
心電図２相性Ｔ波	0	0	0	0	1 (<1)
心電図Ｔ波逆転	1 (<1)	0	0	0	1 (<1)
好酸球数異常	1 (<1)	0	0	0	0
血液学的検査異常	1 (<1)	0	0	0	0
心音異常	1 (<1)	0	0	0	0
Ａ型インフルエンザウイルス検査陽性	1 (<1)	0	0	0	0
リンパ球数異常	0	0	0	0	1 (<1)
リンパ球百分率減少	1 (<1)	0	0	0	0
後骨髄球百分率増加	1 (<1)	0	0	0	0
骨髄球数増加	1 (<1)	0	0	0	0
骨髄球百分率増加	1 (<1)	0	0	0	0
好中球数異常	0	0	0	0	1 (<1)
好中球百分率異常	1 (<1)	0	0	0	0
好中球百分率増加	1 (<1)	0	0	0	0
トランスアミナーゼ上昇	2 (<1)	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白血球数異常	0	0	0	0	1 (<1)
傷害、中毒および処置合併症	62 (15)	54 (13)	63 (16)	117 (14)	17 (8)
挫傷	6 (1)	12 (3)	9 (2)	21 (3)	3 (1)
転倒	5 (1)	6 (1)	14 (3)	20 (2)	4 (2)
関節捻挫	9 (2)	5 (1)	7 (2)	12 (1)	0
四肢損傷	2 (<1)	5 (1)	4 (<1)	9 (1)	2 (<1)
肉離れ	3 (<1)	3 (<1)	5 (1)	8 (<1)	1 (<1)
交通事故	4 (<1)	1 (<1)	5 (1)	6 (<1)	2 (<1)
足骨折	2 (<1)	3 (<1)	2 (<1)	5 (<1)	2 (<1)
靭帯断裂	3 (<1)	1 (<1)	4 (<1)	5 (<1)	0
処置による疼痛	1 (<1)	2 (<1)	3 (<1)	5 (<1)	0
節足動物咬傷	3 (<1)	2 (<1)	2 (<1)	4 (<1)	0
半月板障害	1 (<1)	3 (<1)	1 (<1)	4 (<1)	0
足関節部骨折	0	1 (<1)	2 (<1)	3 (<1)	0
節足動物刺傷	0	2 (<1)	1 (<1)	3 (<1)	0
擦過傷	0	1 (<1)	2 (<1)	3 (<1)	1 (<1)
関節損傷	3 (<1)	1 (<1)	2 (<1)	3 (<1)	0
皮膚裂傷	2 (<1)	3 (<1)	0	3 (<1)	1 (<1)
サンバーン	3 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
熱傷	4 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
むち打ち損傷	2 (<1)	3 (<1)	0	3 (<1)	3 (1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
脳振盪	1 (<1)	2 (<1)	0	2 (<1)	2 (<1)
上顆炎	0	1 (<1)	1 (<1)	2 (<1)	0
顔面損傷	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
関節脱臼	1 (<1)	2 (<1)	0	2 (<1)	0
橈骨骨折	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
骨格損傷	3 (<1)	1 (<1)	1 (<1)	2 (<1)	0
外傷性血腫	0	2 (<1)	0	2 (<1)	1 (<1)
偶発的過量投与	0	1 (<1)	0	1 (<1)	0
鎖骨骨折	0	0	1 (<1)	1 (<1)	0
造影剤反応	0	0	1 (<1)	1 (<1)	0
眼外傷	0	0	1 (<1)	1 (<1)	1 (<1)
眼瞼損傷	0	1 (<1)	0	1 (<1)	0
大腿骨骨折	0	0	1 (<1)	1 (<1)	0
尾骨骨折	0	0	1 (<1)	1 (<1)	0
手骨折	2 (<1)	1 (<1)	0	1 (<1)	3 (1)
腸脛靭帯症候群	0	0	1 (<1)	1 (<1)	0
閉塞性瘢痕ヘルニア	0	0	1 (<1)	1 (<1)	0
損傷	0	0	1 (<1)	1 (<1)	0
靭帯損傷	1 (<1)	0	1 (<1)	1 (<1)	0
靭帯捻挫	0	0	1 (<1)	1 (<1)	0
下肢骨折	0	0	1 (<1)	1 (<1)	0
神経損傷	0	0	1 (<1)	1 (<1)	0

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
過量投与	0	1 (<1)	0	1 (<1)	0
処置後出血	0	1 (<1)	0	1 (<1)	0
処置後浮腫	0	0	1 (<1)	1 (<1)	0
術後発熱	0	1 (<1)	0	1 (<1)	0
処置による低血圧	0	1 (<1)	0	1 (<1)	0
反復性挫傷	1 (<1)	1 (<1)	0	1 (<1)	0
肋骨骨折	0	0	1 (<1)	1 (<1)	0
軟部組織損傷	0	1 (<1)	0	1 (<1)	0
滑膜断裂	0	0	1 (<1)	1 (<1)	0
歯牙破折	1 (<1)	1 (<1)	0	1 (<1)	0
上肢骨折	1 (<1)	0	1 (<1)	1 (<1)	0
創傷	2 (<1)	1 (<1)	0	1 (<1)	0
創し開	0	0	1 (<1)	1 (<1)	0
労働災害	1 (<1)	0	0	0	0
動物による引っかき傷	0	0	0	0	1 (<1)
第２度熱傷	1 (<1)	0	0	0	0
眼部化学的損傷	1 (<1)	0	0	0	0
角膜擦過傷	1 (<1)	0	0	0	0
腓骨骨折	1 (<1)	0	0	0	0
眼内異物	1 (<1)	0	0	0	0
頭部損傷	2 (<1)	0	0	0	1 (<1)
頚部損傷	0	0	0	0	1 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
処置後合併症	1 (<1)	0	0	0	0
外傷後疼痛	1 (<1)	0	0	0	1 (<1)
腱損傷	1 (<1)	0	0	0	0
腱断裂	0	0	0	0	1 (<1)
治療薬毒性	1 (<1)	0	0	0	0
脛骨骨折	1 (<1)	0	0	0	0
有毒性刺傷	1 (<1)	0	0	0	0
創傷出血	1 (<1)	0	0	0	0
手首関節骨折	2 (<1)	0	0	0	0
外科および内科処置	4 (<1)	6 (1)	2 (<1)	8 (<1)	1 (<1)
抜歯	1 (<1)	3 (<1)	0	3 (<1)	0
乳房腫瘤摘除	0	1 (<1)	0	1 (<1)	0
デンタルケア	0	0	1 (<1)	1 (<1)	0
女性不妊手術	0	1 (<1)	0	1 (<1)	0
椎間板手術	0	0	1 (<1)	1 (<1)	0
治療食	0	1 (<1)	0	1 (<1)	0
子宮頚部円錐切除	1 (<1)	0	0	0	0
嚢胞ドレナージ	1 (<1)	0	0	0	0
不妊手術	0	0	0	0	1 (<1)
鼻甲介切除	1 (<1)	0	0	0	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
社会環境	1 (<1) 0	0	0	0	
社会問題	1 (<1) 0	0	0	0	

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	352 (100)	337 (100)	354 (100)	691 (100)	135 (100)
Number of subjects with an event	327 (93)	323 (96)	328 (93)	651 (94)	117 (87)
感染症および寄生虫症	206 (59)	200 (59)	218 (62)	418 (60)	68 (50)
鼻咽頭炎	75 (21)	70 (21)	76 (21)	146 (21)	20 (15)
尿路感染	45 (13)	50 (15)	44 (12)	94 (14)	20 (15)
上気道感染	44 (13)	36 (11)	43 (12)	79 (11)	9 (7)
インフルエンザ	30 (9)	29 (9)	23 (6)	52 (8)	5 (4)
副鼻腔炎	14 (4)	16 (5)	24 (7)	40 (6)	7 (5)
気管支炎	12 (3)	15 (4)	21 (6)	36 (5)	10 (7)
胃腸炎	12 (3)	18 (5)	10 (3)	28 (4)	0
ウイルス性胃腸炎	7 (2)	11 (3)	13 (4)	24 (3)	1 (<1)
気道感染	5 (1)	8 (2)	11 (3)	19 (3)	3 (2)
鼻炎	11 (3)	10 (3)	9 (3)	19 (3)	1 (<1)
咽頭炎	6 (2)	11 (3)	7 (2)	18 (3)	3 (2)
口腔ヘルペス	13 (4)	12 (4)	5 (1)	17 (2)	3 (2)
膀胱炎	10 (3)	6 (2)	10 (3)	16 (2)	2 (1)
帯状疱疹	9 (3)	6 (2)	6 (2)	12 (2)	1 (<1)
喉頭炎	1 (<1)	5 (1)	7 (2)	12 (2)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ウイルス感染	3 (<1)	6 (2)	4 (1)	10 (1)	3 (2)
ウイルス性上気道感染	5 (1)	6 (2)	4 (1)	10 (1)	1 (<1)
外陰腟真菌感染	3 (<1)	5 (1)	5 (1)	10 (1)	2 (1)
感染性結膜炎	0	4 (1)	3 (<1)	7 (1)	0
耳感染	6 (2)	2 (<1)	5 (1)	7 (1)	0
消化管感染	2 (<1)	2 (<1)	5 (1)	7 (1)	1 (<1)
歯膿瘍	5 (1)	5 (1)	2 (<1)	7 (1)	3 (2)
歯感染	3 (<1)	3 (<1)	3 (<1)	6 (<1)	3 (2)
腟感染	2 (<1)	5 (1)	1 (<1)	6 (<1)	2 (1)
麦粒腫	2 (<1)	2 (<1)	3 (<1)	5 (<1)	0
中耳炎	0	3 (<1)	2 (<1)	5 (<1)	1 (<1)
レンサ球菌性咽頭炎	3 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
肺炎	1 (<1)	3 (<1)	2 (<1)	5 (<1)	4 (3)
細菌尿	1 (<1)	1 (<1)	3 (<1)	4 (<1)	0
せつ	1 (<1)	3 (<1)	1 (<1)	4 (<1)	0
下気道感染	4 (1)	1 (<1)	3 (<1)	4 (<1)	0
爪真菌症	1 (<1)	4 (1)	0	4 (<1)	0
毛包炎	4 (1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
陰部ヘルペス	2 (<1)	3 (<1)	0	3 (<1)	0
口腔カンジダ症	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
歯周感染	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
ウイルス性気道感染	0	3 (<1)	0	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
蜂巣炎	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
細菌性結膜炎	0	1 (<1)	1 (<1)	2 (<1)	0
ウイルス性消化管感染	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
Ｈ１Ｎ１インフルエンザ	1 (<1)	1 (<1)	1 (<1)	2 (<1)	2 (1)
ヘリコバクター性胃炎	0	0	2 (<1)	2 (<1)	1 (<1)
ヘリコバクター感染	0	1 (<1)	1 (<1)	2 (<1)	0
単純ヘルペス	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
切開部位感染	0	2 (<1)	0	2 (<1)	0
細菌性副鼻腔炎	0	1 (<1)	1 (<1)	2 (<1)	0
気管気管支炎	0	1 (<1)	1 (<1)	2 (<1)	0
外陰部腟カンジダ症	2 (<1)	2 (<1)	0	2 (<1)	0
腹壁膿瘍	0	0	1 (<1)	1 (<1)	0
ダニ症	0	0	1 (<1)	1 (<1)	0
急性副鼻腔炎	0	0	1 (<1)	1 (<1)	0
急性扁桃炎	0	0	1 (<1)	1 (<1)	0
無症候性細菌尿	1 (<1)	0	1 (<1)	1 (<1)	0
細菌感染	1 (<1)	1 (<1)	0	1 (<1)	0
乳房蜂巣炎	0	0	1 (<1)	1 (<1)	0
ウイルス性気管支炎	0	0	1 (<1)	1 (<1)	1 (<1)
気管支肺炎	0	1 (<1)	0	1 (<1)	0
カンジダ症	0	1 (<1)	0	1 (<1)	1 (<1)
デング熱	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
感染性皮膚炎	0	0	1 (<1)	1 (<1)	0
憩室炎	0	0	1 (<1)	1 (<1)	0
エプスタイン・バーウイルス感染	0	0	1 (<1)	1 (<1)	0
大腸菌性尿路感染	0	1 (<1)	0	1 (<1)	0
熱性感染症	1 (<1)	0	1 (<1)	1 (<1)	0
真菌感染	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
ノロウイルス性胃腸炎	1 (<1)	1 (<1)	0	1 (<1)	0
ロタウイルス胃腸炎	0	1 (<1)	0	1 (<1)	0
歯肉感染	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
眼帯状疱疹	0	0	1 (<1)	1 (<1)	0
咬傷感染	0	0	1 (<1)	1 (<1)	0
伝染性単核症	0	0	1 (<1)	1 (<1)	0
カンジダ性間擦疹	0	0	1 (<1)	1 (<1)	0
限局性感染	1 (<1)	1 (<1)	0	1 (<1)	0
ライム病	0	0	1 (<1)	1 (<1)	1 (<1)
乳腺炎	0	1 (<1)	0	1 (<1)	0
精巣炎	0	0	1 (<1)	1 (<1)	0
爪囲炎	1 (<1)	1 (<1)	0	1 (<1)	0
咽頭扁桃炎	0	0	1 (<1)	1 (<1)	0
歯髄炎	1 (<1)	1 (<1)	0	1 (<1)	0
膿疱性皮疹	0	1 (<1)	0	1 (<1)	1 (<1)
陰嚢膿瘍	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚細菌感染	0	0	1 (<1)	1 (<1)	0
皮下組織膿瘍	0	0	1 (<1)	1 (<1)	0
足部白癬	1 (<1)	0	1 (<1)	1 (<1)	0
癜風	0	0	1 (<1)	1 (<1)	0
気管炎	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
細菌性上気道感染	1 (<1)	1 (<1)	0	1 (<1)	0
真菌性尿路感染	0	1 (<1)	0	1 (<1)	0
泌尿生殖器真菌感染	0	0	1 (<1)	1 (<1)	0
細菌性腟炎	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
ガードネレラ菌性腟炎	0	1 (<1)	0	1 (<1)	0
水痘	0	1 (<1)	0	1 (<1)	0
ウイルス性咽頭炎	1 (<1)	1 (<1)	0	1 (<1)	0
ウイルス性鼻炎	0	0	1 (<1)	1 (<1)	0
外陰部炎	0	1 (<1)	0	1 (<1)	0
膿瘍	1 (<1)	0	0	0	0
肛門膿瘍	1 (<1)	0	0	0	0
ボレリア感染	1 (<1)	0	0	0	0
熱傷部感染	1 (<1)	0	0	0	0
子宮頚管炎	0	0	0	0	1 (<1)
ウイルス性結膜炎	1 (<1)	0	0	0	0
医療機器関連感染	1 (<1)	0	0	0	0
感染性下痢	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
細菌性心内膜炎	1 (<1)	0	0	0	0
皮膚真菌感染	0	0	0	0	1 (<1)
細菌性性器感染	1 (<1)	0	0	0	0
ヘルペスウイルス感染	1 (<1)	0	0	0	0
寄生虫感染	0	0	0	0	1 (<1)
迷路炎	0	0	0	0	1 (<1)
口腔真菌感染	1 (<1)	0	0	0	0
パラインフルエンザウイルス感染	1 (<1)	0	0	0	0
耳下腺炎	0	0	0	0	1 (<1)
骨盤内炎症性疾患	1 (<1)	0	0	0	0
細菌性咽頭炎	2 (<1)	0	0	0	1 (<1)
術後膿瘍	1 (<1)	0	0	0	0
膿胸	0	0	0	0	1 (<1)
ライター症候群	1 (<1)	0	0	0	0
敗血症	1 (<1)	0	0	0	0
扁桃炎	0	0	0	0	1 (<1)
細菌性尿路感染	3 (<1)	0	0	0	0
外陰部膿瘍	1 (<1)	0	0	0	0
創傷感染	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	10 (3)	11 (3)	20 (6)	31 (4)	7 (5)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚乳頭腫	0	3 (<1)	4 (1)	7 (1)	0
脂肪腫	0	1 (<1)	3 (<1)	4 (<1)	0
子宮平滑筋腫	2 (<1)	1 (<1)	3 (<1)	4 (<1)	2 (1)
メラノサイト性母斑	2 (<1)	0	3 (<1)	3 (<1)	1 (<1)
線維腫	0	1 (<1)	1 (<1)	2 (<1)	0
肺新生物	0	1 (<1)	1 (<1)	2 (<1)	0
甲状腺新生物	1 (<1)	2 (<1)	0	2 (<1)	0
基底細胞癌	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
肺の良性新生物	0	1 (<1)	0	1 (<1)	0
乳癌	0	0	1 (<1)	1 (<1)	0
子宮頚部癌	0	0	1 (<1)	1 (<1)	1 (<1)
乳腺線維腺腫	0	0	1 (<1)	1 (<1)	0
泌尿生殖器新生物	0	0	1 (<1)	1 (<1)	0
血管腫	0	0	1 (<1)	1 (<1)	0
神経鞘腫	0	1 (<1)	0	1 (<1)	0
乳頭腫	0	0	1 (<1)	1 (<1)	0
腎新生物	0	1 (<1)	0	1 (<1)	0
脂漏性角化症	0	0	1 (<1)	1 (<1)	0
移行上皮癌	0	1 (<1)	0	1 (<1)	0
リンパ節の良性新生物	1 (<1)	0	0	0	0
甲状腺の良性新生物	1 (<1)	0	0	0	0
子宮内膜癌	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
線維性組織球腫	0	0	0	0	1 (<1)
モートン神経腫	1 (<1)	0	0	0	0
皮膚の新生物	1 (<1)	0	0	0	0
口腔新生物	1 (<1)	0	0	0	0
転移性甲状腺癌	0	0	0	0	1 (<1)
血液およびリンパ系障害	14 (4)	22 (7)	30 (8)	52 (8)	4 (3)
リンパ球減少症	0	10 (3)	10 (3)	20 (3)	0
貧血	7 (2)	7 (2)	12 (3)	19 (3)	2 (1)
白血球減少症	0	4 (1)	4 (1)	8 (1)	0
白血球増加症	1 (<1)	4 (1)	0	4 (<1)	0
好中球増加症	1 (<1)	1 (<1)	3 (<1)	4 (<1)	0
好酸球増加症	0	0	3 (<1)	3 (<1)	0
鉄欠乏性貧血	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
リンパ節症	4 (1)	0	3 (<1)	3 (<1)	1 (<1)
好中球減少症	0	0	2 (<1)	2 (<1)	0
低色素性貧血	0	0	0	0	1 (<1)
小球性貧血	1 (<1)	0	0	0	0
血小板増加症	1 (<1)	0	0	0	0
免疫系障害	7 (2)	11 (3)	12 (3)	23 (3)	6 (4)
過敏症	1 (<1)	9 (3)	5 (1)	14 (2)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
季節性アレルギー	4 (1)	1 (<1)	3 (<1)	4 (<1)	2 (1)
薬物過敏症	0	1 (<1)	2 (<1)	3 (<1)	2 (1)
造影剤アレルギー	0	1 (<1)	0	1 (<1)	0
食物アレルギー	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
免疫不全症	0	0	1 (<1)	1 (<1)	0
続発性免疫不全症	0	0	1 (<1)	1 (<1)	0
アナフィラキシー反応	0	0	0	0	2 (1)
家塵アレルギー	2 (<1)	0	0	0	0
内分泌障害	3 (<1)	3 (<1)	6 (2)	9 (1)	2 (1)
副甲状腺機能亢進症	0	1 (<1)	1 (<1)	2 (<1)	0
甲状腺機能低下症	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
自己免疫性甲状腺炎	0	1 (<1)	0	1 (<1)	0
甲状腺腫	0	1 (<1)	0	1 (<1)	1 (<1)
原発性副甲状腺機能亢進症	0	0	1 (<1)	1 (<1)	0
エストロゲン欠乏症	0	0	1 (<1)	1 (<1)	0
甲状腺腫瘤	0	0	1 (<1)	1 (<1)	0
副腎腫瘤	1 (<1)	0	0	0	0
甲状腺機能亢進症	1 (<1)	0	0	0	0
代謝および栄養障害	34 (10)	22 (7)	29 (8)	51 (7)	10 (7)
食欲減退	8 (2)	7 (2)	8 (2)	15 (2)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
高コレステロール血症	3 (<1)	4 (1)	4 (1)	8 (1)	1 (<1)
高脂血症	3 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
ビタミンD欠乏	7 (2)	3 (<1)	2 (<1)	5 (<1)	3 (2)
脱水	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
高血糖	4 (1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
糖尿病	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
鉄欠乏	0	1 (<1)	1 (<1)	2 (<1)	0
ビタミンＢ１２欠乏	0	0	2 (<1)	2 (<1)	0
異常体重減少	0	0	1 (<1)	1 (<1)	0
耐糖能障害	0	0	1 (<1)	1 (<1)	1 (<1)
痛風	1 (<1)	1 (<1)	0	1 (<1)	0
高ナトリウム血症	0	0	1 (<1)	1 (<1)	0
高トリグリセリド血症	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
低カリウム血症	0	0	1 (<1)	1 (<1)	0
食欲亢進	2 (<1)	1 (<1)	0	1 (<1)	0
亜鉛欠乏	0	0	1 (<1)	1 (<1)	0
電解質失調	1 (<1)	0	0	0	0
葉酸欠乏	1 (<1)	0	0	0	0
高尿酸血症	0	0	0	0	1 (<1)
低ナトリウム血症	1 (<1)	0	0	0	0
ビタミン欠乏症	1 (<1)	0	0	0	0
肥満	1 (<1)	0	0	0	0

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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
精神障害	88 (25)	61 (18)	57 (16)	118 (17)	28 (21)
うつ病	39 (11)	26 (8)	23 (6)	49 (7)	14 (10)
不眠症	16 (5)	17 (5)	10 (3)	27 (4)	7 (5)
不安	15 (4)	12 (4)	7 (2)	19 (3)	3 (2)
睡眠障害	8 (2)	4 (1)	7 (2)	11 (2)	1 (<1)
抑うつ気分	10 (3)	6 (2)	2 (<1)	8 (1)	3 (2)
感情障害	3 (<1)	2 (<1)	3 (<1)	5 (<1)	0
気分変化	0	2 (<1)	1 (<1)	3 (<1)	0
神経症	0	2 (<1)	1 (<1)	3 (<1)	0
ストレス	2 (<1)	1 (<1)	2 (<1)	3 (<1)	3 (2)
リビドー減退	0	2 (<1)	0	2 (<1)	0
神経過敏	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
パニック発作	0	0	2 (<1)	2 (<1)	0
自殺念慮	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
異常な夢	1 (<1)	0	1 (<1)	1 (<1)	0
抑うつ気分を伴う適応障害	0	1 (<1)	0	1 (<1)	0
燃え尽き症候群	0	1 (<1)	0	1 (<1)	0
転換性障害	0	0	1 (<1)	1 (<1)	0
抑うつ症状	1 (<1)	0	1 (<1)	1 (<1)	0
性的興奮障害	0	0	1 (<1)	1 (<1)	0
情動障害	0	0	1 (<1)	1 (<1)	0
多幸気分	1 (<1)	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
リビド消失	0	1 (<1)	0	1 (<1)	0
躁病	0	1 (<1)	0	1 (<1)	0
気分動揺	4 (1)	0	1 (<1)	1 (<1)	1 (<1)
人格障害	0	1 (<1)	0	1 (<1)	0
落ち着きのなさ	0	1 (<1)	0	1 (<1)	0
身体表現性障害	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
自殺企図	0	0	1 (<1)	1 (<1)	1 (<1)
適応障害	0	0	0	0	1 (<1)
感情不安定	4 (1)	0	0	0	0
激越	1 (<1)	0	0	0	0
気晴らし食い	1 (<1)	0	0	0	0
精神緩慢	1 (<1)	0	0	0	0
歯ぎしり	1 (<1)	0	0	0	0
閉所恐怖症	0	0	0	0	1 (<1)
幻覚	1 (<1)	0	0	0	0
故意の自傷行為	0	0	0	0	1 (<1)
悪夢	1 (<1)	0	0	0	0
神経系障害	216 (61)	177 (53)	190 (54)	367 (53)	73 (54)
多発性硬化症再発	123 (35)	93 (28)	92 (26)	185 (27)	49 (36)
頭痛	62 (18)	60 (18)	52 (15)	112 (16)	17 (13)
錯感覚	29 (8)	24 (7)	34 (10)	58 (8)	11 (8)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
浮動性めまい	19 (5)	16 (5)	19 (5)	35 (5)	4 (3)
感覚鈍麻	27 (8)	10 (3)	18 (5)	28 (4)	5 (4)
灼熱感	6 (2)	12 (4)	15 (4)	27 (4)	0
片頭痛	8 (2)	9 (3)	10 (3)	19 (3)	1 (<1)
筋痙直	11 (3)	8 (2)	7 (2)	15 (2)	2 (1)
平衡障害	5 (1)	6 (2)	5 (1)	11 (2)	2 (1)
感覚障害	4 (1)	6 (2)	4 (1)	10 (1)	1 (<1)
多発性硬化症	6 (2)	5 (1)	4 (1)	9 (1)	1 (<1)
異常感覚	3 (<1)	7 (2)	1 (<1)	8 (1)	0
神経痛	2 (<1)	4 (1)	4 (1)	8 (1)	0
坐骨神経痛	7 (2)	3 (<1)	5 (1)	8 (1)	1 (<1)
緊張性頭痛	2 (<1)	4 (1)	4 (1)	8 (1)	1 (<1)
構語障害	0	2 (<1)	4 (1)	6 (<1)	0
傾眠	5 (1)	2 (<1)	4 (1)	6 (<1)	1 (<1)
失神	2 (<1)	2 (<1)	4 (1)	6 (<1)	0
味覚異常	0	1 (<1)	4 (1)	5 (<1)	2 (1)
副鼻腔炎に伴う頭痛	3 (<1)	1 (<1)	4 (1)	5 (<1)	1 (<1)
振戦	4 (1)	3 (<1)	2 (<1)	5 (<1)	2 (1)
健忘	4 (1)	2 (<1)	2 (<1)	4 (<1)	0
注意力障害	0	2 (<1)	2 (<1)	4 (<1)	1 (<1)
三叉神経痛	7 (2)	1 (<1)	3 (<1)	4 (<1)	2 (1)
帯状感	0	0	3 (<1)	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
認知障害	0	1 (<1)	2 (<1)	3 (<1)	1 (<1)
失神寸前の状態	3 (<1)	2 (<1)	1 (<1)	3 (<1)	0
下肢静止不能症候群	4 (1)	2 (<1)	1 (<1)	3 (<1)	3 (2)
ウートホフ現象	2 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
味覚消失	0	1 (<1)	1 (<1)	2 (<1)	0
運動失調	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
手根管症候群	4 (1)	2 (<1)	0	2 (<1)	2 (1)
不器用	0	2 (<1)	0	2 (<1)	1 (<1)
協調運動異常	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
知覚過敏	4 (1)	2 (<1)	0	2 (<1)	1 (<1)
反射亢進	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
過眠症	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
肋間神経痛	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
レルミット徴候	2 (<1)	0	2 (<1)	2 (<1)	0
記憶障害	4 (1)	1 (<1)	1 (<1)	2 (<1)	5 (4)
前兆を伴う片頭痛	1 (<1)	2 (<1)	0	2 (<1)	1 (<1)
不随意性筋収縮	0	2 (<1)	0	2 (<1)	0
神経圧迫	1 (<1)	0	2 (<1)	2 (<1)	0
失認症	0	1 (<1)	0	1 (<1)	0
自律神経失調	0	0	1 (<1)	1 (<1)	0
頚髄神経根痛	0	0	1 (<1)	1 (<1)	0
概日リズム睡眠障害	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
泣き	0	0	1 (<1)	1 (<1)	0
振動覚低下	1 (<1)	1 (<1)	0	1 (<1)	0
体位性めまい	0	1 (<1)	0	1 (<1)	0
よだれ	0	0	1 (<1)	1 (<1)	0
ジスキネジー	0	1 (<1)	0	1 (<1)	0
ジストニー	0	1 (<1)	0	1 (<1)	1 (<1)
てんかん	1 (<1)	1 (<1)	0	1 (<1)	0
顔面神経障害	0	0	1 (<1)	1 (<1)	0
蟻走感	0	0	1 (<1)	1 (<1)	1 (<1)
舌咽神経痛	0	1 (<1)	0	1 (<1)	0
不全片麻痺	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
虚血性脳卒中	0	0	1 (<1)	1 (<1)	0
嗜眠	0	0	1 (<1)	1 (<1)	0
意識消失	1 (<1)	0	1 (<1)	1 (<1)	0
腰髄神経根障害	1 (<1)	1 (<1)	0	1 (<1)	0
感覚異常性大腿神経痛	0	1 (<1)	0	1 (<1)	0
神経学的症状	0	1 (<1)	0	1 (<1)	0
末梢性ニューロパチー	1 (<1)	0	1 (<1)	1 (<1)	0
後頭神経痛	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
視神経炎	0	1 (<1)	0	1 (<1)	0
腓骨神経麻痺	0	1 (<1)	0	1 (<1)	1 (<1)
神経根痛	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
二次性進行型多発性硬化症	0	0	1 (<1)	1 (<1)	0
感覚消失	0	1 (<1)	0	1 (<1)	1 (<1)
一過性脳虚血発作	0	1 (<1)	0	1 (<1)	0
尺骨神経管症候群	0	1 (<1)	0	1 (<1)	0
視野欠損	1 (<1)	1 (<1)	0	1 (<1)	0
異痛症	1 (<1)	0	0	0	0
失語症	1 (<1)	0	0	0	1 (<1)
中枢神経系病変	2 (<1)	0	0	0	0
中枢痛症候群	1 (<1)	0	0	0	0
小脳症候群	1 (<1)	0	0	0	0
脳血管発作	1 (<1)	0	0	0	0
頚腕症候群	2 (<1)	0	0	0	0
痙攣	1 (<1)	0	0	0	0
顔面不全麻痺	0	0	0	0	1 (<1)
顔面痙攣	2 (<1)	0	0	0	1 (<1)
大発作痙攣	1 (<1)	0	0	0	0
頭部動揺	0	0	0	0	1 (<1)
片側頭痛	3 (<1)	0	0	0	0
筋緊張低下	1 (<1)	0	0	0	0
不全単麻痺	1 (<1)	0	0	0	1 (<1)
単麻痺	1 (<1)	0	0	0	0
眼振	1 (<1)	0	0	0	0

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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
起立不耐性	0	0	0	0	1 (<1)
嗅覚錯誤	1 (<1)	0	0	0	0
周期性四肢運動障害	0	0	0	0	1 (<1)
片頭痛発作重積	1 (<1)	0	0	0	0
足根管症候群	0	0	0	0	1 (<1)
振動覚亢進	1 (<1)	0	0	0	1 (<1)
第６脳神経麻痺	0	0	0	0	1 (<1)
眼障害	52 (15)	33 (10)	40 (11)	73 (11)	16 (12)
霧視	12 (3)	8 (2)	10 (3)	18 (3)	4 (3)
眼痛	6 (2)	7 (2)	8 (2)	15 (2)	2 (1)
結膜炎	3 (<1)	4 (1)	4 (1)	8 (1)	1 (<1)
眼乾燥	4 (1)	5 (1)	1 (<1)	6 (<1)	1 (<1)
複視	7 (2)	2 (<1)	3 (<1)	5 (<1)	2 (1)
アレルギー性結膜炎	0	2 (<1)	2 (<1)	4 (<1)	1 (<1)
視力低下	7 (2)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
視力障害	3 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
眼瞼炎	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
眼瞼痙攣	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
失明	0	1 (<1)	2 (<1)	3 (<1)	0
白内障	0	1 (<1)	1 (<1)	2 (<1)	0
緑内障	1 (<1)	0	2 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
眼充血	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
光視症	0	2 (<1)	0	2 (<1)	0
ブドウ膜炎	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
硝子体浮遊物	0	1 (<1)	1 (<1)	2 (<1)	0
黒内障	0	1 (<1)	0	1 (<1)	0
霰粒腫	0	0	1 (<1)	1 (<1)	0
眼出血	0	1 (<1)	0	1 (<1)	0
眼刺激	0	0	1 (<1)	1 (<1)	0
眼そう痒症	1 (<1)	0	1 (<1)	1 (<1)	0
眼瞼障害	0	0	1 (<1)	1 (<1)	0
眼瞼下垂	0	0	1 (<1)	1 (<1)	0
遠視	1 (<1)	1 (<1)	0	1 (<1)	0
角膜炎	0	0	1 (<1)	1 (<1)	0
流涙増加	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
瞼板腺炎	0	0	1 (<1)	1 (<1)	0
夜盲	0	0	1 (<1)	1 (<1)	0
眼球運動失調	0	1 (<1)	0	1 (<1)	0
眼筋麻痺	0	0	1 (<1)	1 (<1)	0
羞明	2 (<1)	1 (<1)	0	1 (<1)	0
老視	0	1 (<1)	0	1 (<1)	0
眼の異常感	1 (<1)	0	0	0	0
一過性失明	0	0	0	0	1 (<1)

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
片側失明	0	0	0	0	1 (<1)
嚢下白内障	1 (<1)	0	0	0	0
結膜刺激	1 (<1)	0	0	0	0
眼瞼紅斑	2 (<1)	0	0	0	0
眼のアレルギー	0	0	0	0	1 (<1)
眼の障害	1 (<1)	0	0	0	0
眼瞼刺激	1 (<1)	0	0	0	0
眼瞼そう痒症	1 (<1)	0	0	0	0
黄斑浮腫	1 (<1)	0	0	0	0
翼状片	1 (<1)	0	0	0	0
屈折障害	1 (<1)	0	0	0	0
閃輝暗点	1 (<1)	0	0	0	0
硝子体出血	1 (<1)	0	0	0	0
耳および迷路障害	23 (7)	17 (5)	36 (10)	53 (8)	12 (9)
回転性めまい	17 (5)	7 (2)	24 (7)	31 (4)	5 (4)
耳鳴	2 (<1)	3 (<1)	5 (1)	8 (1)	2 (1)
耳痛	3 (<1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
頭位性回転性めまい	0	2 (<1)	2 (<1)	4 (<1)	1 (<1)
耳不快感	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
聴力低下	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
感音性難聴	0	1 (<1)	0	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
耳閉	1 (<1)	0	1 (<1)	1 (<1)	0
耳管障害	0	0	1 (<1)	1 (<1)	0
耳管機能障害	0	0	1 (<1)	1 (<1)	1 (<1)
外耳障害	0	0	1 (<1)	1 (<1)	0
聴覚過敏	0	1 (<1)	0	1 (<1)	0
乗物酔い	1 (<1)	0	1 (<1)	1 (<1)	0
耳垢栓塞	0	0	0	0	1 (<1)
外耳道紅斑	1 (<1)	0	0	0	0
心臓障害	20 (6)	24 (7)	23 (6)	47 (7)	7 (5)
動悸	4 (1)	6 (2)	2 (<1)	8 (1)	0
頻脈	4 (1)	3 (<1)	5 (1)	8 (1)	2 (1)
第一度房室ブロック	1 (<1)	4 (1)	3 (<1)	7 (1)	1 (<1)
心室性期外収縮	5 (1)	1 (<1)	5 (1)	6 (<1)	0
狭心症	0	3 (<1)	1 (<1)	4 (<1)	0
上室性期外収縮	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
洞性徐脈	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
左脚ブロック	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
右脚ブロック	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
期外収縮	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
ウォルフ・パーキンソン・ホワイト症候群	0	2 (<1)	0	2 (<1)	0
急性冠動脈症候群	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心房細動	0	0	1 (<1)	1 (<1)	0
徐脈	0	0	1 (<1)	1 (<1)	2 (1)
心不全	0	0	1 (<1)	1 (<1)	0
結節性調律	0	0	1 (<1)	1 (<1)	0
洞性頻脈	1 (<1)	0	1 (<1)	1 (<1)	0
上室性不整脈	1 (<1)	0	0	0	0
伝導障害	1 (<1)	0	0	0	0
心筋虚血	1 (<1)	0	0	0	0
上室性頻脈	1 (<1)	0	0	0	0
血管障害	57 (16)	157 (47)	135 (38)	292 (42)	10 (7)
潮紅	16 (5)	122 (36)	97 (27)	219 (32)	1 (<1)
ほてり	12 (3)	32 (9)	29 (8)	61 (9)	1 (<1)
高血圧	19 (5)	9 (3)	13 (4)	22 (3)	7 (5)
充血	0	1 (<1)	3 (<1)	4 (<1)	0
低血圧	0	3 (<1)	0	3 (<1)	0
血腫	5 (1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
静脈瘤	0	2 (<1)	0	2 (<1)	0
血管障害	0	0	1 (<1)	1 (<1)	0
動脈障害	0	1 (<1)	0	1 (<1)	0
動脈硬化症	0	0	1 (<1)	1 (<1)	0
微小血管症	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
起立性低血圧	2 (<1)	0	1 (<1)	1 (<1)	0
末梢冷感	2 (<1)	1 (<1)	0	1 (<1)	0
末梢性虚血	1 (<1)	1 (<1)	0	1 (<1)	0
静脈炎	2 (<1)	0	1 (<1)	1 (<1)	0
レイノー現象	2 (<1)	1 (<1)	0	1 (<1)	0
毛細血管脆弱	1 (<1)	0	0	0	0
深部静脈血栓症	0	0	0	0	1 (<1)
高血圧クリーゼ	1 (<1)	0	0	0	0
静脈狭窄	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	61 (17)	45 (13)	54 (15)	99 (14)	16 (12)
咳嗽	17 (5)	19 (6)	16 (5)	35 (5)	4 (3)
口腔咽頭痛	12 (3)	11 (3)	20 (6)	31 (4)	5 (4)
アレルギー性鼻炎	3 (<1)	2 (<1)	4 (1)	6 (<1)	0
呼吸困難	4 (1)	4 (1)	1 (<1)	5 (<1)	2 (1)
鼻漏	4 (1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
喘息	1 (<1)	2 (<1)	2 (<1)	4 (<1)	2 (1)
上気道咳症候群	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
鼻閉	4 (1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
湿性咳嗽	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
鼻出血	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
気道うっ血	3 (<1)	0	2 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
副鼻腔うっ血	2 (<1)	0	2 (<1)	2 (<1)	0
咽喉刺激感	2 (<1)	2 (<1)	0	2 (<1)	0
上気道うっ血	3 (<1)	0	2 (<1)	2 (<1)	1 (<1)
アレルギー性咽頭炎	0	0	1 (<1)	1 (<1)	0
アレルギー性副鼻腔炎	0	1 (<1)	0	1 (<1)	0
息詰まり	0	0	1 (<1)	1 (<1)	1 (<1)
息詰まり感	0	1 (<1)	0	1 (<1)	0
咽喉乾燥	1 (<1)	1 (<1)	0	1 (<1)	0
鼻乾燥	2 (<1)	0	1 (<1)	1 (<1)	0
鼻浮腫	0	0	1 (<1)	1 (<1)	0
口腔咽頭プラーク	1 (<1)	1 (<1)	0	1 (<1)	0
咽頭嚢腫	0	1 (<1)	0	1 (<1)	0
咽頭腫瘤	0	0	1 (<1)	1 (<1)	0
胸膜炎	0	0	1 (<1)	1 (<1)	0
ラ音	2 (<1)	0	1 (<1)	1 (<1)	0
呼吸抑制	0	1 (<1)	0	1 (<1)	0
呼吸障害	0	0	1 (<1)	1 (<1)	0
気道の炎症	1 (<1)	0	1 (<1)	1 (<1)	0
低音性連続性ラ音	1 (<1)	1 (<1)	0	1 (<1)	0
副鼻腔障害	1 (<1)	0	1 (<1)	1 (<1)	0
咽喉絞扼感	0	1 (<1)	0	1 (<1)	0
声帯の炎症	1 (<1)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
声帯ポリープ	0	0	1 (<1)	1 (<1)	0
喘鳴	1 (<1)	1 (<1)	0	1 (<1)	0
発声障害	2 (<1)	0	0	0	1 (<1)
労作性呼吸困難	1 (<1)	0	0	0	0
喀血	1 (<1)	0	0	0	0
しゃっくり	1 (<1)	0	0	0	0
上気道分泌増加	1 (<1)	0	0	0	0
鼻中隔穿孔	0	0	0	0	1 (<1)
口腔咽頭水疱形成	1 (<1)	0	0	0	0
口腔咽頭不快感	0	0	0	0	1 (<1)
咽頭紅斑	1 (<1)	0	0	0	0
咽頭の炎症	1 (<1)	0	0	0	0
睡眠時無呼吸症候群	0	0	0	0	1 (<1)
くしゃみ	0	0	0	0	1 (<1)
上気道の炎症	1 (<1)	0	0	0	0
胃腸障害	144 (41)	171 (51)	191 (54)	362 (52)	29 (21)
下痢	44 (13)	50 (15)	62 (18)	112 (16)	7 (5)
悪心	30 (9)	41 (12)	50 (14)	91 (13)	7 (5)
上腹部痛	20 (6)	36 (11)	36 (10)	72 (10)	1 (<1)
腹痛	17 (5)	31 (9)	31 (9)	62 (9)	4 (3)
嘔吐	18 (5)	25 (7)	26 (7)	51 (7)	4 (3)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
消化不良	13 (4)	15 (4)	25 (7)	40 (6)	3 (2)
便秘	17 (5)	13 (4)	18 (5)	31 (4)	7 (5)
胃腸障害	4 (1)	8 (2)	14 (4)	22 (3)	0
胃炎	3 (<1)	11 (3)	8 (2)	19 (3)	1 (<1)
歯痛	8 (2)	6 (2)	11 (3)	17 (2)	3 (2)
腹部不快感	6 (2)	10 (3)	5 (1)	15 (2)	0
口内乾燥	5 (1)	8 (2)	6 (2)	14 (2)	1 (<1)
鼓腸	10 (3)	8 (2)	5 (1)	13 (2)	1 (<1)
胃食道逆流性疾患	10 (3)	5 (1)	7 (2)	12 (2)	2 (1)
腹部膨満	7 (2)	2 (<1)	8 (2)	10 (1)	0
痔核	6 (2)	3 (<1)	6 (2)	9 (1)	0
下腹部痛	1 (<1)	1 (<1)	4 (1)	5 (<1)	0
歯周炎	1 (<1)	2 (<1)	3 (<1)	5 (<1)	0
齲歯	2 (<1)	1 (<1)	3 (<1)	4 (<1)	0
嚥下障害	4 (1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
心窩部不快感	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
おくび	0	1 (<1)	2 (<1)	3 (<1)	0
食中毒	0	0	3 (<1)	3 (<1)	0
裂孔ヘルニア	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
胃酸過多	0	3 (<1)	0	3 (<1)	0
逆流性食道炎	2 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
腹部圧痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
結腸ポリープ	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
腸憩室	0	0	2 (<1)	2 (<1)	1 (<1)
十二指腸潰瘍	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
小腸炎	0	0	2 (<1)	2 (<1)	0
便失禁	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
排便回数増加	0	1 (<1)	1 (<1)	2 (<1)	0
歯肉炎	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
舌痛	0	1 (<1)	1 (<1)	2 (<1)	0
口の感覚鈍麻	0	1 (<1)	1 (<1)	2 (<1)	0
過敏性腸症候群	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
口腔内潰瘍形成	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
埋伏歯	0	0	2 (<1)	2 (<1)	0
腹部ヘルニア	0	1 (<1)	0	1 (<1)	0
便通不規則	0	0	1 (<1)	1 (<1)	0
クローン病	0	1 (<1)	0	1 (<1)	0
便意切迫	0	1 (<1)	0	1 (<1)	2 (1)
憩室穿孔	0	1 (<1)	0	1 (<1)	0
十二指腸ポリープ	0	1 (<1)	0	1 (<1)	0
腸炎	0	0	1 (<1)	1 (<1)	0
胃潰瘍	0	0	1 (<1)	1 (<1)	0
出血性胃炎	0	1 (<1)	0	1 (<1)	1 (<1)
胃腸出血	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
消化器痛	2 (<1)	1 (<1)	0	1 (<1)	0
歯肉嚢胞	0	0	1 (<1)	1 (<1)	0
歯肉障害	0	0	1 (<1)	1 (<1)	0
歯肉痛	1 (<1)	0	1 (<1)	1 (<1)	0
舌炎	0	1 (<1)	0	1 (<1)	0
血便排泄	2 (<1)	0	1 (<1)	1 (<1)	0
胃排出不全	0	1 (<1)	0	1 (<1)	0
炎症性腸疾患	0	0	1 (<1)	1 (<1)	0
腸閉塞	0	0	1 (<1)	1 (<1)	0
腸管ポリープ	0	1 (<1)	0	1 (<1)	0
口唇水疱	0	1 (<1)	0	1 (<1)	0
弛緩歯	0	1 (<1)	0	1 (<1)	0
神経因性腸	0	0	1 (<1)	1 (<1)	0
嚥下痛	0	1 (<1)	0	1 (<1)	0
食道出血	0	1 (<1)	0	1 (<1)	0
食道痙攣	0	0	1 (<1)	1 (<1)	0
食道潰瘍	0	0	1 (<1)	1 (<1)	0
食道炎	0	1 (<1)	0	1 (<1)	0
口腔内痛	0	0	1 (<1)	1 (<1)	0
膵脂肪腫症	0	1 (<1)	0	1 (<1)	0
膵臓障害	0	0	1 (<1)	1 (<1)	0
口の錯感覚	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
消化性潰瘍	0	0	1 (<1)	1 (<1)	0
歯周病	0	1 (<1)	0	1 (<1)	0
肛門周囲痛	2 (<1)	1 (<1)	0	1 (<1)	0
逆流性胃炎	1 (<1)	0	1 (<1)	1 (<1)	0
流涎過多	0	1 (<1)	0	1 (<1)	0
舌腫脹	0	1 (<1)	0	1 (<1)	0
舌苔	0	0	1 (<1)	1 (<1)	0
舌障害	0	0	1 (<1)	1 (<1)	0
地図状舌	0	1 (<1)	0	1 (<1)	0
歯の障害	1 (<1)	1 (<1)	0	1 (<1)	0
歯の脱落	1 (<1)	1 (<1)	0	1 (<1)	0
腹部硬直	1 (<1)	0	0	0	0
異常便	1 (<1)	0	0	0	0
裂肛	1 (<1)	0	0	0	0
アフタ性口内炎	1 (<1)	0	0	0	0
根尖肉芽腫	0	0	0	0	1 (<1)
呼気臭	1 (<1)	0	0	0	0
大腸炎	2 (<1)	0	0	0	1 (<1)
潰瘍性大腸炎	1 (<1)	0	0	0	0
十二指腸胃逆流	1 (<1)	0	0	0	0
変色便	0	0	0	0	1 (<1)
胃障害	2 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
歯肉出血	1 (<1)	0	0	0	1 (<1)
歯肉腫脹	1 (<1)	0	0	0	0
吐血	1 (<1)	0	0	0	0
膵炎	1 (<1)	0	0	0	0
急性膵炎	1 (<1)	0	0	0	0
腹膜出血	1 (<1)	0	0	0	0
直腸出血	1 (<1)	0	0	0	0
直腸攣縮	0	0	0	0	1 (<1)
口内炎	2 (<1)	0	0	0	1 (<1)
舌乾燥	1 (<1)	0	0	0	0
臍ヘルニア	1 (<1)	0	0	0	0
肝胆道系障害	4 (1)	6 (2)	9 (3)	15 (2)	1 (<1)
肝障害	0	1 (<1)	3 (<1)	4 (<1)	0
肝細胞融解性肝炎	0	1 (<1)	2 (<1)	3 (<1)	0
胆石症	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
肝嚢胞	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
脂肪肝	0	2 (<1)	0	2 (<1)	0
胆管結石	1 (<1)	0	1 (<1)	1 (<1)	0
胆道ジスキネジー	0	0	1 (<1)	1 (<1)	0
胆汁うっ滞性肝炎	0	1 (<1)	0	1 (<1)	0
肝炎	1 (<1)	0	0	0	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
中毒性肝炎	1 (<1)	0	0	0	0
皮膚および皮下組織障害	85 (24)	109 (32)	116 (33)	225 (33)	26 (19)
そう痒症	16 (5)	31 (9)	29 (8)	60 (9)	2 (1)
発疹	12 (3)	24 (7)	27 (8)	51 (7)	4 (3)
紅斑	4 (1)	17 (5)	28 (8)	45 (7)	2 (1)
多汗症	6 (2)	11 (3)	9 (3)	20 (3)	2 (1)
寝汗	5 (1)	7 (2)	9 (3)	16 (2)	1 (<1)
脱毛症	9 (3)	7 (2)	5 (1)	12 (2)	1 (<1)
蕁麻疹	4 (1)	5 (1)	5 (1)	10 (1)	1 (<1)
アレルギー性皮膚炎	4 (1)	5 (1)	1 (<1)	6 (<1)	1 (<1)
湿疹	2 (<1)	3 (<1)	3 (<1)	6 (<1)	2 (1)
全身性そう痒症	2 (<1)	1 (<1)	5 (1)	6 (<1)	2 (1)
そう痒性皮疹	2 (<1)	4 (1)	2 (<1)	6 (<1)	0
顔面感覚鈍麻	3 (<1)	1 (<1)	4 (1)	5 (<1)	1 (<1)
光線過敏性反応	1 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
皮膚灼熱感	0	2 (<1)	3 (<1)	5 (<1)	0
ざ瘡	6 (2)	1 (<1)	3 (<1)	4 (<1)	0
皮膚炎	2 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
皮膚乾燥	5 (1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
全身紅斑	0	1 (<1)	3 (<1)	4 (<1)	0
酒さ	1 (<1)	4 (1)	0	4 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
痒疹	0	2 (<1)	1 (<1)	3 (<1)	0
全身性皮疹	0	1 (<1)	2 (<1)	3 (<1)	0
斑状皮疹	1 (<1)	0	3 (<1)	3 (<1)	0
皮膚色素過剰	1 (<1)	3 (<1)	0	3 (<1)	1 (<1)
水疱	1 (<1)	2 (<1)	0	2 (<1)	0
過角化	0	0	2 (<1)	2 (<1)	0
網状皮斑	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
皮膚疼痛	0	0	2 (<1)	2 (<1)	0
紅斑性皮疹	0	0	2 (<1)	2 (<1)	0
丘疹性皮疹	0	1 (<1)	1 (<1)	2 (<1)	0
皮膚刺激	0	2 (<1)	0	2 (<1)	1 (<1)
皮膚のつっぱり感	0	1 (<1)	1 (<1)	2 (<1)	0
日光性角化症	0	0	1 (<1)	1 (<1)	0
皮膚弛緩症	0	1 (<1)	0	1 (<1)	0
皮膚嚢腫	1 (<1)	1 (<1)	0	1 (<1)	0
ざ瘡様皮膚炎	0	1 (<1)	0	1 (<1)	0
アトピー性皮膚炎	0	1 (<1)	0	1 (<1)	0
接触性皮膚炎	1 (<1)	0	1 (<1)	1 (<1)	2 (1)
斑状出血	4 (1)	0	1 (<1)	1 (<1)	1 (<1)
紅色汗疹	1 (<1)	1 (<1)	0	1 (<1)	0
嵌入爪	1 (<1)	0	1 (<1)	1 (<1)	0
毛孔性角化症	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
睫毛眉毛脱落症	0	1 (<1)	0	1 (<1)	0
爪変色	1 (<1)	1 (<1)	0	1 (<1)	0
爪の障害	0	0	1 (<1)	1 (<1)	0
爪破損	1 (<1)	1 (<1)	0	1 (<1)	0
乾癬	4 (1)	0	1 (<1)	1 (<1)	1 (<1)
瘢痕	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
皮膚色素脱失	0	0	1 (<1)	1 (<1)	0
皮膚変色	1 (<1)	0	1 (<1)	1 (<1)	0
皮膚剥脱	0	0	1 (<1)	1 (<1)	0
皮膚硬結	1 (<1)	1 (<1)	0	1 (<1)	2 (1)
皮膚反応	0	0	1 (<1)	1 (<1)	0
毛細血管拡張症	1 (<1)	1 (<1)	0	1 (<1)	0
一過性棘融解性皮膚症	0	0	1 (<1)	1 (<1)	0
乾皮症	0	0	1 (<1)	1 (<1)	0
冷汗	1 (<1)	0	0	0	0
頭部粃糠疹	0	0	0	0	1 (<1)
多形紅斑	1 (<1)	0	0	0	0
剥脱性発疹	1 (<1)	0	0	0	0
皮膚肉芽腫	1 (<1)	0	0	0	0
毛質異常	1 (<1)	0	0	0	0
内出血発生の増加傾向	0	0	0	0	1 (<1)
脂肪組織萎縮症	0	0	0	0	1 (<1)

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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
後天性リポジストロフィー	0	0	0	0	1 (<1)
爪床の炎症	1 (<1)	0	0	0	0
点状出血	2 (<1)	0	0	0	0
光線性皮膚症	1 (<1)	0	0	0	0
色素沈着障害	2 (<1)	0	0	0	0
ばら色粃糠疹	1 (<1)	0	0	0	0
斑状丘疹状皮疹	1 (<1)	0	0	0	0
猩紅熱様発疹	1 (<1)	0	0	0	0
小水疱性皮疹	1 (<1)	0	0	0	0
皮膚障害	1 (<1)	0	0	0	0
皮膚病変	1 (<1)	0	0	0	0
皮膚小結節	0	0	0	0	1 (<1)
顔面腫脹	1 (<1)	0	0	0	2 (1)
筋骨格系および結合組織障害	149 (42)	126 (37)	125 (35)	251 (36)	39 (29)
背部痛	47 (13)	51 (15)	44 (12)	95 (14)	18 (13)
関節痛	35 (10)	35 (10)	31 (9)	66 (10)	9 (7)
四肢痛	32 (9)	32 (9)	26 (7)	58 (8)	10 (7)
筋痙縮	24 (7)	16 (5)	22 (6)	38 (5)	7 (5)
筋骨格痛	13 (4)	10 (3)	11 (3)	21 (3)	3 (2)
筋力低下	18 (5)	7 (2)	11 (3)	18 (3)	3 (2)
頚部痛	14 (4)	8 (2)	6 (2)	14 (2)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋肉痛	16 (5)	7 (2)	6 (2)	13 (2)	1 (<1)
関節炎	1 (<1)	2 (<1)	5 (1)	7 (1)	1 (<1)
関節腫脹	2 (<1)	4 (1)	2 (<1)	6 (<1)	2 (1)
変形性関節症	4 (1)	3 (<1)	3 (<1)	6 (<1)	0
滑液包炎	1 (<1)	2 (<1)	3 (<1)	5 (<1)	0
筋骨格系胸痛	1 (<1)	1 (<1)	4 (1)	5 (<1)	1 (<1)
関節硬直	0	1 (<1)	3 (<1)	4 (<1)	1 (<1)
筋骨格硬直	5 (1)	3 (<1)	1 (<1)	4 (<1)	4 (3)
重感	2 (<1)	4 (1)	0	4 (<1)	1 (<1)
滑液嚢腫	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
骨痛	3 (<1)	2 (<1)	1 (<1)	3 (<1)	0
椎間板障害	0	2 (<1)	1 (<1)	3 (<1)	0
椎間板突出	1 (<1)	3 (<1)	0	3 (<1)	0
骨減少症	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
骨粗鬆症	3 (<1)	3 (<1)	0	3 (<1)	0
関節周囲炎	4 (1)	1 (<1)	2 (<1)	3 (<1)	0
尾骨痛	1 (<1)	0	2 (<1)	2 (<1)	0
側腹部痛	0	0	2 (<1)	2 (<1)	1 (<1)
筋拘縮	1 (<1)	0	2 (<1)	2 (<1)	0
筋緊張	2 (<1)	0	2 (<1)	2 (<1)	0
筋骨格不快感	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
四肢の結節	0	0	2 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膝蓋大腿部痛症候群	0	1 (<1)	1 (<1)	2 (<1)	0
変形性脊椎症	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腱炎	5 (1)	2 (<1)	0	2 (<1)	0
関節障害	0	0	1 (<1)	1 (<1)	0
軟骨炎	0	1 (<1)	0	1 (<1)	0
外骨腫	0	0	1 (<1)	1 (<1)	2 (1)
四肢拘縮	0	1 (<1)	0	1 (<1)	0
尺骨部痛	0	1 (<1)	0	1 (<1)	0
成長痛	0	0	1 (<1)	1 (<1)	1 (<1)
椎間板圧迫	0	1 (<1)	0	1 (<1)	0
椎間板変性症	0	0	1 (<1)	1 (<1)	0
下肢腫瘤	0	0	1 (<1)	1 (<1)	0
筋腫脹	0	1 (<1)	0	1 (<1)	0
筋攣縮	2 (<1)	1 (<1)	0	1 (<1)	0
ミオキミア	0	1 (<1)	0	1 (<1)	0
筋硬化症	1 (<1)	1 (<1)	0	1 (<1)	0
骨端症	0	0	1 (<1)	1 (<1)	0
骨壊死	1 (<1)	1 (<1)	0	1 (<1)	0
脊椎分離	0	1 (<1)	0	1 (<1)	0
滑膜障害	0	1 (<1)	0	1 (<1)	0
腱鞘炎	0	1 (<1)	0	1 (<1)	0
斜頚	1 (<1)	0	1 (<1)	1 (<1)	0

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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
弾発指	0	1 (<1)	0	1 (<1)	0
線維筋痛	1 (<1)	0	0	0	0
運動性低下	1 (<1)	0	0	0	0
筋炎	1 (<1)	0	0	0	0
結節性変形性関節症	1 (<1)	0	0	0	0
顎痛	3 (<1)	0	0	0	1 (<1)
回帰性リウマチ	1 (<1)	0	0	0	0
足底筋膜炎	1 (<1)	0	0	0	0
関節リウマチ	2 (<1)	0	0	0	0
肩回旋筋腱板症候群	2 (<1)	0	0	0	0
腱障害	1 (<1)	0	0	0	0
腱痛	1 (<1)	0	0	0	0
腎および尿路障害	72 (20)	65 (19)	85 (24)	150 (22)	23 (17)
蛋白尿	19 (5)	24 (7)	37 (10)	61 (9)	12 (9)
血尿	20 (6)	15 (4)	22 (6)	37 (5)	5 (4)
ミクロアルブミン尿	10 (3)	15 (4)	13 (4)	28 (4)	4 (3)
尿意切迫	7 (2)	5 (1)	5 (1)	10 (1)	1 (<1)
尿失禁	4 (1)	5 (1)	5 (1)	10 (1)	2 (1)
排尿困難	7 (2)	3 (<1)	6 (2)	9 (1)	0
ケトン尿	1 (<1)	3 (<1)	5 (1)	8 (1)	0
腎結石症	4 (1)	5 (1)	3 (<1)	8 (1)	0

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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
頻尿	8 (2)	3 (<1)	3 (<1)	6 (<1)	0
尿閉	2 (<1)	3 (<1)	1 (<1)	4 (<1)	1 (<1)
膀胱機能障害	0	2 (<1)	1 (<1)	3 (<1)	0
糖尿	2 (<1)	1 (<1)	2 (<1)	3 (<1)	2 (1)
腎臓痛	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
切迫性尿失禁	0	1 (<1)	2 (<1)	3 (<1)	0
アルブミン尿	0	1 (<1)	1 (<1)	2 (<1)	2 (1)
非感染性膀胱炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腎嚢胞	1 (<1)	2 (<1)	0	2 (<1)	0
排尿躊躇	3 (<1)	0	2 (<1)	2 (<1)	1 (<1)
尿臭異常	0	0	2 (<1)	2 (<1)	0
膀胱痛	0	1 (<1)	0	1 (<1)	0
着色尿	0	0	1 (<1)	1 (<1)	0
失禁	0	0	1 (<1)	1 (<1)	1 (<1)
白血球尿	0	0	1 (<1)	1 (<1)	0
神経因性膀胱	1 (<1)	1 (<1)	0	1 (<1)	0
腎仙痛	0	1 (<1)	0	1 (<1)	0
腎機能障害	0	0	1 (<1)	1 (<1)	0
腎尿細管性アシドーシス	0	0	1 (<1)	1 (<1)	0
尿管瘤	0	1 (<1)	0	1 (<1)	0
尿路痛	0	1 (<1)	0	1 (<1)	1 (<1)
膀胱憩室	1 (<1)	0	0	0	0

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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
肋骨脊柱角圧痛	1 (<1)	0	0	0	0
慢性糸球体腎炎	1 (<1)	0	0	0	0
高血圧性腎症	0	0	0	0	1 (<1)
夜間頻尿	0	0	0	0	1 (<1)
腹圧性尿失禁	1 (<1)	0	0	0	0
尿路の炎症	1 (<1)	0	0	0	0
生殖系および乳房障害	35 (10)	33 (10)	36 (10)	69 (10)	11 (8)
不正子宮出血	4 (1)	4 (1)	3 (<1)	7 (1)	2 (1)
勃起不全	1 (<1)	3 (<1)	3 (<1)	6 (<1)	0
不規則月経	4 (1)	1 (<1)	5 (1)	6 (<1)	3 (2)
卵巣嚢胞	2 (<1)	4 (1)	2 (<1)	6 (<1)	1 (<1)
月経困難症	3 (<1)	2 (<1)	3 (<1)	5 (<1)	0
月経過多	5 (1)	2 (<1)	2 (<1)	4 (<1)	2 (1)
骨盤痛	3 (<1)	2 (<1)	2 (<1)	4 (<1)	0
子宮出血	1 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
乳房痛	0	1 (<1)	2 (<1)	3 (<1)	0
性機能不全	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
無月経	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
萎縮性外陰腟炎	0	0	2 (<1)	2 (<1)	0
乳房腫瘤	0	1 (<1)	1 (<1)	2 (<1)	0
閉経期症状	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0

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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腺筋症	0	0	1 (<1)	1 (<1)	0
バルトリン腺炎	0	0	1 (<1)	1 (<1)	0
良性前立腺肥大症	1 (<1)	1 (<1)	0	1 (<1)	0
乳房嚢胞	1 (<1)	1 (<1)	0	1 (<1)	0
乳房分泌	0	0	1 (<1)	1 (<1)	0
乳房出血	0	1 (<1)	0	1 (<1)	0
射精障害	0	1 (<1)	0	1 (<1)	0
子宮内膜増殖症	0	1 (<1)	0	1 (<1)	0
子宮内膜症	0	1 (<1)	0	1 (<1)	0
線維嚢胞性乳腺疾患	3 (<1)	0	1 (<1)	1 (<1)	0
月経遅延	0	1 (<1)	0	1 (<1)	0
乳頭障害	0	1 (<1)	0	1 (<1)	0
卵巣嚢胞破裂	1 (<1)	1 (<1)	0	1 (<1)	0
頻発月経	1 (<1)	0	1 (<1)	1 (<1)	0
閉経後出血	2 (<1)	0	1 (<1)	1 (<1)	0
前立腺炎	0	1 (<1)	0	1 (<1)	0
前立腺腫大	0	0	1 (<1)	1 (<1)	1 (<1)
精巣障害	0	0	1 (<1)	1 (<1)	0
子宮ポリープ	1 (<1)	1 (<1)	0	1 (<1)	0
子宮腟脱	0	1 (<1)	0	1 (<1)	0
腟出血	1 (<1)	0	1 (<1)	1 (<1)	0
外陰腟乾燥	0	0	1 (<1)	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
外陰腟そう痒症	0	1 (<1)	0	1 (<1)	0
バルトリン嚢腫	1 (<1)	0	0	0	0
乳房障害	1 (<1)	0	0	0	1 (<1)
乳房硬結	1 (<1)	0	0	0	0
子宮頚管ポリープ	0	0	0	0	1 (<1)
機能性子宮出血	1 (<1)	0	0	0	0
月経障害	1 (<1)	0	0	0	0
腟分泌物	1 (<1)	0	0	0	0
先天性、家族性および遺伝性障害	0	1 (<1)	2 (<1)	3 (<1)	0
異形成母斑症候群	0	1 (<1)	1 (<1)	2 (<1)	0
ラウン・ギャノン・レバイン症候群	0	0	1 (<1)	1 (<1)	0
一般・全身障害および投与部位の状態	101 (29)	99 (29)	102 (29)	201 (29)	54 (40)
疲労	42 (12)	59 (18)	50 (14)	109 (16)	18 (13)
無力症	12 (3)	16 (5)	8 (2)	24 (3)	8 (6)
発熱	15 (4)	9 (3)	13 (4)	22 (3)	6 (4)
熱感	0	11 (3)	8 (2)	19 (3)	1 (<1)
疼痛	7 (2)	11 (3)	5 (1)	16 (2)	2 (1)
歩行障害	4 (1)	6 (2)	7 (2)	13 (2)	4 (3)
インフルエンザ様疾患	5 (1)	6 (2)	7 (2)	13 (2)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
胸痛	7 (2)	1 (<1)	10 (3)	11 (2)	2 (1)
末梢性浮腫	16 (5)	3 (<1)	8 (2)	11 (2)	1 (<1)
非心臓性胸痛	2 (<1)	2 (<1)	3 (<1)	5 (<1)	2 (1)
嚢胞	1 (<1)	0	4 (1)	4 (<1)	0
倦怠感	1 (<1)	1 (<1)	3 (<1)	4 (<1)	2 (1)
顔面痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	2 (1)
冷感	1 (<1)	0	2 (<1)	2 (<1)	0
高熱	1 (<1)	2 (<1)	0	2 (<1)	0
易刺激性	1 (<1)	1 (<1)	1 (<1)	2 (<1)	2 (1)
胸部不快感	4 (1)	1 (<1)	0	1 (<1)	1 (<1)
悪寒	5 (1)	1 (<1)	0	1 (<1)	2 (1)
医療機器不具合	0	1 (<1)	0	1 (<1)	0
不快感	0	0	1 (<1)	1 (<1)	0
医療機器関連眼合併症	0	1 (<1)	0	1 (<1)	0
びくびく感	0	0	1 (<1)	1 (<1)	0
全身性浮腫	0	1 (<1)	0	1 (<1)	0
重力性浮腫	0	0	1 (<1)	1 (<1)	0
閉塞性ヘルニア	0	0	1 (<1)	1 (<1)	0
注射部位硬結	0	0	1 (<1)	1 (<1)	2 (1)
局所腫脹	0	1 (<1)	0	1 (<1)	0
足のもつれ	1 (<1)	1 (<1)	0	1 (<1)	0
医療機器による疼痛	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
粘膜乾燥	0	1 (<1)	0	1 (<1)	0
浮腫	1 (<1)	0	1 (<1)	1 (<1)	0
不活発	0	0	1 (<1)	1 (<1)	0
軟部組織の炎症	0	1 (<1)	0	1 (<1)	0
腫脹	0	1 (<1)	0	1 (<1)	0
圧痛	0	0	1 (<1)	1 (<1)	0
血管穿刺部位血腫	0	0	1 (<1)	1 (<1)	0
適用部位浮腫	0	0	0	0	1 (<1)
異常感	0	0	0	0	1 (<1)
全身症状	1 (<1)	0	0	0	0
注射直後反応	0	0	0	0	3 (2)
注射部位乾燥	0	0	0	0	1 (<1)
注射部位紅斑	0	0	0	0	14 (10)
注射部位血腫	0	0	0	0	5 (4)
注射部位出血	0	0	0	0	1 (<1)
注射部位肥厚	0	0	0	0	1 (<1)
注射部位腫瘤	0	0	0	0	5 (4)
注射部位結節	0	0	0	0	1 (<1)
注射部位疼痛	0	0	0	0	10 (7)
注射部位そう痒感	0	0	0	0	6 (4)
注射部位発疹	0	0	0	0	1 (<1)
注射部位反応	0	0	0	0	2 (1)

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
注射部位腫脹	0	0	0	0	5 (4)
注射部位熱感	0	0	0	0	1 (<1)
壊死	0	0	0	0	1 (<1)
骨盤腔内腫瘤	1 (<1)	0	0	0	0
口渇	1 (<1)	0	0	0	0
ワクチン接種部位疼痛	1 (<1)	0	0	0	0
臨床検査	88 (25)	91 (27)	107 (30)	198 (29)	43 (32)
アラニン・アミノトランスフェラーゼ増加	17 (5)	25 (7)	21 (6)	46 (7)	8 (6)
尿中アルブミン陽性	11 (3)	15 (4)	20 (6)	35 (5)	6 (4)
アスパラギン酸アミノトランスフェラーゼ増加	6 (2)	17 (5)	14 (4)	31 (4)	4 (3)
血中ブドウ糖増加	5 (1)	7 (2)	12 (3)	19 (3)	3 (2)
γ－グルタミルトランスフェラーゼ増加	15 (4)	12 (4)	5 (1)	17 (2)	5 (4)
尿中蛋白陽性	11 (3)	9 (3)	8 (2)	17 (2)	6 (4)
尿中β２ミクログロブリン増加	5 (1)	5 (1)	11 (3)	16 (2)	3 (2)
尿中白血球陽性	7 (2)	9 (3)	7 (2)	16 (2)	2 (1)
血中副甲状腺ホルモン増加	2 (<1)	7 (2)	8 (2)	15 (2)	1 (<1)
体重減少	2 (<1)	5 (1)	7 (2)	12 (2)	2 (1)
白血球数減少	1 (<1)	6 (2)	6 (2)	12 (2)	0
尿中血陽性	4 (1)	3 (<1)	7 (2)	10 (1)	2 (1)
尿中ケトン体陽性	1 (<1)	4 (1)	5 (1)	9 (1)	1 (<1)
肝酵素上昇	5 (1)	4 (1)	4 (1)	8 (1)	2 (1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
体重増加	4 (1)	3 (<1)	5 (1)	8 (1)	3 (2)
白血球数増加	6 (2)	5 (1)	3 (<1)	8 (1)	2 (1)
β２ミクログロブリン増加	1 (<1)	3 (<1)	4 (1)	7 (1)	0
血中クレアチニン増加	2 (<1)	2 (<1)	5 (1)	7 (1)	4 (3)
リンパ球数減少	0	3 (<1)	4 (1)	7 (1)	0
好中球数増加	5 (1)	3 (<1)	3 (<1)	6 (<1)	0
尿中赤血球陽性	4 (1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
ヘモグロビン減少	0	3 (<1)	2 (<1)	5 (<1)	1 (<1)
赤血球数減少	1 (<1)	4 (1)	1 (<1)	5 (<1)	0
血中アルカリホスファターゼ増加	4 (1)	3 (<1)	1 (<1)	4 (<1)	0
心電図ＱＴ延長	4 (1)	1 (<1)	3 (<1)	4 (<1)	4 (3)
血液学的検査異常	0	2 (<1)	2 (<1)	4 (<1)	0
ビタミンＤ減少	1 (<1)	3 (<1)	1 (<1)	4 (<1)	1 (<1)
血中乳酸脱水素酵素増加	1 (<1)	3 (<1)	0	3 (<1)	0
血中カリウム増加	0	2 (<1)	1 (<1)	3 (<1)	0
血圧上昇	0	2 (<1)	1 (<1)	3 (<1)	0
血中尿素増加	2 (<1)	0	3 (<1)	3 (<1)	1 (<1)
心電図異常	3 (<1)	0	3 (<1)	3 (<1)	0
尿中ブドウ糖陽性	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
ヘマトクリット減少	0	2 (<1)	1 (<1)	3 (<1)	0
好中球数減少	1 (<1)	3 (<1)	0	3 (<1)	0
血中ケトン体増加	0	1 (<1)	1 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
体温上昇	0	0	2 (<1)	2 (<1)	0
肝機能検査異常	0	1 (<1)	1 (<1)	2 (<1)	0
アラニン・アミノトランスフェラーゼ異常	0	1 (<1)	0	1 (<1)	0
抗痙攣剤濃度減少	0	0	1 (<1)	1 (<1)	0
アスパラギン酸アミノトランスフェラーゼ異常	0	1 (<1)	0	1 (<1)	0
細菌検査陽性	0	0	1 (<1)	1 (<1)	1 (<1)
血中アルカリホスファターゼ異常	0	1 (<1)	0	1 (<1)	0
血中重炭酸塩増加	0	1 (<1)	0	1 (<1)	0
血中ビリルビン増加	3 (<1)	0	1 (<1)	1 (<1)	0
血中カルシウム増加	1 (<1)	0	1 (<1)	1 (<1)	0
血中クロール増加	0	0	1 (<1)	1 (<1)	0
血中コレステロール増加	0	0	1 (<1)	1 (<1)	0
血中免疫グロブリンM増加	0	0	1 (<1)	1 (<1)	0
血中副甲状腺ホルモン異常	0	0	1 (<1)	1 (<1)	0
拡張期血圧上昇	0	0	1 (<1)	1 (<1)	0
血中ナトリウム減少	0	0	1 (<1)	1 (<1)	0
血中ナトリウム増加	0	0	1 (<1)	1 (<1)	1 (<1)
血中トリグリセリド増加	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
体温低下	0	1 (<1)	0	1 (<1)	0
呼吸音異常	0	1 (<1)	0	1 (<1)	0
心雑音	1 (<1)	1 (<1)	0	1 (<1)	0
結腸内視鏡検査	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白血球百分率数異常	0	0	1 (<1)	1 (<1)	0
心筋虚血の心電図所見	0	1 (<1)	0	1 (<1)	0
	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
心電図Ｔ波逆転	0	1 (<1)	0	1 (<1)	1 (<1)
好酸球数異常	0	0	1 (<1)	1 (<1)	0
好酸球数増加	0	1 (<1)	0	1 (<1)	0
エプスタイン・バーウイルス抗体陽性	0	0	1 (<1)	1 (<1)	0
大腸菌検査陽性	0	1 (<1)	0	1 (<1)	0
γ－グルタミルトランスフェラーゼ異常	0	1 (<1)	0	1 (<1)	0
心拍数減少	0	0	1 (<1)	1 (<1)	0
心拍数増加	1 (<1)	1 (<1)	0	1 (<1)	0
検査	0	0	1 (<1)	1 (<1)	0
低比重リポ蛋白増加	0	0	1 (<1)	1 (<1)	1 (<1)
リンパ球数増加	0	0	1 (<1)	1 (<1)	0
リンパ球百分率減少	0	1 (<1)	0	1 (<1)	0
医学的観察	0	0	1 (<1)	1 (<1)	0
神経学的検査異常	0	1 (<1)	0	1 (<1)	0
好中球百分率増加	0	1 (<1)	0	1 (<1)	0
血小板数	0	1 (<1)	0	1 (<1)	0
血小板数減少	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血小板数増加	1 (<1)	1 (<1)	0	1 (<1)	0
ロンベルグ徴候陽性	0	1 (<1)	0	1 (<1)	0
赤血球数増加	1 (<1)	1 (<1)	0	1 (<1)	0
血清フェリチン減少	0	0	1 (<1)	1 (<1)	0
子宮頚部スミア異常	1 (<1)	0	1 (<1)	1 (<1)	0
ビタミンＢ１２減少	1 (<1)	1 (<1)	0	1 (<1)	0
抗甲状腺抗体陽性	1 (<1)	0	0	0	0
抗核抗体増加	1 (<1)	0	0	0	0
細菌検査	1 (<1)	0	0	0	0
血中カルシウム減少	1 (<1)	0	0	0	1 (<1)
血中クロール減少	1 (<1)	0	0	0	0
血中ブドウ糖減少	1 (<1)	0	0	0	0
血中鉄減少	1 (<1)	0	0	0	0
血中カリウム減少	1 (<1)	0	0	0	0
血中尿酸増加	2 (<1)	0	0	0	0
尿中結晶陽性	5 (1)	0	0	0	0
心電図異常ＱＲＳ群	1 (<1)	0	0	0	0
心電図ＱＲＳ群延長	1 (<1)	0	0	0	0
全血球数異常	1 (<1)	0	0	0	0
握力低下	0	0	0	0	2 (1)
リンパ球形態異常	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
	1 (<1)	0	0	0	0
便潜血陽性	0	0	0	0	1 (<1)
ＱＲＳ軸異常	2 (<1)	0	0	0	0
膀胱超音波検査異常	1 (<1)	0	0	0	0
尿細胞診異常	1 (<1)	0	0	0	0
前庭機能検査異常	0	0	0	0	1 (<1)
ビタミンＤ増加	1 (<1)	0	0	0	0
傷害、中毒および処置合併症	78 (22)	49 (15)	56 (16)	105 (15)	24 (18)
挫傷	13 (4)	9 (3)	16 (5)	25 (4)	2 (1)
転倒	17 (5)	16 (5)	8 (2)	24 (3)	10 (7)
関節捻挫	7 (2)	8 (2)	6 (2)	14 (2)	3 (2)
足骨折	2 (<1)	4 (1)	4 (1)	8 (1)	0
節足動物咬傷	6 (2)	2 (<1)	5 (1)	7 (1)	2 (1)
擦過傷	4 (1)	1 (<1)	4 (1)	5 (<1)	1 (<1)
肉離れ	2 (<1)	2 (<1)	3 (<1)	5 (<1)	0
処置による疼痛	2 (<1)	2 (<1)	3 (<1)	5 (<1)	2 (1)
皮膚裂傷	5 (1)	2 (<1)	3 (<1)	5 (<1)	0
歯牙破折	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
半月板障害	2 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
熱傷	4 (1)	1 (<1)	2 (<1)	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
動物咬傷	2 (<1)	2 (<1)	0	2 (<1)	1 (<1)
足関節部骨折	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
四肢損傷	3 (<1)	0	2 (<1)	2 (<1)	1 (<1)
筋断裂	0	2 (<1)	0	2 (<1)	0
頚部損傷	0	1 (<1)	1 (<1)	2 (<1)	0
交通事故	1 (<1)	2 (<1)	0	2 (<1)	1 (<1)
骨格損傷	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
脊椎圧迫骨折	0	2 (<1)	0	2 (<1)	0
サンバーン	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
外傷性血腫	0	1 (<1)	1 (<1)	2 (<1)	0
創傷	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
手首関節骨折	0	0	2 (<1)	2 (<1)	0
アルコール中毒	0	0	1 (<1)	1 (<1)	0
節足動物刺傷	3 (<1)	0	1 (<1)	1 (<1)	0
凍瘡	1 (<1)	1 (<1)	0	1 (<1)	0
鎖骨骨折	0	1 (<1)	0	1 (<1)	0
上顆炎	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
眼外傷	3 (<1)	1 (<1)	0	1 (<1)	0
顔面骨骨折	0	1 (<1)	0	1 (<1)	0
大腿骨骨折	0	1 (<1)	0	1 (<1)	1 (<1)
頭部損傷	1 (<1)	1 (<1)	0	1 (<1)	0
切開部位痛	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
瘢痕ヘルニア	1 (<1)	1 (<1)	0	1 (<1)	0
損傷	0	0	1 (<1)	1 (<1)	1 (<1)
関節脱臼	0	1 (<1)	0	1 (<1)	0
術後発熱	0	1 (<1)	0	1 (<1)	0
処置による悪心	1 (<1)	1 (<1)	0	1 (<1)	0
処置による嘔吐	0	1 (<1)	0	1 (<1)	0
放射線皮膚損傷	0	0	1 (<1)	1 (<1)	0
橈骨骨折	0	1 (<1)	0	1 (<1)	1 (<1)
網膜損傷	1 (<1)	1 (<1)	0	1 (<1)	0
引っかき傷	0	0	1 (<1)	1 (<1)	0
舌損傷	0	1 (<1)	0	1 (<1)	0
外傷性脳損傷	0	1 (<1)	0	1 (<1)	0
外傷性骨折	0	0	1 (<1)	1 (<1)	0
ワクチン接種合併症	1 (<1)	0	1 (<1)	1 (<1)	0
むち打ち損傷	0	1 (<1)	0	1 (<1)	0
気圧性中耳炎	0	0	0	0	1 (<1)
大腿骨頚部骨折	1 (<1)	0	0	0	0
前腕骨折	0	0	0	0	1 (<1)
尾骨骨折	1 (<1)	0	0	0	0
手骨折	0	0	0	0	1 (<1)
関節損傷	3 (<1)	0	0	0	0
靭帯断裂	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
口唇損傷	0	0	0	0	1 (<1)
筋損傷	2 (<1)	0	0	0	0
処置後合併症	1 (<1)	0	0	0	1 (<1)
処置後出血	1 (<1)	0	0	0	0
外傷後疼痛	1 (<1)	0	0	0	1 (<1)
術後創合併症	0	0	0	0	1 (<1)
ストレス骨折	0	0	0	0	1 (<1)
腱断裂	3 (<1)	0	0	0	0
脛骨骨折	1 (<1)	0	0	0	0
歯の完全脱臼	1 (<1)	0	0	0	0
上肢骨折	0	0	0	0	1 (<1)
有毒性刺傷	1 (<1)	0	0	0	0
第７神経損傷	0	0	0	0	1 (<1)
外科および内科処置	3 (<1)	3 (<1)	2 (<1)	5 (<1)	3 (2)
子宮摘出	0	1 (<1)	1 (<1)	2 (<1)	0
ヘルニア修復	0	1 (<1)	0	1 (<1)	0
抜歯	2 (<1)	1 (<1)	0	1 (<1)	2 (1)
静脈ステント挿入	0	0	1 (<1)	1 (<1)	0
入院	0	0	0	0	1 (<1)
色素性母斑切除	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by age group: Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
社会環境	2 (<1)	1 (<1)	0	1 (<1)	0
閉経	0	1 (<1)	0	1 (<1)	0
元タバコ使用者	1 (<1)	0	0	0	0
職場でのストレス	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-AGE-A.SAS DATE: 02DEC2015

Table 275: Incidence of Serious Adverse Events by System Organ Class and Preferred Term - by Age Group: Studies 109MS301 and 109MS302

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
Page 1 of 17
(<40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	419 (100)	432 (100)	406 (100)	838 (100)	216 (100)
Number of subjects with an event	98 (23)	72 (17)	60 (15)	132 (16)	33 (15)
感染症および寄生虫症	5 (1)	10 (2)	10 (2)	20 (2)	2 (<1)
胃腸炎	0	4 (<1)	2 (<1)	6 (<1)	0
蜂巣炎	0	1 (<1)	1 (<1)	2 (<1)	0
副鼻腔炎	0	1 (<1)	1 (<1)	2 (<1)	0
ウイルス感染	0	1 (<1)	1 (<1)	2 (<1)	0
虫垂炎	0	1 (<1)	0	1 (<1)	1 (<1)
ダグラス窩膿瘍	0	0	1 (<1)	1 (<1)	0
Ｈ１Ｎ１インフルエンザ	1 (<1)	0	1 (<1)	1 (<1)	0
骨盤内炎症性疾患	0	0	1 (<1)	1 (<1)	0
扁桃周囲膿瘍	0	0	1 (<1)	1 (<1)	0
肺炎	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
ウイルス感染後疲労症候群	0	1 (<1)	0	1 (<1)	0
急性腎盂腎炎	0	0	1 (<1)	1 (<1)	0
尿路感染	0	0	1 (<1)	1 (<1)	0
外陰部膿瘍	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
鼻咽頭炎	1 (<1)	0	0	0	0
敗血症	1 (<1)	0	0	0	0
気管炎	1 (<1)	0	0	0	0
消化器結核	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	4 (<1)	0	0	0	0
乳癌	1 (<1)	0	0	0	0
乳房新生物	1 (<1)	0	0	0	0
線維腫	1 (<1)	0	0	0	0
血管腫	1 (<1)	0	0	0	0
免疫系障害	0	0	1 (<1)	1 (<1)	1 (<1)
アナフィラキシー様反応	0	0	1 (<1)	1 (<1)	0
過敏症	0	0	0	0	1 (<1)
内分泌障害	0	1 (<1)	2 (<1)	3 (<1)	0
甲状腺腫	0	1 (<1)	1 (<1)	2 (<1)	0
間脳性内分泌障害	0	0	1 (<1)	1 (<1)	0
代謝および栄養障害	1 (<1)	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
低血糖症	0	0	1 (<1)	1 (<1)	0
糖尿病性ケトアシドーシス	1 (<1)	0	0	0	0
精神障害	1 (<1)	3 (<1)	0	3 (<1)	3 (1)
双極１型障害	0	1 (<1)	0	1 (<1)	0
うつ病	1 (<1)	1 (<1)	0	1 (<1)	2 (<1)
全般性不安障害	0	1 (<1)	0	1 (<1)	0
自己愛性人格障害	0	1 (<1)	0	1 (<1)	0
自殺既遂	0	0	0	0	1 (<1)
自殺念慮	0	0	0	0	1 (<1)
神経系障害	75 (18)	44 (10)	40 (10)	84 (10)	25 (12)
多発性硬化症再発	70 (17)	42 (10)	36 (9)	78 (9)	21 (10)
頭痛	0	0	3 (<1)	3 (<1)	0
意識変容状態	0	0	1 (<1)	1 (<1)	0
良性頭蓋内圧亢進	0	0	1 (<1)	1 (<1)	0
てんかん	1 (<1)	1 (<1)	0	1 (<1)	0
大発作痙攣	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
片頭痛	2 (<1)	0	1 (<1)	1 (<1)	0
多発性硬化症	1 (<1)	0	1 (<1)	1 (<1)	0
神経学的症状	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
後頭神経痛	0	0	1 (<1)	1 (<1)	0
部分発作	0	1 (<1)	0	1 (<1)	1 (<1)
一過性全健忘	0	0	1 (<1)	1 (<1)	0
横静脈洞血栓症	0	0	1 (<1)	1 (<1)	0
第７脳神経麻痺	0	1 (<1)	0	1 (<1)	0
失語症	0	0	0	0	1 (<1)
脳血管障害	0	0	0	0	1 (<1)
痙攣	2 (<1)	0	0	0	0
脳症	1 (<1)	0	0	0	0
意識消失	1 (<1)	0	0	0	1 (<1)
下肢静止不能症候群	1 (<1)	0	0	0	0
眼障害	3 (<1)	0	0	0	0
眼痛	1 (<1)	0	0	0	0
ホームズ・アディー瞳孔	1 (<1)	0	0	0	0
視力低下	1 (<1)	0	0	0	0
耳および迷路障害	0	0	0	0	1 (<1)
前庭性運動失調	0	0	0	0	1 (<1)
心臓障害	0	0	2 (<1)	2 (<1)	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
徐脈	0	0	1 (<1)	1 (<1)	0
うっ血性心不全	0	0	1 (<1)	1 (<1)	0
心筋炎	0	0	0	0	1 (<1)
血管障害	0	1 (<1)	2 (<1)	3 (<1)	0
深部静脈血栓症	0	0	1 (<1)	1 (<1)	0
潮紅	0	1 (<1)	0	1 (<1)	0
静脈瘤	0	0	1 (<1)	1 (<1)	0
呼吸器、胸郭および縦隔障害	1 (<1)	2 (<1)	0	2 (<1)	0
胸水	0	1 (<1)	0	1 (<1)	0
誤嚥性肺炎	0	1 (<1)	0	1 (<1)	0
鼻茸	1 (<1)	0	0	0	0
胃腸障害	1 (<1)	5 (1)	7 (2)	12 (1)	0
胃炎	0	0	3 (<1)	3 (<1)	0
嘔吐	0	1 (<1)	2 (<1)	3 (<1)	0
腹痛	0	2 (<1)	0	2 (<1)	0
腹部ヘルニア	0	1 (<1)	0	1 (<1)	0
便秘	0	1 (<1)	0	1 (<1)	0
十二指腸炎	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
裂孔ヘルニア	0	1 (<1)	0	1 (<1)	0
悪心	0	1 (<1)	0	1 (<1)	0
臍ヘルニア	0	0	1 (<1)	1 (<1)	0
胃腸出血	1 (<1)	0	0	0	0
肝胆道系障害	0	1 (<1)	0	1 (<1)	1 (<1)
胆石症	0	1 (<1)	0	1 (<1)	1 (<1)
皮膚および皮下組織障害	1 (<1)	1 (<1)	0	1 (<1)	0
スティーブンス・ジョンソン症候群	0	1 (<1)	0	1 (<1)	0
アレルギー性皮膚炎	1 (<1)	0	0	0	0
筋骨格系および結合組織障害	1 (<1)	1 (<1)	0	1 (<1)	0
シェーグレン症候群	0	1 (<1)	0	1 (<1)	0
多発性関節炎	1 (<1)	0	0	0	0
腎および尿路障害	1 (<1)	0	2 (<1)	2 (<1)	0
膀胱穿孔	0	0	1 (<1)	1 (<1)	0
腎仙痛	0	0	1 (<1)	1 (<1)	0
腎下垂症	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
妊娠、産褥および周産期の状態	3 (<1)	0	0	0	0
自然流産	2 (<1)	0	0	0	0
妊娠浮腫	1 (<1)	0	0	0	0
生殖系および乳房障害	2 (<1)	1 (<1)	0	1 (<1)	0
卵巣嚢胞破裂	0	1 (<1)	0	1 (<1)	0
卵巣嚢胞	1 (<1)	0	0	0	0
子宮出血	1 (<1)	0	0	0	0
先天性、家族性および遺伝性障害	0	0	1 (<1)	1 (<1)	0
陰嚢水瘤	0	0	1 (<1)	1 (<1)	0
一般・全身障害および投与部位の状態	0	0	2 (<1)	2 (<1)	1 (<1)
末梢性浮腫	0	0	1 (<1)	1 (<1)	1 (<1)
発熱	0	0	1 (<1)	1 (<1)	0
臨床検査	2 (<1)	0	2 (<1)	2 (<1)	0
アレルギー検査	0	0	1 (<1)	1 (<1)	0
血中ブドウ糖増加	0	0	1 (<1)	1 (<1)	0
肝酵素上昇	2 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
傷害、中毒および処置合併症	3 (<1)	6 (1)	5 (1)	11 (1)	1 (<1)
交通事故	0	0	2 (<1)	2 (<1)	1 (<1)
足関節部骨折	0	0	1 (<1)	1 (<1)	0
脳振盪	0	1 (<1)	0	1 (<1)	0
大腿骨骨折	0	0	1 (<1)	1 (<1)	0
靱帯断裂	0	1 (<1)	0	1 (<1)	0
半月板障害	1 (<1)	1 (<1)	0	1 (<1)	0
肉離れ	0	0	1 (<1)	1 (<1)	0
過量投与	0	1 (<1)	0	1 (<1)	0
術後発熱	0	1 (<1)	0	1 (<1)	0
処置による低血圧	0	1 (<1)	0	1 (<1)	0
橈骨骨折	0	0	1 (<1)	1 (<1)	0
外傷性血腫	0	1 (<1)	0	1 (<1)	0
手骨折	1 (<1)	0	0	0	0
靱帯損傷	1 (<1)	0	0	0	0
治療薬毒性	1 (<1)	0	0	0	0
むち打ち損傷	0	0	0	0	1 (<1)
外科および内科処置	2 (<1)	3 (<1)	1 (<1)	4 (<1)	1 (<1)
乳房腫瘤摘除	0	1 (<1)	0	1 (<1)	0
女性不妊手術	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(<40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
椎間板手術	0	0	1 (<1)	1 (<1)	0
治療食	0	1 (<1)	0	1 (<1)	0
子宮頚部円錐切除	1 (<1)	0	0	0	0
不妊手術	0	0	0	0	1 (<1)
鼻甲介切除	1 (<1)	0	0	0	0
社会環境	1 (<1)	0	0	0	0
社会問題	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	352 (100)	337 (100)	354 (100)	691 (100)	135 (100)
Number of subjects with an event	67 (19)	63 (19)	59 (17)	122 (18)	27 (20)
感染症および寄生虫症	7 (2)	7 (2)	5 (1)	12 (2)	2 (1)
胃腸炎	0	2 (<1)	1 (<1)	3 (<1)	0
蜂巣炎	0	1 (<1)	1 (<1)	2 (<1)	0
尿路感染	0	1 (<1)	1 (<1)	2 (<1)	0
ウイルス性胃腸炎	0	0	1 (<1)	1 (<1)	0
Ｈ１Ｎ１インフルエンザ	0	1 (<1)	0	1 (<1)	0
インフルエンザ	1 (<1)	0	1 (<1)	1 (<1)	0
肺炎	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
ウイルス感染	0	1 (<1)	0	1 (<1)	1 (<1)
肛門膿瘍	1 (<1)	0	0	0	0
ボレリア感染	1 (<1)	0	0	0	0
感染性下痢	1 (<1)	0	0	0	0
細菌性心内膜炎	1 (<1)	0	0	0	0
骨盤内炎症性疾患	1 (<1)	0	0	0	0
膿胸	0	0	0	0	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ライター症候群	1 (<1)	0	0	0	0
敗血症	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	2 (<1)	4 (1)	3 (<1)	7 (1)	5 (4)
子宮平滑筋腫	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
肺の良性新生物	0	1 (<1)	0	1 (<1)	0
乳癌	0	0	1 (<1)	1 (<1)	0
子宮頚部癌	0	0	1 (<1)	1 (<1)	1 (<1)
神経鞘腫	0	1 (<1)	0	1 (<1)	0
移行上皮癌	0	1 (<1)	0	1 (<1)	0
基底細胞癌	1 (<1)	0	0	0	1 (<1)
子宮内膜癌	0	0	0	0	1 (<1)
転移性甲状腺癌	0	0	0	0	1 (<1)
血液およびリンパ系障害	2 (<1)	0	0	0	0
貧血	1 (<1)	0	0	0	0
小球性貧血	1 (<1)	0	0	0	0
免疫系障害	0	1 (<1)	1 (<1)	2 (<1)	2 (1)
過敏症	0	1 (<1)	1 (<1)	2 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
アナフィラキシー反応	0	0	0	0	2 (1)
代謝および栄養障害	0	0	1 (<1)	1 (<1)	0
脱水	0	0	1 (<1)	1 (<1)	0
精神障害	3 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
抑うつ気分を伴う適応障害	0	1 (<1)	0	1 (<1)	0
うつ病	1 (<1)	0	1 (<1)	1 (<1)	0
躁病	0	1 (<1)	0	1 (<1)	0
自殺念慮	1 (<1)	1 (<1)	0	1 (<1)	0
自殺企図	0	0	1 (<1)	1 (<1)	1 (<1)
不安	1 (<1)	0	0	0	0
神経系障害	43 (12)	37 (11)	29 (8)	66 (10)	15 (11)
多発性硬化症再発	41 (12)	36 (11)	26 (7)	62 (9)	15 (11)
構語障害	0	0	1 (<1)	1 (<1)	0
舌咽神経痛	0	1 (<1)	0	1 (<1)	0
虚血性脳卒中	0	0	1 (<1)	1 (<1)	0
神経学的症状	0	1 (<1)	0	1 (<1)	0
下肢静止不能症候群	0	0	1 (<1)	1 (<1)	0
一過性脳虚血発作	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
Page 13 of 17
(>=40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
脳血管発作	1 (<1)	0	0	0	0
痙攣	1 (<1)	0	0	0	0
大発作痙攣	1 (<1)	0	0	0	0
耳および迷路障害	0	0	1 (<1)	1 (<1)	0
頭位性回転性めまい	0	0	1 (<1)	1 (<1)	0
心臓障害	0	0	2 (<1)	2 (<1)	0
急性冠動脈症候群	0	0	1 (<1)	1 (<1)	0
心不全	0	0	1 (<1)	1 (<1)	0
血管障害	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
潮紅	0	0	1 (<1)	1 (<1)	0
静脈瘤	0	1 (<1)	0	1 (<1)	0
深部静脈血栓症	0	0	0	0	1 (<1)
末梢性虚血	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	0	1 (<1)	0	1 (<1)	0
喘息	0	1 (<1)	0	1 (<1)	0
胃腸障害	4 (1)	3 (<1)	3 (<1)	6 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
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(>=40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
下腹部痛	0	0	1 (<1)	1 (<1)	0
憩室穿孔	0	1 (<1)	0	1 (<1)	0
胃腸障害	0	1 (<1)	0	1 (<1)	0
胃腸出血	0	0	1 (<1)	1 (<1)	0
腸閉塞	0	0	1 (<1)	1 (<1)	0
嘔吐	1 (<1)	1 (<1)	0	1 (<1)	0
大腸炎	1 (<1)	0	0	0	0
潰瘍性大腸炎	1 (<1)	0	0	0	0
悪心	1 (<1)	0	0	0	0
急性膵炎	1 (<1)	0	0	0	0
腹膜出血	1 (<1)	0	0	0	0
肝胆道系障害	0	1 (<1)	1 (<1)	2 (<1)	0
胆管結石	0	0	1 (<1)	1 (<1)	0
胆石症	0	0	1 (<1)	1 (<1)	0
胆汁うっ滞性肝炎	0	1 (<1)	0	1 (<1)	0
皮膚および皮下組織障害	0	0	1 (<1)	1 (<1)	0
そう痒症	0	0	1 (<1)	1 (<1)	0
筋骨格系および結合組織障害	2 (<1)	4 (1)	3 (<1)	7 (1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
背部痛	0	2 (<1)	1 (<1)	3 (<1)	0
関節痛	0	1 (<1)	0	1 (<1)	0
滑液包炎	0	1 (<1)	0	1 (<1)	0
変形性関節症	1 (<1)	0	1 (<1)	1 (<1)	0
変形性脊椎症	0	0	1 (<1)	1 (<1)	0
滑液嚢腫	1 (<1)	0	0	0	0
腎および尿路障害	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
膀胱機能障害	0	1 (<1)	0	1 (<1)	0
尿管瘤	0	1 (<1)	0	1 (<1)	0
尿失禁	0	0	1 (<1)	1 (<1)	0
膀胱憩室	1 (<1)	0	0	0	0
生殖系および乳房障害	4 (1)	3 (<1)	3 (<1)	6 (<1)	2 (1)
卵巣嚢胞	0	1 (<1)	2 (<1)	3 (<1)	0
腺筋症	0	0	1 (<1)	1 (<1)	0
子宮内膜症	0	1 (<1)	0	1 (<1)	0
月経過多	0	1 (<1)	0	1 (<1)	0
不正子宮出血	0	0	1 (<1)	1 (<1)	1 (<1)
バルトリン嚢腫	1 (<1)	0	0	0	0
月経障害	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
骨盤痛	1 (<1)	0	0	0	0
子宮出血	1 (<1)	0	0	0	1 (<1)
一般・全身障害および投与部位の状態	3 (<1)	1 (<1)	4 (1)	5 (<1)	0
発熱	0	1 (<1)	1 (<1)	2 (<1)	0
無力症	1 (<1)	0	1 (<1)	1 (<1)	0
閉塞性ヘルニア	0	0	1 (<1)	1 (<1)	0
非心臓性胸痛	0	0	1 (<1)	1 (<1)	0
インフルエンザ様疾患	1 (<1)	0	0	0	0
骨盤腔内腫瘤	1 (<1)	0	0	0	0
臨床検査	0	1 (<1)	3 (<1)	4 (<1)	0
尿中β２ミクログロブリン増加	0	0	1 (<1)	1 (<1)	0
結腸内視鏡検査	0	1 (<1)	0	1 (<1)	0
検査	0	0	1 (<1)	1 (<1)	0
医学的観察	0	0	1 (<1)	1 (<1)	0
傷害、中毒および処置合併症	6 (2)	4 (1)	4 (1)	8 (1)	2 (1)
手首関節骨折	0	0	2 (<1)	2 (<1)	0
アルコール中毒	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by age group:
Studies 109MS301 and 109MS302
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(>=40 yrs)

	Placebo	BG00012240 mg BID	BG00012 240 mg TID	Total BG00012	GA
顔面骨骨折	0	1 (<1)	0	1 (<1)	0
転倒	0	1 (<1)	0	1 (<1)	0
大腿骨骨折	0	1 (<1)	0	1 (<1)	1 (<1)
足骨折	0	1 (<1)	0	1 (<1)	0
肉離れ	0	0	1 (<1)	1 (<1)	0
交通事故	0	1 (<1)	0	1 (<1)	0
外傷性脳損傷	0	1 (<1)	0	1 (<1)	0
眼外傷	1 (<1)	0	0	0	0
大腿骨頚部骨折	1 (<1)	0	0	0	0
橈骨骨折	0	0	0	0	1 (<1)
腱断裂	3 (<1)	0	0	0	0
脛骨骨折	1 (<1)	0	0	0	0
外科および内科処置	0	1 (<1)	1 (<1)	2 (<1)	0
子宮摘出	0	1 (<1)	0	1 (<1)	0
静脈ステント挿入	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-AGE-A.SAS DATE: 02DEC2015

Table 276: Incidence of Serious Adverse Events by System Organ Class and Preferred Term - by Gender: Studies 109MS301 and 109MS302

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302

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(Male)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	214 (100)	228 (100)	204 (100)	432 (100)	104 (100)
Number of subjects with an event	35 (16)	34 (15)	29 (14)	63 (15)	20 (19)
感染症および寄生虫症	2 (<1)	4 (2)	3 (1)	7 (2)	3 (3)
胃腸炎	0	1 (<1)	1 (<1)	2 (<1)	0
Ｈ１Ｎ１インフルエンザ	0	1 (<1)	1 (<1)	2 (<1)	0
肺炎	0	1 (<1)	0	1 (<1)	2 (2)
尿路感染	0	0	1 (<1)	1 (<1)	0
ウイルス感染	0	1 (<1)	0	1 (<1)	1 (<1)
肛門膿瘍	1 (<1)	0	0	0	0
膿胸	0	0	0	0	1 (<1)
消化器結核	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
神経鞘腫	0	1 (<1)	0	1 (<1)	0
基底細胞癌	0	0	0	0	1 (<1)
血管腫	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Male)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
免疫系障害	0	0	1 (<1)	1 (<1)	0
過敏症	0	0	1 (<1)	1 (<1)	0
代謝および栄養障害	0	0	1 (<1)	1 (<1)	0
低血糖症	0	0	1 (<1)	1 (<1)	0
精神障害	0	3 (1)	0	3 (<1)	2 (2)
抑うつ気分を伴う適応障害	0	1 (<1)	0	1 (<1)	0
うつ病	0	1 (<1)	0	1 (<1)	1 (<1)
躁病	0	1 (<1)	0	1 (<1)	0
自殺念慮	0	1 (<1)	0	1 (<1)	1 (<1)
自殺既遂	0	0	0	0	1 (<1)
神経系障害	26 (12)	22 (10)	20 (10)	42 (10)	14 (13)
多発性硬化症再発	23 (11)	21 (9)	17 (8)	38 (9)	12 (12)
意識変容状態	0	0	1 (<1)	1 (<1)	0
構語障害	0	0	1 (<1)	1 (<1)	0
てんかん	1 (<1)	1 (<1)	0	1 (<1)	0
頭痛	0	0	1 (<1)	1 (<1)	0
虚血性脳卒中	0	0	1 (<1)	1 (<1)	0
神経学的症状	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Male)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
脳血管障害	0	0	0	0	1 (<1)
痙攣	1 (<1)	0	0	0	0
脳症	1 (<1)	0	0	0	0
大発作痙攣	1 (<1)	0	0	0	1 (<1)
意識消失	1 (<1)	0	0	0	0
多発性硬化症	1 (<1)	0	0	0	0
眼障害	2 (<1)	0	0	0	0
ホームズ・アディー瞳孔	1 (<1)	0	0	0	0
視力低下	1 (<1)	0	0	0	0
耳および迷路障害	0	0	0	0	1 (<1)
前庭性運動失調	0	0	0	0	1 (<1)
血管障害	0	0	1 (<1)	1 (<1)	0
深部静脈血栓症	0	0	1 (<1)	1 (<1)	0
呼吸器、胸郭および縦隔障害	1 (<1)	2 (<1)	0	2 (<1)	0
胸水	0	1 (<1)	0	1 (<1)	0
誤嚥性肺炎	0	1 (<1)	0	1 (<1)	0
鼻茸	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Male)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
胃腸障害	0	2 (<1)	0	2 (<1)	0
腹痛	0	1 (<1)	0	1 (<1)	0
憩室穿孔	0	1 (<1)	0	1 (<1)	0
肝胆道系障害	0	0	0	0	1 (<1)
胆石症	0	0	0	0	1 (<1)
筋骨格系および結合組織障害	0	1 (<1)	0	1 (<1)	0
滑液包炎	0	1 (<1)	0	1 (<1)	0
先天性、家族性および遺伝性障害	0	0	1 (<1)	1 (<1)	0
陰嚢水瘤	0	0	1 (<1)	1 (<1)	0
一般・全身障害および投与部位の状態	0	0	3 (1)	3 (<1)	0
無力症	0	0	1 (<1)	1 (<1)	0
非心臓性胸痛	0	0	1 (<1)	1 (<1)	0
発熱	0	0	1 (<1)	1 (<1)	0
臨床検査	1 (<1)	0	1 (<1)	1 (<1)	0
医学的観察	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Male)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
	1 (<1)	0	0	0	0
肝酵素上昇	4 (2)	3 (1)	2 (<1)	5 (1)	1 (<1)
傷害、中毒および処置合併症					
アルコール中毒	0	0	1 (<1)	1 (<1)	0
顔面骨骨折	0	1 (<1)	0	1 (<1)	0
靭帯断裂	0	1 (<1)	0	1 (<1)	0
外傷性血腫	0	1 (<1)	0	1 (<1)	0
手首関節骨折	0	0	1 (<1)	1 (<1)	0
靭帯損傷	1 (<1)	0	0	0	0
半月板障害	1 (<1)	0	0	0	0
交通事故	0	0	0	0	1 (<1)
腱断裂	1 (<1)	0	0	0	0
治療薬毒性	1 (<1)	0	0	0	0
脛骨骨折	1 (<1)	0	0	0	0
むち打ち損傷	0	0	0	0	1 (<1)
外科および内科処置	1 (<1)	0	0	0	0
鼻甲介切除	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	557 (100)	541 (100)	556 (100)	1097 (100)	247 (100)
Number of subjects with an event	130 (23)	101 (19)	90 (16)	191 (17)	40 (16)
感染症および寄生虫症	10 (2)	13 (2)	12 (2)	25 (2)	1 (<1)
胃腸炎	0	5 (<1)	2 (<1)	7 (<1)	0
蜂巣炎	0	2 (<1)	2 (<1)	4 (<1)	0
副鼻腔炎	0	1 (<1)	1 (<1)	2 (<1)	0
尿路感染	0	1 (<1)	1 (<1)	2 (<1)	0
ウイルス感染	0	1 (<1)	1 (<1)	2 (<1)	0
虫垂炎	0	1 (<1)	0	1 (<1)	1 (<1)
ダグラス窩膿瘍	0	0	1 (<1)	1 (<1)	0
ウイルス性胃腸炎	0	0	1 (<1)	1 (<1)	0
インフルエンザ	1 (<1)	0	1 (<1)	1 (<1)	0
骨盤内炎症性疾患	1 (<1)	0	1 (<1)	1 (<1)	0
扁桃周囲膿瘍	0	0	1 (<1)	1 (<1)	0
肺炎	2 (<1)	1 (<1)	0	1 (<1)	0
ウイルス感染後疲労症候群	0	1 (<1)	0	1 (<1)	0
急性腎盂腎炎	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
外陰部膿瘍	0	0	1 (<1)	1 (<1)	0
ボレリア感染	1 (<1)	0	0	0	0
感染性下痢	1 (<1)	0	0	0	0
細菌性心内膜炎	1 (<1)	0	0	0	0
Ｈ１Ｎ１インフルエンザ	1 (<1)	0	0	0	0
鼻咽頭炎	1 (<1)	0	0	0	0
ライター症候群	1 (<1)	0	0	0	0
敗血症	2 (<1)	0	0	0	0
気管炎	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	5 (<1)	3 (<1)	3 (<1)	6 (<1)	4 (2)
子宮平滑筋腫	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
肺の良性新生物	0	1 (<1)	0	1 (<1)	0
乳癌	1 (<1)	0	1 (<1)	1 (<1)	0
子宮頚部癌	0	0	1 (<1)	1 (<1)	1 (<1)
移行上皮癌	0	1 (<1)	0	1 (<1)	0
基底細胞癌	1 (<1)	0	0	0	0
乳房新生物	1 (<1)	0	0	0	0
子宮内膜癌	0	0	0	0	1 (<1)
線維腫	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
転移性甲状腺癌	0	0	0	0	1 (<1)
血液およびリンパ系障害	2 (<1)	0	0	0	0
貧血	1 (<1)	0	0	0	0
小球性貧血	1 (<1)	0	0	0	0
免疫系障害	0	1 (<1)	1 (<1)	2 (<1)	3 (1)
アナフィラキシー様反応	0	0	1 (<1)	1 (<1)	0
過敏症	0	1 (<1)	0	1 (<1)	1 (<1)
アナフィラキシー反応	0	0	0	0	2 (<1)
内分泌障害	0	1 (<1)	2 (<1)	3 (<1)	0
甲状腺腫	0	1 (<1)	1 (<1)	2 (<1)	0
間脳性内分泌障害	0	0	1 (<1)	1 (<1)	0
代謝および栄養障害	1 (<1)	0	1 (<1)	1 (<1)	0
脱水	0	0	1 (<1)	1 (<1)	0
糖尿病性ケトアシドーシス	1 (<1)	0	0	0	0
精神障害	4 (<1)	2 (<1)	2 (<1)	4 (<1)	2 (<1)
双極１型障害	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
うつ病	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
全般性不安障害	0	1 (<1)	0	1 (<1)	0
自己愛性人格障害	0	1 (<1)	0	1 (<1)	0
自殺企図	0	0	1 (<1)	1 (<1)	1 (<1)
不安	1 (<1)	0	0	0	0
自殺念慮	1 (<1)	0	0	0	0
神経系障害	92 (17)	59 (11)	49 (9)	108 (10)	26 (11)
多発性硬化症再発	88 (16)	57 (11)	45 (8)	102 (9)	24 (10)
頭痛	0	0	2 (<1)	2 (<1)	0
良性頭蓋内圧亢進	0	0	1 (<1)	1 (<1)	0
舌咽神経痛	0	1 (<1)	0	1 (<1)	0
大発作痙攣	1 (<1)	0	1 (<1)	1 (<1)	0
片頭痛	2 (<1)	0	1 (<1)	1 (<1)	0
多発性硬化症	0	0	1 (<1)	1 (<1)	0
神経学的症状	0	0	1 (<1)	1 (<1)	0
後頭神経痛	0	0	1 (<1)	1 (<1)	0
部分発作	0	1 (<1)	0	1 (<1)	1 (<1)
下肢静止不能症候群	1 (<1)	0	1 (<1)	1 (<1)	0
一過性全健忘	0	0	1 (<1)	1 (<1)	0
一過性脳虚血発作	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
横静脈洞血栓症	0	0	1 (<1)	1 (<1)	0
第７脳神経麻痺	0	1 (<1)	0	1 (<1)	0
失語症	0	0	0	0	1 (<1)
脳血管発作	1 (<1)	0	0	0	0
痙攣	2 (<1)	0	0	0	0
意識消失	0	0	0	0	1 (<1)
眼障害	1 (<1)	0	0	0	0
眼痛	1 (<1)	0	0	0	0
耳および迷路障害	0	0	1 (<1)	1 (<1)	0
頭位性回転性めまい	0	0	1 (<1)	1 (<1)	0
心臓障害	0	0	4 (<1)	4 (<1)	1 (<1)
急性冠動脈症候群	0	0	1 (<1)	1 (<1)	0
徐脈	0	0	1 (<1)	1 (<1)	0
心不全	0	0	1 (<1)	1 (<1)	0
うっ血性心不全	0	0	1 (<1)	1 (<1)	0
心筋炎	0	0	0	0	1 (<1)
血管障害	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
潮紅	0	1 (<1)	1 (<1)	2 (<1)	0
静脈瘤	0	1 (<1)	1 (<1)	2 (<1)	0
深部静脈血栓症	0	0	0	0	1 (<1)
末梢性虚血	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	0	1 (<1)	0	1 (<1)	0
喘息	0	1 (<1)	0	1 (<1)	0
胃腸障害	5 (<1)	6 (1)	10 (2)	16 (1)	0
嘔吐	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
胃炎	0	0	3 (<1)	3 (<1)	0
腹部ヘルニア	0	1 (<1)	0	1 (<1)	0
腹痛	0	1 (<1)	0	1 (<1)	0
下腹部痛	0	0	1 (<1)	1 (<1)	0
便秘	0	1 (<1)	0	1 (<1)	0
十二指腸炎	0	0	1 (<1)	1 (<1)	0
胃腸障害	0	1 (<1)	0	1 (<1)	0
胃腸出血	1 (<1)	0	1 (<1)	1 (<1)	0
裂孔ヘルニア	0	1 (<1)	0	1 (<1)	0
腸閉塞	0	0	1 (<1)	1 (<1)	0
悪心	1 (<1)	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
臍ヘルニア	0	0	1 (<1)	1 (<1)	0
大腸炎	1 (<1)	0	0	0	0
潰瘍性大腸炎	1 (<1)	0	0	0	0
急性膵炎	1 (<1)	0	0	0	0
腹膜出血	1 (<1)	0	0	0	0
肝胆道系障害	0	2 (<1)	1 (<1)	3 (<1)	0
胆石症	0	1 (<1)	1 (<1)	2 (<1)	0
胆管結石	0	0	1 (<1)	1 (<1)	0
胆汁うっ滞性肝炎	0	1 (<1)	0	1 (<1)	0
皮膚および皮下組織障害	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
そう痒症	0	0	1 (<1)	1 (<1)	0
スティーブンス・ジョンソン症候群	0	1 (<1)	0	1 (<1)	0
アレルギー性皮膚炎	1 (<1)	0	0	0	0
筋骨格系および結合組織障害	3 (<1)	4 (<1)	3 (<1)	7 (<1)	0
背部痛	0	2 (<1)	1 (<1)	3 (<1)	0
関節痛	0	1 (<1)	0	1 (<1)	0
変形性関節症	1 (<1)	0	1 (<1)	1 (<1)	0
シェーグレン症候群	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
変形性脊椎症	0	0	1 (<1)	1 (<1)	0
多発性関節炎	1 (<1)	0	0	0	0
滑液嚢腫	1 (<1)	0	0	0	0
腎および尿路障害	2 (<1)	2 (<1)	3 (<1)	5 (<1)	0
膀胱機能障害	0	1 (<1)	0	1 (<1)	0
膀胱穿孔	0	0	1 (<1)	1 (<1)	0
腎仙痛	0	0	1 (<1)	1 (<1)	0
尿管瘤	0	1 (<1)	0	1 (<1)	0
尿失禁	0	0	1 (<1)	1 (<1)	0
膀胱憩室	1 (<1)	0	0	0	0
腎下垂症	1 (<1)	0	0	0	0
妊娠、産褥および周産期の状態	3 (<1)	0	0	0	0
自然流産	2 (<1)	0	0	0	0
妊娠浮腫	1 (<1)	0	0	0	0
生殖系および乳房障害	6 (1)	4 (<1)	3 (<1)	7 (<1)	2 (<1)
卵巣嚢胞	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
腺筋症	0	0	1 (<1)	1 (<1)	0
子宮内膜症	0	1 (<1)	0	1 (<1)	0

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
月経過多	0	1 (<1)	0	1 (<1)	0
不正子宮出血	0	0	1 (<1)	1 (<1)	1 (<1)
卵巣嚢胞破裂	0	1 (<1)	0	1 (<1)	0
バルトリン嚢腫	1 (<1)	0	0	0	0
月経障害	1 (<1)	0	0	0	0
骨盤痛	1 (<1)	0	0	0	0
子宮出血	2 (<1)	0	0	0	1 (<1)
一般・全身障害および投与部位の状態	3 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
発熱	0	1 (<1)	1 (<1)	2 (<1)	0
閉塞性ヘルニア	0	0	1 (<1)	1 (<1)	0
末梢性浮腫	0	0	1 (<1)	1 (<1)	1 (<1)
無力症	1 (<1)	0	0	0	0
インフルエンザ様疾患	1 (<1)	0	0	0	0
骨盤腔内腫瘤	1 (<1)	0	0	0	0
臨床検査	1 (<1)	1 (<1)	4 (<1)	5 (<1)	0
アレルギー検査	0	0	1 (<1)	1 (<1)	0
尿中β２ミクログロブリン増加	0	0	1 (<1)	1 (<1)	0
血中ブドウ糖増加	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
結腸内視鏡検査	0	1 (<1)	0	1 (<1)	0
検査	0	0	1 (<1)	1 (<1)	0
肝酵素上昇	1 (<1)	0	0	0	0
傷害、中毒および処置合併症	5 (<1)	7 (1)	7 (1)	14 (1)	2 (<1)
交通事故	0	1 (<1)	2 (<1)	3 (<1)	0
大腿骨骨折	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
肉離れ	0	0	2 (<1)	2 (<1)	0
足関節部骨折	0	0	1 (<1)	1 (<1)	0
脳振盪	0	1 (<1)	0	1 (<1)	0
転倒	0	1 (<1)	0	1 (<1)	0
足骨折	0	1 (<1)	0	1 (<1)	0
半月板障害	0	1 (<1)	0	1 (<1)	0
過量投与	0	1 (<1)	0	1 (<1)	0
術後発熱	0	1 (<1)	0	1 (<1)	0
処置による低血圧	0	1 (<1)	0	1 (<1)	0
橈骨骨折	0	0	1 (<1)	1 (<1)	1 (<1)
外傷性脳損傷	0	1 (<1)	0	1 (<1)	0
手首関節骨折	0	0	1 (<1)	1 (<1)	0
眼外傷	1 (<1)	0	0	0	0
大腿骨頚部骨折	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by gender: Studies 109MS301 and 109MS302
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(Female)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
手骨折	1 (<1)	0	0	0	0
腱断裂	2 (<1)	0	0	0	0
外科および内科処置	1 (<1)	4 (<1)	2 (<1)	6 (<1)	1 (<1)
乳房腫瘤摘除	0	1 (<1)	0	1 (<1)	0
女性不妊手術	0	1 (<1)	0	1 (<1)	0
子宮摘出	0	1 (<1)	0	1 (<1)	0
椎間板手術	0	0	1 (<1)	1 (<1)	0
治療食	0	1 (<1)	0	1 (<1)	0
静脈ステント挿入	0	0	1 (<1)	1 (<1)	0
子宮頚部円錐切除	1 (<1)	0	0	0	0
不妊手術	0	0	0	0	1 (<1)
社会環境	1 (<1)	0	0	0	0
社会問題	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-GENDER-A.SAS DATE: 02DEC2015

Table 277: Incidence of Adverse Events by System Organ Class and Preferred Term - by Race Group: Studies 109MS301 and 109MS302

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	623 (100)	625 (100)	621 (100)	1246 (100)	291 (100)
Number of subjects with an event	582 (93)	598 (96)	580 (93)	1178 (95)	250 (86)
感染症および寄生虫症	375 (60)	386 (62)	395 (64)	781 (63)	149 (51)
鼻咽頭炎	137 (22)	149 (24)	148 (24)	297 (24)	47 (16)
上気道感染	80 (13)	88 (14)	88 (14)	176 (14)	23 (8)
尿路感染	78 (13)	90 (14)	80 (13)	170 (14)	41 (14)
インフルエンザ	46 (7)	47 (8)	56 (9)	103 (8)	10 (3)
副鼻腔炎	30 (5)	27 (4)	47 (8)	74 (6)	8 (3)
気管支炎	28 (4)	30 (5)	42 (7)	72 (6)	15 (5)
胃腸炎	22 (4)	31 (5)	24 (4)	55 (4)	3 (1)
咽頭炎	22 (4)	25 (4)	16 (3)	41 (3)	12 (4)
鼻炎	17 (3)	18 (3)	20 (3)	38 (3)	5 (2)
気道感染	14 (2)	16 (3)	20 (3)	36 (3)	9 (3)
ウイルス性胃腸炎	16 (3)	14 (2)	20 (3)	34 (3)	6 (2)
口腔ヘルペス	23 (4)	20 (3)	12 (2)	32 (3)	6 (2)
膀胱炎	20 (3)	10 (2)	19 (3)	29 (2)	4 (1)
ウイルス感染	14 (2)	13 (2)	10 (2)	23 (2)	4 (1)
喉頭炎	4 (<1)	11 (2)	10 (2)	21 (2)	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
耳感染	8 (1)	4 (<1)	16 (3)	20 (2)	1 (<1)
ウイルス性上気道感染	11 (2)	10 (2)	8 (1)	18 (1)	7 (2)
扁桃炎	8 (1)	8 (1)	9 (1)	17 (1)	2 (<1)
消化管感染	8 (1)	5 (<1)	11 (2)	16 (1)	2 (<1)
帯状疱疹	10 (2)	7 (1)	9 (1)	16 (1)	2 (<1)
中耳炎	1 (<1)	7 (1)	9 (1)	16 (1)	1 (<1)
外陰腟真菌感染	10 (2)	5 (<1)	11 (2)	16 (1)	2 (<1)
腟感染	3 (<1)	10 (2)	5 (<1)	15 (1)	2 (<1)
感染性結膜炎	1 (<1)	6 (<1)	7 (1)	13 (1)	0
歯膿瘍	8 (1)	9 (1)	4 (<1)	13 (1)	3 (1)
麦粒腫	4 (<1)	6 (<1)	5 (<1)	11 (<1)	0
ウイルス性消化管感染	4 (<1)	6 (<1)	4 (<1)	10 (<1)	1 (<1)
レンサ球菌性咽頭炎	10 (2)	3 (<1)	5 (<1)	8 (<1)	1 (<1)
肺炎	3 (<1)	4 (<1)	4 (<1)	8 (<1)	6 (2)
ウイルス性気道感染	4 (<1)	6 (<1)	2 (<1)	8 (<1)	0
外陰部腟カンジダ症	5 (<1)	4 (<1)	4 (<1)	8 (<1)	1 (<1)
下気道感染	5 (<1)	2 (<1)	5 (<1)	7 (<1)	1 (<1)
歯感染	4 (<1)	2 (<1)	5 (<1)	7 (<1)	4 (1)
咽頭扁桃炎	1 (<1)	4 (<1)	2 (<1)	6 (<1)	1 (<1)
気管炎	2 (<1)	5 (<1)	1 (<1)	6 (<1)	1 (<1)
Ｈ１Ｎ１インフルエンザ	0	2 (<1)	3 (<1)	5 (<1)	2 (<1)
口腔カンジダ症	0	1 (<1)	4 (<1)	5 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
急性扁桃炎	4 (<1)	3 (<1)	1 (<1)	4 (<1)	2 (<1)
細菌尿	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
せつ	1 (<1)	3 (<1)	1 (<1)	4 (<1)	0
陰部ヘルペス	2 (<1)	4 (<1)	0	4 (<1)	1 (<1)
単純ヘルペス	2 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
爪真菌症	0	4 (<1)	0	4 (<1)	0
外耳炎	1 (<1)	3 (<1)	1 (<1)	4 (<1)	1 (<1)
皮下組織膿瘍	0	2 (<1)	2 (<1)	4 (<1)	0
癜風	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
細菌性結膜炎	0	1 (<1)	2 (<1)	3 (<1)	0
遊走性紅斑	0	1 (<1)	2 (<1)	3 (<1)	0
毛包炎	3 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
歯周感染	0	1 (<1)	2 (<1)	3 (<1)	0
細菌性膣炎	0	3 (<1)	0	3 (<1)	1 (<1)
急性副鼻腔炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
眼感染	3 (<1)	2 (<1)	0	2 (<1)	0
真菌感染	2 (<1)	2 (<1)	0	2 (<1)	1 (<1)
性器カンジダ症	0	2 (<1)	0	2 (<1)	0
ヘリコバクター性胃炎	0	0	2 (<1)	2 (<1)	1 (<1)
ヘリコバクター感染	0	1 (<1)	1 (<1)	2 (<1)	0
切開部位感染	0	2 (<1)	0	2 (<1)	0
咬傷感染	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
シラミ寄生	0	1 (<1)	1 (<1)	2 (<1)	0
限局性感染	0	2 (<1)	0	2 (<1)	0
口腔真菌感染	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
爪囲炎	0	2 (<1)	0	2 (<1)	0
術後創感染	0	1 (<1)	1 (<1)	2 (<1)	0
歯髄炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
細菌性副鼻腔炎	0	2 (<1)	0	2 (<1)	0
ブドウ球菌感染	0	0	2 (<1)	2 (<1)	0
気管気管支炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
細菌性上気道感染	0	2 (<1)	0	2 (<1)	0
腹壁膿瘍	0	0	1 (<1)	1 (<1)	0
ダニ症	0	0	1 (<1)	1 (<1)	0
虫垂炎	0	1 (<1)	0	1 (<1)	1 (<1)
無症候性細菌尿	1 (<1)	0	1 (<1)	1 (<1)	0
細菌感染	1 (<1)	1 (<1)	0	1 (<1)	0
ボレリア感染	3 (<1)	1 (<1)	0	1 (<1)	0
乳房膿瘍	0	0	1 (<1)	1 (<1)	0
気管支肺炎	0	1 (<1)	0	1 (<1)	0
カンジダ症	0	1 (<1)	0	1 (<1)	1 (<1)
蜂巣炎	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
子宮頚管炎	0	1 (<1)	0	1 (<1)	1 (<1)
ウイルス性結膜炎	1 (<1)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
感染性皮膚炎	0	0	1 (<1)	1 (<1)	0
憩室炎	0	0	1 (<1)	1 (<1)	0
ダグラス窩膿瘍	0	0	1 (<1)	1 (<1)	0
感染性湿疹	0	0	1 (<1)	1 (<1)	0
エプスタイン・バーウイルス感染	0	0	1 (<1)	1 (<1)	0
熱性感染症	1 (<1)	0	1 (<1)	1 (<1)	0
ノロウイルス性胃腸炎	1 (<1)	1 (<1)	0	1 (<1)	0
ロタウイルス胃腸炎	0	1 (<1)	0	1 (<1)	0
細菌性性器感染	2 (<1)	1 (<1)	0	1 (<1)	0
泌尿生殖器感染	1 (<1)	1 (<1)	0	1 (<1)	0
ジアルジア症	0	1 (<1)	0	1 (<1)	0
歯肉感染	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
神経合併症を伴う帯状疱疹感染	0	1 (<1)	0	1 (<1)	0
眼帯状疱疹	0	0	1 (<1)	1 (<1)	0
膿痂疹	0	0	1 (<1)	1 (<1)	0
感染性嚢腫	1 (<1)	1 (<1)	0	1 (<1)	0
感染	0	0	1 (<1)	1 (<1)	1 (<1)
伝染性単核症	0	0	1 (<1)	1 (<1)	0
迷路炎	2 (<1)	1 (<1)	0	1 (<1)	0
ライム病	0	0	1 (<1)	1 (<1)	1 (<1)
乳腺炎	1 (<1)	1 (<1)	0	1 (<1)	0
爪感染	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
精巣炎	0	0	1 (<1)	1 (<1)	0
急性中耳炎	0	0	1 (<1)	1 (<1)	0
扁桃周囲膿瘍	0	0	1 (<1)	1 (<1)	0
腎盂腎炎	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
急性腎盂腎炎	0	0	1 (<1)	1 (<1)	0
卵管卵巣炎	2 (<1)	1 (<1)	0	1 (<1)	0
陰嚢膿瘍	0	0	1 (<1)	1 (<1)	0
皮膚細菌感染	0	0	1 (<1)	1 (<1)	0
足部白癬	2 (<1)	0	1 (<1)	1 (<1)	0
細菌性尿路感染	2 (<1)	0	1 (<1)	1 (<1)	0
真菌性尿路感染	0	1 (<1)	0	1 (<1)	0
泌尿生殖器真菌感染	0	0	1 (<1)	1 (<1)	0
ガードネレラ菌性膣炎	0	1 (<1)	0	1 (<1)	0
水痘	0	1 (<1)	0	1 (<1)	1 (<1)
ウイルス性鼻炎	0	0	1 (<1)	1 (<1)	0
外陰部膿瘍	1 (<1)	0	1 (<1)	1 (<1)	0
外陰部炎	0	1 (<1)	0	1 (<1)	0
膿瘍	1 (<1)	0	0	0	0
顎膿瘍	1 (<1)	0	0	0	0
四肢膿瘍	1 (<1)	0	0	0	0
ウイルス性気管支炎	0	0	0	0	1 (<1)
慢性副鼻腔炎	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
細菌性心内膜炎	1 (<1)	0	0	0	0
皮膚真菌感染	0	0	0	0	1 (<1)
真菌性消化管感染	1 (<1)	0	0	0	0
ヘルペスウイルス感染	1 (<1)	0	0	0	0
寄生虫感染	0	0	0	0	1 (<1)
乳様突起炎	0	0	0	0	1 (<1)
ムンプス	1 (<1)	0	0	0	0
パラインフルエンザウイルス感染	1 (<1)	0	0	0	0
子宮傍組織炎	0	0	0	0	1 (<1)
耳下腺炎	0	0	0	0	1 (<1)
細菌性咽頭炎	3 (<1)	0	0	0	1 (<1)
毛巣嚢胞	1 (<1)	0	0	0	0
ウイルス感染後疲労症候群	1 (<1)	0	0	0	0
術後膿瘍	1 (<1)	0	0	0	0
膿胸	0	0	0	0	1 (<1)
膿疱性皮疹	0	0	0	0	1 (<1)
猩紅熱	1 (<1)	0	0	0	0
敗血症	2 (<1)	0	0	0	0
レンサ球菌感染	1 (<1)	0	0	0	0
白癬感染	1 (<1)	0	0	0	0
尿路性敗血症	2 (<1)	0	0	0	0
ウイルス性咽頭炎	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
	2 (<1)	0	0	0	0
創傷感染	13 (2)	19 (3)	23 (4)	42 (3)	9 (3)
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）					
皮膚乳頭腫	0	5 (<1)	4 (<1)	9 (<1)	0
脂肪腫	0	2 (<1)	4 (<1)	6 (<1)	1 (<1)
メラノサイト性母斑	2 (<1)	2 (<1)	4 (<1)	6 (<1)	2 (<1)
子宮平滑筋腫	1 (<1)	2 (<1)	4 (<1)	6 (<1)	2 (<1)
乳腺線維腺腫	0	1 (<1)	1 (<1)	2 (<1)	0
線維腫	0	2 (<1)	0	2 (<1)	0
肺新生物	0	1 (<1)	1 (<1)	2 (<1)	0
甲状腺新生物	1 (<1)	2 (<1)	0	2 (<1)	0
基底細胞癌	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
肺の良性新生物	0	1 (<1)	0	1 (<1)	0
乳癌	1 (<1)	0	1 (<1)	1 (<1)	0
子宮頚部癌	0	0	1 (<1)	1 (<1)	1 (<1)
泌尿生殖器新生物	0	0	1 (<1)	1 (<1)	0
肝臓血管腫	0	0	1 (<1)	1 (<1)	0
神経鞘腫	0	1 (<1)	0	1 (<1)	0
乳頭腫	0	0	1 (<1)	1 (<1)	0
腎新生物	0	1 (<1)	0	1 (<1)	0
脂漏性角化症	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
移行上皮癌	0	1 (<1)	0	1 (<1)	0
アクロコルドン	1 (<1)	0	0	0	0
リンパ節の良性新生物	1 (<1)	0	0	0	0
甲状腺の良性新生物	1 (<1)	0	0	0	0
乳房新生物	1 (<1)	0	0	0	0
子宮内膜癌	0	0	0	0	1 (<1)
線維性組織球腫	0	0	0	0	1 (<1)
血管腫	1 (<1)	0	0	0	0
モートン神経腫	1 (<1)	0	0	0	0
皮膚の新生物	1 (<1)	0	0	0	0
口腔新生物	1 (<1)	0	0	0	0
良性副甲状腺腫瘍	1 (<1)	0	0	0	0
転移性甲状腺癌	0	0	0	0	1 (<1)
	29 (5)	39 (6)	41 (7)	80 (6)	9 (3)
血液およびリンパ系障害					
リンパ球減少症	2 (<1)	15 (2)	15 (2)	30 (2)	0
貧血	10 (2)	9 (1)	10 (2)	19 (2)	4 (1)
白血球減少症	1 (<1)	7 (1)	9 (1)	16 (1)	0
好中球増加症	4 (<1)	4 (<1)	5 (<1)	9 (<1)	1 (<1)
好酸球増加症	1 (<1)	3 (<1)	5 (<1)	8 (<1)	0
リンパ節症	5 (<1)	3 (<1)	5 (<1)	8 (<1)	3 (1)
白血球増加症	2 (<1)	6 (<1)	1 (<1)	7 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
鉄欠乏性貧血	3 (<1)	3 (<1)	2 (<1)	5 (<1)	0
好中球減少症	1 (<1)	0	3 (<1)	3 (<1)	0
正色素性正球性貧血	0	0	1 (<1)	1 (<1)	0
脾腫	0	0	1 (<1)	1 (<1)	0
血小板減少症	0	1 (<1)	0	1 (<1)	0
妊娠貧血	1 (<1)	0	0	0	0
低色素性貧血	1 (<1)	0	0	0	1 (<1)
リンパ節炎	1 (<1)	0	0	0	0
小球性貧血	1 (<1)	0	0	0	0
血小板増加症	1 (<1)	0	0	0	0
免疫系障害	15 (2)	20 (3)	21 (3)	41 (3)	7 (2)
過敏症	1 (<1)	9 (1)	9 (1)	18 (1)	1 (<1)
季節性アレルギー	8 (1)	6 (<1)	7 (1)	13 (1)	3 (1)
食物アレルギー	1 (<1)	5 (<1)	1 (<1)	6 (<1)	1 (<1)
薬物過敏症	3 (<1)	1 (<1)	3 (<1)	4 (<1)	2 (<1)
アナフィラキシー様反応	0	0	1 (<1)	1 (<1)	0
造影剤アレルギー	0	0	1 (<1)	1 (<1)	0
家塵アレルギー	2 (<1)	0	1 (<1)	1 (<1)	0
免疫不全症	0	0	1 (<1)	1 (<1)	0
続発性免疫不全症	0	0	1 (<1)	1 (<1)	0
化学物質アレルギー	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
アナフィラキシー反応	0	0	0	0	1 (<1)
	5 (<1)	5 (<1)	8 (1)	13 (1)	2 (<1)
内分泌障害					
甲状腺機能低下症	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
甲状腺腫	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
副甲状腺機能亢進症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
自己免疫性甲状腺炎	0	1 (<1)	0	1 (<1)	0
原発性副甲状腺機能亢進症	0	0	1 (<1)	1 (<1)	0
続発性副甲状腺機能亢進症	0	1 (<1)	0	1 (<1)	0
甲状腺機能亢進症	2 (<1)	0	1 (<1)	1 (<1)	0
エストロゲン欠乏症	0	0	1 (<1)	1 (<1)	0
甲状腺腫瘤	0	0	1 (<1)	1 (<1)	0
副腎腫瘤	1 (<1)	0	0	0	0
	41 (7)	32 (5)	43 (7)	75 (6)	13 (4)
代謝および栄養障害					
食欲減退	7 (1)	7 (1)	12 (2)	19 (2)	2 (<1)
ビタミンD欠乏	5 (<1)	4 (<1)	7 (1)	11 (<1)	2 (<1)
高コレステロール血症	3 (<1)	4 (<1)	6 (<1)	10 (<1)	1 (<1)
脱水	1 (<1)	3 (<1)	3 (<1)	6 (<1)	0
高血糖	4 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
脂質異常症	0	0	3 (<1)	3 (<1)	0
耐糖能障害	0	1 (<1)	2 (<1)	3 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
高脂血症	5 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
鉄欠乏	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
ビタミンＢ１２欠乏	0	0	3 (<1)	3 (<1)	0
糖尿病	1 (<1)	1 (<1)	1 (<1)	2 (<1)	2 (<1)
低カリウム血症	0	1 (<1)	1 (<1)	2 (<1)	0
食欲亢進	3 (<1)	2 (<1)	0	2 (<1)	0
２型糖尿病	0	2 (<1)	0	2 (<1)	0
異常体重減少	0	0	1 (<1)	1 (<1)	0
糖尿病性ケトアシドーシス	0	0	1 (<1)	1 (<1)	0
痛風	1 (<1)	1 (<1)	0	1 (<1)	0
高ナトリウム血症	0	0	1 (<1)	1 (<1)	0
高トリグリセリド血症	3 (<1)	0	1 (<1)	1 (<1)	2 (<1)
低血糖症	0	0	1 (<1)	1 (<1)	0
低リン酸血症	0	0	1 (<1)	1 (<1)	0
ビタミン欠乏症	2 (<1)	1 (<1)	0	1 (<1)	0
ケトーシス	0	0	1 (<1)	1 (<1)	0
１型糖尿病	0	1 (<1)	0	1 (<1)	0
亜鉛欠乏	0	0	1 (<1)	1 (<1)	0
電解質失調	1 (<1)	0	0	0	0
葉酸欠乏	1 (<1)	0	0	0	0
妊娠糖尿病	1 (<1)	0	0	0	0
高カルシウム血症	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
高カリウム血症	1 (<1)	0	0	0	1 (<1)
高尿酸血症	0	0	0	0	1 (<1)
ビタミンD過剰症	1 (<1)	0	0	0	0
低ナトリウム血症	1 (<1)	0	0	0	0
肥満	1 (<1)	0	0	0	1 (<1)
精神障害	127 (20)	102 (16)	106 (17)	208 (17)	50 (17)
うつ病	51 (8)	45 (7)	37 (6)	82 (7)	24 (8)
不眠症	28 (4)	25 (4)	21 (3)	46 (4)	10 (3)
不安	20 (3)	23 (4)	21 (3)	44 (4)	6 (2)
抑うつ気分	14 (2)	9 (1)	6 (<1)	15 (1)	4 (1)
睡眠障害	12 (2)	8 (1)	7 (1)	15 (1)	2 (<1)
気分動揺	4 (<1)	1 (<1)	5 (<1)	6 (<1)	1 (<1)
感情障害	3 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
パニック発作	0	0	5 (<1)	5 (<1)	0
抑うつ症状	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
リビドー減退	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
気分変化	0	1 (<1)	2 (<1)	3 (<1)	0
神経過敏	1 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
神経症	0	2 (<1)	1 (<1)	3 (<1)	0
ストレス	4 (<1)	1 (<1)	2 (<1)	3 (<1)	3 (1)
感情不安定	5 (<1)	0	2 (<1)	2 (<1)	2 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
初期不眠症	0	0	2 (<1)	2 (<1)	0
大うつ病	0	0	2 (<1)	2 (<1)	0
落ち着きのなさ	0	2 (<1)	0	2 (<1)	0
身体表現性障害	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
自殺念慮	1 (<1)	2 (<1)	0	2 (<1)	2 (<1)
異常な夢	1 (<1)	0	1 (<1)	1 (<1)	0
抑うつ気分を伴う適応障害	0	1 (<1)	0	1 (<1)	0
不安障害	1 (<1)	1 (<1)	0	1 (<1)	0
双極１型障害	0	1 (<1)	0	1 (<1)	0
歯ぎしり	1 (<1)	0	1 (<1)	1 (<1)	0
燃え尽き症候群	0	1 (<1)	0	1 (<1)	0
性的興奮障害	1 (<1)	0	1 (<1)	1 (<1)	0
情動障害	0	0	1 (<1)	1 (<1)	0
全般性不安障害	0	1 (<1)	0	1 (<1)	0
リビド消失	0	1 (<1)	0	1 (<1)	0
躁病	0	1 (<1)	0	1 (<1)	0
自己愛性人格障害	0	1 (<1)	0	1 (<1)	0
パニック障害	0	1 (<1)	0	1 (<1)	0
人格変化	0	1 (<1)	0	1 (<1)	0
人格障害	0	1 (<1)	0	1 (<1)	0
睡眠発作	0	0	1 (<1)	1 (<1)	0
自殺企図	0	0	1 (<1)	1 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
適応障害	0	0	0	0	1 (<1)
攻撃性	1 (<1)	0	0	0	0
激越	1 (<1)	0	0	0	0
気晴らし食い	1 (<1)	0	0	0	0
精神緩慢	1 (<1)	0	0	0	0
自殺既遂	0	0	0	0	1 (<1)
錯乱状態	1 (<1)	0	0	0	0
不快気分	1 (<1)	0	0	0	0
多幸気分	1 (<1)	0	0	0	0
故意の自傷行為	0	0	0	0	1 (<1)
精神障害	0	0	0	0	1 (<1)
中期不眠症	1 (<1)	0	0	0	0
強迫性障害	1 (<1)	0	0	0	0
緊張	1 (<1)	0	0	0	0
タバコ乱用	1 (<1)	0	0	0	0
神経系障害	411 (66)	334 (53)	323 (52)	657 (53)	137 (47)
多発性硬化症再発	283 (45)	181 (29)	164 (26)	345 (28)	95 (33)
頭痛	104 (17)	106 (17)	94 (15)	200 (16)	30 (10)
錯感覚	54 (9)	45 (7)	51 (8)	96 (8)	13 (4)
感覚鈍麻	37 (6)	24 (4)	36 (6)	60 (5)	11 (4)
浮動性めまい	32 (5)	28 (4)	26 (4)	54 (4)	7 (2)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
灼熱感	11 (2)	16 (3)	23 (4)	39 (3)	0
片頭痛	14 (2)	18 (3)	18 (3)	36 (3)	5 (2)
筋痙直	22 (4)	13 (2)	12 (2)	25 (2)	6 (2)
平衡障害	8 (1)	10 (2)	9 (1)	19 (2)	1 (<1)
感覚障害	8 (1)	8 (1)	9 (1)	17 (1)	1 (<1)
多発性硬化症	14 (2)	7 (1)	8 (1)	15 (1)	5 (2)
坐骨神経痛	8 (1)	8 (1)	7 (1)	15 (1)	1 (<1)
異常感覚	3 (<1)	8 (1)	4 (<1)	12 (<1)	0
緊張性頭痛	5 (<1)	5 (<1)	7 (1)	12 (<1)	1 (<1)
振戦	9 (1)	9 (1)	3 (<1)	12 (<1)	4 (1)
傾眠	5 (<1)	5 (<1)	6 (<1)	11 (<1)	1 (<1)
レルミット徴候	7 (1)	1 (<1)	8 (1)	9 (<1)	1 (<1)
神経痛	4 (<1)	5 (<1)	4 (<1)	9 (<1)	0
構語障害	0	2 (<1)	6 (<1)	8 (<1)	0
失神	4 (<1)	2 (<1)	6 (<1)	8 (<1)	1 (<1)
前兆を伴う片頭痛	2 (<1)	6 (<1)	1 (<1)	7 (<1)	0
認知障害	0	1 (<1)	5 (<1)	6 (<1)	0
注意力障害	0	3 (<1)	3 (<1)	6 (<1)	2 (<1)
副鼻腔炎に伴う頭痛	2 (<1)	2 (<1)	4 (<1)	6 (<1)	2 (<1)
ウートホフ現象	3 (<1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
健忘	4 (<1)	3 (<1)	2 (<1)	5 (<1)	0
味覚異常	1 (<1)	1 (<1)	4 (<1)	5 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
神経圧迫	1 (<1)	0	5 (<1)	5 (<1)	0
下肢静止不能症候群	5 (<1)	2 (<1)	3 (<1)	5 (<1)	3 (1)
三叉神経痛	8 (1)	2 (<1)	3 (<1)	5 (<1)	2 (<1)
手根管症候群	5 (<1)	3 (<1)	1 (<1)	4 (<1)	2 (<1)
知覚過敏	3 (<1)	3 (<1)	1 (<1)	4 (<1)	0
記憶障害	5 (<1)	3 (<1)	1 (<1)	4 (<1)	3 (1)
不随意性筋収縮	0	3 (<1)	1 (<1)	4 (<1)	0
失神寸前の状態	3 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
帯状感	0	1 (<1)	2 (<1)	3 (<1)	0
てんかん	2 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
視神経炎	0	2 (<1)	1 (<1)	3 (<1)	0
味覚消失	0	1 (<1)	1 (<1)	2 (<1)	0
運動失調	1 (<1)	0	2 (<1)	2 (<1)	0
頚原性頭痛	0	1 (<1)	1 (<1)	2 (<1)	0
不器用	1 (<1)	2 (<1)	0	2 (<1)	1 (<1)
協調運動異常	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
顔面不全麻痺	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
不全片麻痺	2 (<1)	0	2 (<1)	2 (<1)	0
過眠症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
肋間神経痛	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
意識消失	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
腰髄神経根障害	1 (<1)	2 (<1)	0	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
感覚異常性大腿神経痛	0	1 (<1)	1 (<1)	2 (<1)	0
後頭神経痛	1 (<1)	0	2 (<1)	2 (<1)	0
一過性脳虚血発作	0	1 (<1)	1 (<1)	2 (<1)	0
意識変容状態	0	0	1 (<1)	1 (<1)	0
自律神経失調	0	0	1 (<1)	1 (<1)	0
良性頭蓋内圧亢進	0	0	1 (<1)	1 (<1)	0
小脳症候群	1 (<1)	0	1 (<1)	1 (<1)	0
頚髄神経根痛	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
概日リズム睡眠障害	0	1 (<1)	0	1 (<1)	0
痙攣	0	0	1 (<1)	1 (<1)	0
泣き	0	0	1 (<1)	1 (<1)	0
体位性めまい	0	1 (<1)	0	1 (<1)	0
よだれ	1 (<1)	0	1 (<1)	1 (<1)	0
ジスキネジー	0	1 (<1)	0	1 (<1)	0
ジストニー	0	1 (<1)	0	1 (<1)	0
てんかんの前兆	0	1 (<1)	0	1 (<1)	0
顔面神経障害	0	0	1 (<1)	1 (<1)	0
蟻走感	0	0	1 (<1)	1 (<1)	0
舌咽神経痛	0	1 (<1)	0	1 (<1)	0
大発作痙攣	0	0	1 (<1)	1 (<1)	1 (<1)
頭部動揺	0	0	1 (<1)	1 (<1)	1 (<1)
片側頭痛	5 (<1)	1 (<1)	0	1 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
思考散乱	0	0	1 (<1)	1 (<1)	0
脳圧低下	0	0	1 (<1)	1 (<1)	0
虚血性脳卒中	0	0	1 (<1)	1 (<1)	0
嗜眠	0	0	1 (<1)	1 (<1)	0
運動機能障害	0	0	1 (<1)	1 (<1)	0
神経学的症状	0	1 (<1)	0	1 (<1)	0
末梢性ニューロパチー	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
眼振	1 (<1)	1 (<1)	0	1 (<1)	0
腓骨神経麻痺	0	1 (<1)	0	1 (<1)	1 (<1)
睡眠の質低下	0	1 (<1)	0	1 (<1)	1 (<1)
神経根痛	0	1 (<1)	0	1 (<1)	0
頚髄神経根炎	0	1 (<1)	0	1 (<1)	0
逆行性健忘	0	1 (<1)	0	1 (<1)	0
感覚消失	0	1 (<1)	0	1 (<1)	0
会話障害	0	1 (<1)	0	1 (<1)	0
舌の麻痺	0	1 (<1)	0	1 (<1)	0
一過性全健忘	0	0	1 (<1)	1 (<1)	0
横静脈洞血栓症	0	0	1 (<1)	1 (<1)	0
尺骨神経管症候群	0	1 (<1)	0	1 (<1)	0
血管性頭痛	0	0	1 (<1)	1 (<1)	0
視野欠損	1 (<1)	1 (<1)	0	1 (<1)	0
異痛症	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
失語症	1 (<1)	0	0	0	1 (<1)
中枢神経系病変	2 (<1)	0	0	0	0
中枢痛症候群	1 (<1)	0	0	0	0
脳血管発作	1 (<1)	0	0	0	0
脳血管障害	0	0	0	0	1 (<1)
頚腕症候群	2 (<1)	0	0	0	0
振動覚低下	1 (<1)	0	0	0	0
顔面痙攣	2 (<1)	0	0	0	1 (<1)
痙性歩行	1 (<1)	0	0	0	0
ホルネル症候群	1 (<1)	0	0	0	0
反射亢進	4 (<1)	0	0	0	1 (<1)
筋緊張亢進	1 (<1)	0	0	0	0
筋緊張低下	1 (<1)	0	0	0	0
仮面状顔貌	0	0	0	0	1 (<1)
不全単麻痺	0	0	0	0	1 (<1)
単麻痺	1 (<1)	0	0	0	0
起立不耐性	0	0	0	0	1 (<1)
嗅覚錯誤	1 (<1)	0	0	0	0
部分発作	0	0	0	0	1 (<1)
周期性四肢運動障害	0	0	0	0	1 (<1)
片頭痛発作重積	1 (<1)	0	0	0	0
足根管症候群	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
温度覚鈍麻	1 (<1)	0	0	0	0
振動覚亢進	2 (<1)	0	0	0	1 (<1)
第６脳神経麻痺	0	0	0	0	1 (<1)
眼障害	75 (12)	57 (9)	70 (11)	127 (10)	19 (7)
霧視	15 (2)	11 (2)	16 (3)	27 (2)	5 (2)
眼痛	10 (2)	11 (2)	13 (2)	24 (2)	4 (1)
結膜炎	4 (<1)	7 (1)	6 (<1)	13 (1)	2 (<1)
視力障害	6 (<1)	6 (<1)	6 (<1)	12 (<1)	0
複視	8 (1)	4 (<1)	7 (1)	11 (<1)	3 (1)
眼瞼痙攣	6 (<1)	3 (<1)	6 (<1)	9 (<1)	0
眼乾燥	2 (<1)	7 (1)	1 (<1)	8 (<1)	1 (<1)
視力低下	8 (1)	3 (<1)	4 (<1)	7 (<1)	3 (1)
眼充血	0	3 (<1)	2 (<1)	5 (<1)	0
眼瞼炎	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
アレルギー性結膜炎	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
眼の異常感	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
失明	0	1 (<1)	2 (<1)	3 (<1)	0
硝子体浮遊物	0	2 (<1)	1 (<1)	3 (<1)	0
白内障	1 (<1)	0	2 (<1)	2 (<1)	0
霰粒腫	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
眼出血	0	1 (<1)	1 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
眼瞼下垂	0	1 (<1)	1 (<1)	2 (<1)	0
緑内障	1 (<1)	0	2 (<1)	2 (<1)	0
眼筋麻痺	0	1 (<1)	1 (<1)	2 (<1)	0
ブドウ膜炎	0	0	2 (<1)	2 (<1)	0
眼精疲労	1 (<1)	0	1 (<1)	1 (<1)	0
両眼球運動障害	0	0	1 (<1)	1 (<1)	0
アレルギー性眼瞼炎	0	0	1 (<1)	1 (<1)	0
眼瞼湿疹	0	1 (<1)	0	1 (<1)	0
眼刺激	1 (<1)	0	1 (<1)	1 (<1)	0
眼運動障害	0	0	1 (<1)	1 (<1)	0
眼そう痒症	2 (<1)	0	1 (<1)	1 (<1)	0
眼瞼嚢胞	0	1 (<1)	0	1 (<1)	0
眼瞼障害	0	0	1 (<1)	1 (<1)	0
眼瞼浮腫	0	0	1 (<1)	1 (<1)	0
遠視	2 (<1)	1 (<1)	0	1 (<1)	0
角膜炎	0	0	1 (<1)	1 (<1)	0
流涙増加	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
瞼板腺炎	0	0	1 (<1)	1 (<1)	0
夜盲	0	0	1 (<1)	1 (<1)	0
眼球運動失調	0	1 (<1)	0	1 (<1)	0
開放隅角緑内障	0	0	1 (<1)	1 (<1)	0
視神経萎縮	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
全眼球炎	0	1 (<1)	0	1 (<1)	0
光視症	0	1 (<1)	0	1 (<1)	0
老視	0	1 (<1)	0	1 (<1)	0
強膜炎	0	1 (<1)	0	1 (<1)	0
乾燥症候群	0	1 (<1)	0	1 (<1)	0
一過性失明	1 (<1)	0	0	0	1 (<1)
嚢下白内障	1 (<1)	0	0	0	0
結膜出血	1 (<1)	0	0	0	1 (<1)
結膜刺激	1 (<1)	0	0	0	0
眼瞼紅斑	2 (<1)	0	0	0	0
眼のアレルギー	0	0	0	0	1 (<1)
眼の障害	1 (<1)	0	0	0	0
眼瞼刺激	1 (<1)	0	0	0	0
眼瞼そう痒症	1 (<1)	0	0	0	0
ホームズ・アディー瞳孔	1 (<1)	0	0	0	0
虹彩毛様体炎	0	0	0	0	1 (<1)
黄斑浮腫	1 (<1)	0	0	0	0
近視	1 (<1)	0	0	0	1 (<1)
羞明	2 (<1)	0	0	0	0
翼状片	1 (<1)	0	0	0	0
閃輝暗点	1 (<1)	0	0	0	0
硝子体出血	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
	48 (8)	34 (5)	54 (9)	88 (7)	20 (7)
耳および迷路障害					
回転性めまい	33 (5)	16 (3)	35 (6)	51 (4)	12 (4)
耳痛	3 (<1)	4 (<1)	7 (1)	11 (<1)	1 (<1)
耳鳴	5 (<1)	5 (<1)	6 (<1)	11 (<1)	2 (<1)
耳閉	1 (<1)	0	3 (<1)	3 (<1)	0
耳不快感	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
聴力低下	3 (<1)	0	3 (<1)	3 (<1)	1 (<1)
頭位性回転性めまい	3 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
聴覚過敏	0	1 (<1)	1 (<1)	2 (<1)	0
乗物酔い	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
耳垢栓塞	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
難聴	2 (<1)	1 (<1)	0	1 (<1)	0
感音性難聴	0	1 (<1)	0	1 (<1)	0
耳出血	0	1 (<1)	0	1 (<1)	0
耳そう痒症	0	1 (<1)	0	1 (<1)	0
耳管機能障害	0	0	1 (<1)	1 (<1)	1 (<1)
外耳障害	0	0	1 (<1)	1 (<1)	0
外耳痛	0	1 (<1)	0	1 (<1)	0
外耳道紅斑	1 (<1)	0	0	0	0
前庭性運動失調	0	0	0	0	1 (<1)
前庭障害	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心臓障害	36 (6)	33 (5)	40 (6)	73 (6)	18 (6)
動悸	9 (1)	8 (1)	6 (<1)	14 (1)	3 (1)
頻脈	6 (<1)	4 (<1)	7 (1)	11 (<1)	5 (2)
上室性期外収縮	2 (<1)	4 (<1)	4 (<1)	8 (<1)	1 (<1)
心室性期外収縮	7 (1)	2 (<1)	6 (<1)	8 (<1)	0
第一度房室ブロック	1 (<1)	4 (<1)	2 (<1)	6 (<1)	2 (<1)
狭心症	0	3 (<1)	2 (<1)	5 (<1)	0
期外収縮	1 (<1)	3 (<1)	1 (<1)	4 (<1)	0
洞性徐脈	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
洞性頻脈	3 (<1)	0	4 (<1)	4 (<1)	0
徐脈	1 (<1)	0	3 (<1)	3 (<1)	2 (<1)
左脚ブロック	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
右脚ブロック	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
心臓瘤	0	1 (<1)	1 (<1)	2 (<1)	0
心筋症	0	1 (<1)	1 (<1)	2 (<1)	0
僧帽弁逸脱	0	1 (<1)	1 (<1)	2 (<1)	0
ウォルフ・パーキンソン・ホワイト症候群	0	2 (<1)	0	2 (<1)	0
心房細動	0	0	1 (<1)	1 (<1)	1 (<1)
心不全	0	0	1 (<1)	1 (<1)	0
うっ血性心不全	0	0	1 (<1)	1 (<1)	0
伝導障害	3 (<1)	1 (<1)	0	1 (<1)	1 (<1)
結節性調律	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
頻脈性不整脈	0	0	1 (<1)	1 (<1)	0
上室性不整脈	1 (<1)	0	0	0	0
心筋虚血	1 (<1)	0	0	0	0
心筋炎	0	0	0	0	1 (<1)
上室性頻脈	1 (<1)	0	0	0	0
発作性頻脈	1 (<1)	0	0	0	1 (<1)
血管障害	72 (12)	287 (46)	246 (40)	533 (43)	19 (7)
潮紅	29 (5)	236 (38)	194 (31)	430 (35)	5 (2)
ほてり	12 (2)	45 (7)	39 (6)	84 (7)	2 (<1)
高血圧	22 (4)	9 (1)	17 (3)	26 (2)	11 (4)
充血	0	2 (<1)	7 (1)	9 (<1)	0
低血圧	3 (<1)	5 (<1)	0	5 (<1)	0
静脈瘤	0	4 (<1)	1 (<1)	5 (<1)	0
血腫	4 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
起立性低血圧	0	0	2 (<1)	2 (<1)	0
静脈炎	2 (<1)	0	2 (<1)	2 (<1)	0
レイノー現象	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
血管障害	0	0	1 (<1)	1 (<1)	0
動脈障害	0	1 (<1)	0	1 (<1)	0
動脈硬化症	0	0	1 (<1)	1 (<1)	0
高血圧クリーゼ	1 (<1)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
` 微小血管症	0	1 (<1)	0	1 (<1)	0
末梢冷感	2 (<1)	1 (<1)	0	1 (<1)	0
末梢性虚血	0	1 (<1)	0	1 (<1)	0
静脈痛	0	1 (<1)	0	1 (<1)	0
静脈不全	0	1 (<1)	0	1 (<1)	0
毛細血管脆弱	1 (<1)	0	0	0	0
深部静脈血栓症	0	0	0	0	1 (<1)
腹腔内血腫	0	0	0	0	1 (<1)
静脈狭窄	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	88 (14)	93 (15)	100 (16)	193 (15)	32 (11)
口腔咽頭痛	27 (4)	32 (5)	35 (6)	67 (5)	12 (4)
咳嗽	23 (4)	30 (5)	27 (4)	57 (5)	6 (2)
鼻漏	2 (<1)	13 (2)	7 (1)	20 (2)	0
鼻閉	6 (<1)	8 (1)	2 (<1)	10 (<1)	1 (<1)
呼吸困難	6 (<1)	5 (<1)	4 (<1)	9 (<1)	5 (2)
副鼻腔うっ血	2 (<1)	1 (<1)	8 (1)	9 (<1)	0
鼻出血	5 (<1)	4 (<1)	4 (<1)	8 (<1)	1 (<1)
アレルギー性鼻炎	4 (<1)	2 (<1)	4 (<1)	6 (<1)	2 (<1)
喘息	2 (<1)	4 (<1)	1 (<1)	5 (<1)	2 (<1)
上気道咳症候群	3 (<1)	2 (<1)	3 (<1)	5 (<1)	0
息詰まり	2 (<1)	0	3 (<1)	3 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
口腔咽頭不快感	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
湿性咳嗽	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
気道うっ血	4 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
咽喉刺激感	2 (<1)	3 (<1)	0	3 (<1)	0
上気道うっ血	1 (<1)	0	3 (<1)	3 (<1)	2 (<1)
喘鳴	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
咽喉乾燥	1 (<1)	2 (<1)	0	2 (<1)	0
発声障害	2 (<1)	0	2 (<1)	2 (<1)	1 (<1)
咽頭紅斑	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
咽喉絞扼感	0	1 (<1)	1 (<1)	2 (<1)	0
アレルギー性気管支炎	0	0	1 (<1)	1 (<1)	0
アレルギー性咽頭炎	2 (<1)	0	1 (<1)	1 (<1)	0
アレルギー性副鼻腔炎	1 (<1)	1 (<1)	0	1 (<1)	0
過換気	1 (<1)	0	1 (<1)	1 (<1)	0
鼻乾燥	2 (<1)	0	1 (<1)	1 (<1)	0
鼻浮腫	0	0	1 (<1)	1 (<1)	0
鼻中隔弯曲	0	1 (<1)	0	1 (<1)	0
口腔咽頭プラーク	1 (<1)	1 (<1)	0	1 (<1)	0
口腔咽頭腫脹	0	0	1 (<1)	1 (<1)	0
呼吸時疼痛	0	0	1 (<1)	1 (<1)	0
副鼻腔嚢胞	0	0	1 (<1)	1 (<1)	0
副鼻腔分泌過多	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
咽頭嚢腫	0	1 (<1)	0	1 (<1)	0
咽頭腫瘤	0	0	1 (<1)	1 (<1)	0
胸膜炎	0	0	1 (<1)	1 (<1)	0
誤嚥性肺炎	0	1 (<1)	0	1 (<1)	0
ラ音	2 (<1)	0	1 (<1)	1 (<1)	0
呼吸抑制	0	1 (<1)	0	1 (<1)	0
呼吸障害	0	0	1 (<1)	1 (<1)	0
気道の炎症	1 (<1)	0	1 (<1)	1 (<1)	0
低音性連続性ラ音	2 (<1)	1 (<1)	0	1 (<1)	0
副鼻腔障害	0	0	1 (<1)	1 (<1)	0
声帯の炎症	1 (<1)	0	1 (<1)	1 (<1)	0
声帯ポリープ	0	0	1 (<1)	1 (<1)	0
アレルギー性咳嗽	1 (<1)	0	0	0	0
アレルギー性呼吸器疾患	1 (<1)	0	0	0	0
アレルギー性呼吸器症状	1 (<1)	0	0	0	0
労作性呼吸困難	1 (<1)	0	0	0	0
喀血	1 (<1)	0	0	0	0
しゃっくり	2 (<1)	0	0	0	0
低換気	0	0	0	0	1 (<1)
鼻部不快感	1 (<1)	0	0	0	0
口腔咽頭水疱形成	1 (<1)	0	0	0	0
咽頭の炎症	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
季節性鼻炎	0	0	0	0	1 (<1)
睡眠時無呼吸症候群	0	0	0	0	2 (<1)
扁桃障害	1 (<1)	0	0	0	0
上気道の炎症	1 (<1)	0	0	0	0
	233 (37)	304 (49)	331 (53)	635 (51)	48 (16)
胃腸障害					
下痢	64 (10)	92 (15)	106 (17)	198 (16)	11 (4)
悪心	56 (9)	80 (13)	97 (16)	177 (14)	9 (3)
上腹部痛	36 (6)	67 (11)	68 (11)	135 (11)	3 (1)
腹痛	26 (4)	59 (9)	54 (9)	113 (9)	1 (<1)
嘔吐	29 (5)	55 (9)	46 (7)	101 (8)	5 (2)
消化不良	19 (3)	29 (5)	35 (6)	64 (5)	5 (2)
胃腸障害	8 (1)	18 (3)	34 (5)	52 (4)	2 (<1)
便秘	23 (4)	19 (3)	19 (3)	38 (3)	5 (2)
歯痛	14 (2)	13 (2)	21 (3)	34 (3)	3 (1)
腹部不快感	11 (2)	19 (3)	12 (2)	31 (2)	1 (<1)
胃炎	8 (1)	16 (3)	12 (2)	28 (2)	4 (1)
胃食道逆流性疾患	13 (2)	13 (2)	11 (2)	24 (2)	2 (<1)
口内乾燥	5 (<1)	11 (2)	8 (1)	19 (2)	1 (<1)
腹部膨満	11 (2)	3 (<1)	14 (2)	17 (1)	0
鼓腸	11 (2)	8 (1)	9 (1)	17 (1)	1 (<1)
痔核	4 (<1)	7 (1)	5 (<1)	12 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
歯周炎	3 (<1)	2 (<1)	10 (2)	12 (<1)	0
齲歯	2 (<1)	4 (<1)	5 (<1)	9 (<1)	3 (1)
食中毒	2 (<1)	4 (<1)	5 (<1)	9 (<1)	1 (<1)
嚥下障害	5 (<1)	3 (<1)	4 (<1)	7 (<1)	2 (<1)
便失禁	1 (<1)	3 (<1)	4 (<1)	7 (<1)	0
下腹部痛	3 (<1)	2 (<1)	4 (<1)	6 (<1)	0
おくび	0	2 (<1)	3 (<1)	5 (<1)	0
小腸炎	0	1 (<1)	3 (<1)	4 (<1)	0
歯肉炎	2 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
裂孔ヘルニア	2 (<1)	3 (<1)	1 (<1)	4 (<1)	0
口の感覚鈍麻	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
逆流性食道炎	2 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
腹部硬直	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
腹部圧痛	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
便意切迫	0	1 (<1)	2 (<1)	3 (<1)	1 (<1)
十二指腸潰瘍	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
心窩部不快感	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
排便回数増加	0	1 (<1)	2 (<1)	3 (<1)	0
埋伏歯	0	0	3 (<1)	3 (<1)	0
腹部ヘルニア	0	2 (<1)	0	2 (<1)	0
異常便	1 (<1)	2 (<1)	0	2 (<1)	0
結腸ポリープ	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腸憩室	0	0	2 (<1)	2 (<1)	1 (<1)
胃障害	3 (<1)	1 (<1)	1 (<1)	2 (<1)	0
歯肉出血	0	2 (<1)	0	2 (<1)	1 (<1)
歯肉痛	1 (<1)	0	2 (<1)	2 (<1)	0
舌痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
吐血	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
嚥下痛	0	1 (<1)	1 (<1)	2 (<1)	0
食道炎	0	2 (<1)	0	2 (<1)	0
口腔内痛	0	1 (<1)	1 (<1)	2 (<1)	0
口の錯感覚	2 (<1)	2 (<1)	0	2 (<1)	0
流涎過多	0	2 (<1)	0	2 (<1)	0
口内炎	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
唾液欠乏	0	1 (<1)	0	1 (<1)	0
便習慣変化	0	0	1 (<1)	1 (<1)	0
口唇炎	0	1 (<1)	0	1 (<1)	0
大腸炎	1 (<1)	0	1 (<1)	1 (<1)	0
クローン病	0	1 (<1)	0	1 (<1)	0
憩室穿孔	0	1 (<1)	0	1 (<1)	0
十二指腸ポリープ	0	1 (<1)	0	1 (<1)	0
腸炎	1 (<1)	0	1 (<1)	1 (<1)	0
胃潰瘍	0	0	1 (<1)	1 (<1)	0
出血性胃炎	0	1 (<1)	0	1 (<1)	1 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
胃十二指腸炎	0	0	1 (<1)	1 (<1)	0
胃腸出血	1 (<1)	0	1 (<1)	1 (<1)	0
消化器痛	3 (<1)	1 (<1)	0	1 (<1)	1 (<1)
歯肉嚢胞	0	0	1 (<1)	1 (<1)	0
歯肉障害	0	0	1 (<1)	1 (<1)	0
歯肉腫脹	0	1 (<1)	0	1 (<1)	0
舌炎	0	1 (<1)	0	1 (<1)	0
血便排泄	1 (<1)	0	1 (<1)	1 (<1)	0
胃酸過多	0	1 (<1)	0	1 (<1)	0
胃排出不全	0	1 (<1)	0	1 (<1)	0
腸閉塞	0	0	1 (<1)	1 (<1)	0
腸管ポリープ	0	1 (<1)	0	1 (<1)	0
過敏性腸症候群	2 (<1)	1 (<1)	0	1 (<1)	0
口唇水疱	0	1 (<1)	0	1 (<1)	0
弛緩歯	0	1 (<1)	0	1 (<1)	0
腰ヘルニア	0	0	1 (<1)	1 (<1)	0
マロリー・ワイス症候群	0	1 (<1)	0	1 (<1)	0
口腔内潰瘍形成	3 (<1)	0	1 (<1)	1 (<1)	0
神経因性腸	0	0	1 (<1)	1 (<1)	0
食道出血	0	1 (<1)	0	1 (<1)	0
食道痙攣	0	0	1 (<1)	1 (<1)	0
食道潰瘍	0	0	1 (<1)	1 (<1)	0

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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膵脂肪腫症	0	1 (<1)	0	1 (<1)	0
膵臓障害	0	0	1 (<1)	1 (<1)	0
膵機能不全	0	0	1 (<1)	1 (<1)	0
歯周病	0	1 (<1)	0	1 (<1)	0
肛門周囲痛	1 (<1)	1 (<1)	0	1 (<1)	0
直腸出血	1 (<1)	1 (<1)	0	1 (<1)	0
逆流性胃炎	1 (<1)	0	1 (<1)	1 (<1)	0
唾液管閉塞	0	0	1 (<1)	1 (<1)	0
舌腫脹	0	1 (<1)	0	1 (<1)	0
舌苔	0	0	1 (<1)	1 (<1)	0
舌障害	1 (<1)	0	1 (<1)	1 (<1)	0
地図状舌	0	1 (<1)	0	1 (<1)	0
歯の磨耗	0	1 (<1)	0	1 (<1)	0
歯の脱落	1 (<1)	1 (<1)	0	1 (<1)	0
便通不規則	1 (<1)	0	0	0	0
潰瘍性大腸炎	1 (<1)	0	0	0	0
十二指腸胃逆流	1 (<1)	0	0	0	0
変色便	0	0	0	0	1 (<1)
胃ポリープ	1 (<1)	0	0	0	0
歯肉紅斑	0	0	0	0	1 (<1)
痔出血	0	0	0	0	1 (<1)
口唇乾燥	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膵炎	1 (<1)	0	0	0	0
急性膵炎	1 (<1)	0	0	0	0
脆弱歯	1 (<1)	0	0	0	0
歯の発育障害	1 (<1)	0	0	0	0
歯の障害	1 (<1)	0	0	0	0
肝胆道系障害	11 (2)	9 (1)	14 (2)	23 (2)	5 (2)
肝障害	1 (<1)	2 (<1)	6 (<1)	8 (<1)	2 (<1)
胆石症	3 (<1)	1 (<1)	2 (<1)	3 (<1)	2 (<1)
胆道ジスキネジー	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
肝細胞融解性肝炎	0	1 (<1)	1 (<1)	2 (<1)	0
肝嚢胞	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
脂肪肝	1 (<1)	2 (<1)	0	2 (<1)	0
胆管結石	2 (<1)	0	1 (<1)	1 (<1)	0
胆嚢浮腫	0	0	1 (<1)	1 (<1)	0
肝炎	1 (<1)	0	1 (<1)	1 (<1)	0
胆汁うっ滞性肝炎	0	1 (<1)	0	1 (<1)	0
高ビリルビン血症	2 (<1)	0	1 (<1)	1 (<1)	0
中毒性肝炎	1 (<1)	0	0	0	0
	125 (20)	207 (33)	207 (33)	414 (33)	42 (14)
皮膚および皮下組織障害					
そう痒症	20 (3)	51 (8)	42 (7)	93 (7)	3 (1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
発疹	22 (4)	48 (8)	45 (7)	93 (7)	8 (3)
紅斑	8 (1)	32 (5)	46 (7)	78 (6)	5 (2)
多汗症	8 (1)	15 (2)	24 (4)	39 (3)	4 (1)
脱毛症	12 (2)	14 (2)	10 (2)	24 (2)	4 (1)
寝汗	7 (1)	12 (2)	12 (2)	24 (2)	2 (<1)
全身性そう痒症	2 (<1)	10 (2)	9 (1)	19 (2)	2 (<1)
蕁麻疹	6 (<1)	9 (1)	10 (2)	19 (2)	2 (<1)
アレルギー性皮膚炎	4 (<1)	11 (2)	4 (<1)	15 (1)	1 (<1)
皮膚乾燥	4 (<1)	6 (<1)	7 (1)	13 (1)	1 (<1)
湿疹	4 (<1)	7 (1)	5 (<1)	12 (<1)	2 (<1)
そう痒性皮疹	2 (<1)	8 (1)	3 (<1)	11 (<1)	0
皮膚灼熱感	0	5 (<1)	6 (<1)	11 (<1)	0
皮膚炎	3 (<1)	4 (<1)	5 (<1)	9 (<1)	1 (<1)
ざ瘡	10 (2)	4 (<1)	4 (<1)	8 (<1)	2 (<1)
全身紅斑	0	4 (<1)	4 (<1)	8 (<1)	0
全身性皮疹	0	4 (<1)	4 (<1)	8 (<1)	0
斑状皮疹	1 (<1)	1 (<1)	7 (1)	8 (<1)	0
光線過敏性反応	1 (<1)	3 (<1)	4 (<1)	7 (<1)	1 (<1)
顔面感覚鈍麻	7 (1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
酒さ	3 (<1)	5 (<1)	0	5 (<1)	0
紅斑性皮疹	0	1 (<1)	3 (<1)	4 (<1)	0
丘疹性皮疹	0	1 (<1)	3 (<1)	4 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚のつっぱり感	0	1 (<1)	3 (<1)	4 (<1)	0
接触性皮膚炎	2 (<1)	2 (<1)	1 (<1)	3 (<1)	3 (1)
薬疹	0	1 (<1)	2 (<1)	3 (<1)	0
痒疹	0	2 (<1)	1 (<1)	3 (<1)	0
アレルギー性そう痒症	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
乾癬	4 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
皮膚色素過剰	1 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
皮膚刺激	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
皮膚病変	2 (<1)	3 (<1)	0	3 (<1)	0
皮膚反応	0	1 (<1)	2 (<1)	3 (<1)	2 (<1)
顔面腫脹	0	1 (<1)	2 (<1)	3 (<1)	2 (<1)
水疱	1 (<1)	2 (<1)	0	2 (<1)	0
ざ瘡様皮膚炎	0	2 (<1)	0	2 (<1)	0
斑状出血	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
過角化	0	0	2 (<1)	2 (<1)	0
網状皮斑	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
爪破損	0	2 (<1)	0	2 (<1)	0
皮膚疼痛	0	0	2 (<1)	2 (<1)	0
皮膚剥脱	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
皮膚硬結	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
皮膚熱感	0	1 (<1)	1 (<1)	2 (<1)	0
日光性角化症	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
冷汗	2 (<1)	0	1 (<1)	1 (<1)	0
皮膚弛緩症	0	1 (<1)	0	1 (<1)	0
皮膚嚢腫	3 (<1)	0	1 (<1)	1 (<1)	1 (<1)
アトピー性皮膚炎	1 (<1)	1 (<1)	0	1 (<1)	0
紅色汗疹	1 (<1)	1 (<1)	0	1 (<1)	0
内出血発生の増加傾向	0	0	1 (<1)	1 (<1)	1 (<1)
嵌入爪	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
毛孔性角化症	0	0	1 (<1)	1 (<1)	0
爪変色	1 (<1)	1 (<1)	0	1 (<1)	0
爪の障害	0	0	1 (<1)	1 (<1)	0
色素沈着障害	2 (<1)	1 (<1)	0	1 (<1)	0
瘢痕	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
脂腺障害	0	0	1 (<1)	1 (<1)	0
脂漏	0	1 (<1)	0	1 (<1)	0
皮膚変色	1 (<1)	0	1 (<1)	1 (<1)	0
皮膚潰瘍	0	0	1 (<1)	1 (<1)	0
スティーブンス・ジョンソン症候群	0	1 (<1)	0	1 (<1)	0
皮下結節	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
毛細血管拡張症	1 (<1)	1 (<1)	0	1 (<1)	0
一過性棘融解性皮膚症	0	0	1 (<1)	1 (<1)	0
乾皮症	1 (<1)	0	1 (<1)	1 (<1)	0
発汗障害	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
多形紅斑	1 (<1)	0	0	0	0
剥脱性発疹	1 (<1)	0	0	0	0
皮膚肉芽腫	1 (<1)	0	0	0	0
皮下出血	0	0	0	0	1 (<1)
毛質異常	1 (<1)	0	0	0	0
黒子	1 (<1)	0	0	0	0
脂肪組織萎縮症	0	0	0	0	1 (<1)
爪床障害	1 (<1)	0	0	0	0
点状出血	3 (<1)	0	0	0	0
光線性皮膚症	1 (<1)	0	0	0	0
ばら色粃糠疹	3 (<1)	0	0	0	0
前癌性皮膚病変	1 (<1)	0	0	0	0
猩紅熱様発疹	1 (<1)	0	0	0	0
小水疱性皮疹	1 (<1)	0	0	0	0
皮膚障害	1 (<1)	0	0	0	0
筋骨格系および結合組織障害	203 (33)	197 (32)	204 (33)	401 (32)	61 (21)
背部痛	70 (11)	75 (12)	70 (11)	145 (12)	21 (7)
関節痛	53 (9)	54 (9)	55 (9)	109 (9)	14 (5)
四肢痛	45 (7)	44 (7)	41 (7)	85 (7)	14 (5)
筋痙縮	25 (4)	20 (3)	44 (7)	64 (5)	5 (2)
頚部痛	17 (3)	20 (3)	17 (3)	37 (3)	2 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋力低下	31 (5)	13 (2)	21 (3)	34 (3)	4 (1)
筋骨格痛	19 (3)	13 (2)	18 (3)	31 (2)	6 (2)
筋肉痛	22 (4)	8 (1)	11 (2)	19 (2)	3 (1)
滑液包炎	3 (<1)	5 (<1)	6 (<1)	11 (<1)	0
筋骨格硬直	6 (<1)	6 (<1)	3 (<1)	9 (<1)	4 (1)
関節炎	1 (<1)	3 (<1)	5 (<1)	8 (<1)	2 (<1)
関節硬直	0	2 (<1)	5 (<1)	7 (<1)	0
筋骨格系胸痛	5 (<1)	3 (<1)	4 (<1)	7 (<1)	1 (<1)
変形性関節症	5 (<1)	3 (<1)	4 (<1)	7 (<1)	0
骨痛	2 (<1)	3 (<1)	3 (<1)	6 (<1)	0
関節腫脹	2 (<1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
重感	3 (<1)	5 (<1)	1 (<1)	6 (<1)	2 (<1)
椎間板突出	2 (<1)	3 (<1)	2 (<1)	5 (<1)	0
側腹部痛	1 (<1)	0	4 (<1)	4 (<1)	2 (<1)
筋緊張	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
骨粗鬆症	3 (<1)	3 (<1)	1 (<1)	4 (<1)	0
変形性脊椎症	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
滑液嚢腫	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
腱鞘炎	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
尾骨痛	2 (<1)	0	3 (<1)	3 (<1)	0
椎間板障害	0	2 (<1)	1 (<1)	3 (<1)	0
筋骨格不快感	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
骨減少症	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
関節周囲炎	3 (<1)	1 (<1)	2 (<1)	3 (<1)	0
腱炎	7 (1)	2 (<1)	1 (<1)	3 (<1)	0
関節障害	0	1 (<1)	1 (<1)	2 (<1)	0
関節滲出液	0	0	2 (<1)	2 (<1)	0
筋拘縮	0	0	2 (<1)	2 (<1)	1 (<1)
筋攣縮	3 (<1)	2 (<1)	0	2 (<1)	1 (<1)
骨壊死	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
膝蓋大腿部痛症候群	0	1 (<1)	1 (<1)	2 (<1)	0
肩回旋筋腱板症候群	2 (<1)	0	2 (<1)	2 (<1)	0
シェーグレン症候群	0	2 (<1)	0	2 (<1)	0
弾発指	0	1 (<1)	1 (<1)	2 (<1)	0
軟骨炎	0	1 (<1)	0	1 (<1)	0
腱付着部症	0	1 (<1)	0	1 (<1)	0
外骨腫	0	0	1 (<1)	1 (<1)	2 (<1)
四肢拘縮	0	1 (<1)	0	1 (<1)	0
尺骨部痛	1 (<1)	1 (<1)	0	1 (<1)	0
成長痛	0	0	1 (<1)	1 (<1)	1 (<1)
椎間板圧迫	0	1 (<1)	0	1 (<1)	0
椎間板変性症	0	0	1 (<1)	1 (<1)	0
四肢不快感	0	0	1 (<1)	1 (<1)	0
下肢腫瘤	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
中足骨痛	0	1 (<1)	0	1 (<1)	0
筋肉内出血	0	0	1 (<1)	1 (<1)	0
筋腫脹	0	1 (<1)	0	1 (<1)	0
ミオキミア	0	1 (<1)	0	1 (<1)	0
筋硬化症	1 (<1)	1 (<1)	0	1 (<1)	0
筋炎	1 (<1)	0	1 (<1)	1 (<1)	0
四肢の結節	0	0	1 (<1)	1 (<1)	0
骨端症	0	0	1 (<1)	1 (<1)	0
顎痛	4 (<1)	1 (<1)	0	1 (<1)	0
乾癬性関節症	0	0	1 (<1)	1 (<1)	0
足根洞症候群	0	1 (<1)	0	1 (<1)	0
脊椎障害	0	1 (<1)	0	1 (<1)	0
脊椎分離	0	1 (<1)	0	1 (<1)	0
滑膜障害	0	1 (<1)	0	1 (<1)	0
腱障害	0	1 (<1)	0	1 (<1)	0
斜頚	1 (<1)	0	1 (<1)	1 (<1)	0
線維筋痛	2 (<1)	0	0	0	0
運動性低下	1 (<1)	0	0	0	1 (<1)
筋固縮	0	0	0	0	1 (<1)
結節性変形性関節症	1 (<1)	0	0	0	0
回帰性リウマチ	1 (<1)	0	0	0	0
足底筋膜炎	1 (<1)	0	0	0	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
関節リウマチ	1 (<1)	0	0	0	0
脊柱変形	1 (<1)	0	0	0	0
滑膜炎	1 (<1)	0	0	0	0
腱痛	1 (<1)	0	0	0	0
腎および尿路障害	122 (20)	112 (18)	137 (22)	249 (20)	49 (17)
蛋白尿	53 (9)	49 (8)	64 (10)	113 (9)	26 (9)
ミクロアルブミン尿	23 (4)	29 (5)	31 (5)	60 (5)	14 (5)
血尿	26 (4)	24 (4)	35 (6)	59 (5)	9 (3)
ケトン尿	3 (<1)	6 (<1)	12 (2)	18 (1)	0
排尿困難	5 (<1)	5 (<1)	9 (1)	14 (1)	1 (<1)
尿意切迫	9 (1)	8 (1)	5 (<1)	13 (1)	5 (2)
腎結石症	8 (1)	5 (<1)	8 (1)	13 (1)	1 (<1)
尿失禁	7 (1)	7 (1)	4 (<1)	11 (<1)	2 (<1)
尿閉	4 (<1)	4 (<1)	3 (<1)	7 (<1)	1 (<1)
糖尿	6 (<1)	3 (<1)	3 (<1)	6 (<1)	2 (<1)
切迫性尿失禁	0	2 (<1)	3 (<1)	5 (<1)	0
アルブミン尿	0	2 (<1)	2 (<1)	4 (<1)	2 (<1)
頻尿	8 (1)	2 (<1)	2 (<1)	4 (<1)	3 (1)
腎臓痛	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
排尿躊躇	2 (<1)	0	4 (<1)	4 (<1)	0
膀胱機能障害	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0

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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白血球尿	1 (<1)	0	3 (<1)	3 (<1)	1 (<1)
腎仙痛	0	1 (<1)	2 (<1)	3 (<1)	0
尿臭異常	1 (<1)	0	3 (<1)	3 (<1)	0
膀胱刺激症状	0	1 (<1)	1 (<1)	2 (<1)	0
グロブリン尿	0	2 (<1)	0	2 (<1)	0
緊張性膀胱	0	1 (<1)	1 (<1)	2 (<1)	0
起立性蛋白尿症	0	1 (<1)	1 (<1)	2 (<1)	0
腎嚢胞	1 (<1)	2 (<1)	0	2 (<1)	0
膀胱痛	0	1 (<1)	0	1 (<1)	0
膀胱穿孔	0	0	1 (<1)	1 (<1)	0
着色尿	0	0	1 (<1)	1 (<1)	0
出血性膀胱炎	0	1 (<1)	0	1 (<1)	0
非感染性膀胱炎	3 (<1)	1 (<1)	0	1 (<1)	0
失禁	0	0	1 (<1)	1 (<1)	1 (<1)
排尿異常	0	1 (<1)	0	1 (<1)	0
腎下垂症	1 (<1)	1 (<1)	0	1 (<1)	0
神経因性膀胱	2 (<1)	0	1 (<1)	1 (<1)	0
腎障害	0	1 (<1)	0	1 (<1)	0
慢性腎不全	0	0	1 (<1)	1 (<1)	0
有痛性排尿困難	0	1 (<1)	0	1 (<1)	0
尿管瘤	0	1 (<1)	0	1 (<1)	0
尿路痛	0	1 (<1)	0	1 (<1)	0

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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膀胱憩室	1 (<1)	0	0	0	0
膀胱痙縮	1 (<1)	0	0	0	0
肋骨脊柱角圧痛	1 (<1)	0	0	0	0
慢性糸球体腎炎	1 (<1)	0	0	0	0
ネフローゼ症候群	0	0	0	0	1 (<1)
夜間頻尿	1 (<1)	0	0	0	0
尿路の炎症	1 (<1)	0	0	0	0
妊娠、産褥および周産期の状態	2 (<1)	1 (<1)	0	1 (<1)	0
妊娠	0	1 (<1)	0	1 (<1)	0
自然流産	1 (<1)	0	0	0	0
妊娠浮腫	1 (<1)	0	0	0	0
生殖系および乳房障害	58 (9)	61 (10)	57 (9)	118 (9)	22 (8)
月経困難症	8 (1)	11 (2)	10 (2)	21 (2)	2 (<1)
不規則月経	8 (1)	4 (<1)	8 (1)	12 (<1)	5 (2)
卵巣嚢胞	3 (<1)	8 (1)	4 (<1)	12 (<1)	3 (1)
不正子宮出血	5 (<1)	6 (<1)	5 (<1)	11 (<1)	4 (1)
月経過多	5 (<1)	3 (<1)	4 (<1)	7 (<1)	2 (<1)
勃起不全	4 (<1)	2 (<1)	4 (<1)	6 (<1)	0
無月経	3 (<1)	3 (<1)	2 (<1)	5 (<1)	3 (1)
腟出血	1 (<1)	2 (<1)	3 (<1)	5 (<1)	0

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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
乳房痛	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
月経障害	1 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
骨盤痛	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
子宮出血	2 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
乳房嚢胞	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
頻発月経	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
性機能不全	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
萎縮性外陰腟炎	0	0	2 (<1)	2 (<1)	0
乳房腫瘤	0	1 (<1)	1 (<1)	2 (<1)	0
乳房圧痛	0	0	2 (<1)	2 (<1)	0
子宮頚部上皮異形成	1 (<1)	2 (<1)	0	2 (<1)	0
閉経期症状	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
月経遅延	2 (<1)	2 (<1)	0	2 (<1)	0
外陰腟乾燥	0	1 (<1)	1 (<1)	2 (<1)	0
外陰腟そう痒症	0	1 (<1)	1 (<1)	2 (<1)	0
腺筋症	0	0	1 (<1)	1 (<1)	0
良性前立腺肥大症	1 (<1)	1 (<1)	0	1 (<1)	0
乳房分泌	0	0	1 (<1)	1 (<1)	0
乳房不快感	0	1 (<1)	0	1 (<1)	0
乳房障害	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
乳房出血	0	1 (<1)	0	1 (<1)	0
子宮頚部の炎症	0	1 (<1)	0	1 (<1)	0

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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
性交困難	0	0	1 (<1)	1 (<1)	0
射精障害	0	1 (<1)	0	1 (<1)	0
子宮内膜増殖症	0	1 (<1)	0	1 (<1)	0
子宮内膜症	0	1 (<1)	0	1 (<1)	0
線維嚢胞性乳腺疾患	2 (<1)	0	1 (<1)	1 (<1)	0
乳汁漏出症	0	1 (<1)	0	1 (<1)	0
乳頭障害	0	1 (<1)	0	1 (<1)	0
多嚢胞性卵巣	0	0	1 (<1)	1 (<1)	0
閉経後出血	2 (<1)	0	1 (<1)	1 (<1)	0
早発閉経	0	1 (<1)	0	1 (<1)	0
前立腺炎	0	1 (<1)	0	1 (<1)	0
前立腺腫大	0	0	1 (<1)	1 (<1)	1 (<1)
精巣障害	0	0	1 (<1)	1 (<1)	0
精巣痛	2 (<1)	1 (<1)	0	1 (<1)	0
子宮の炎症	0	1 (<1)	0	1 (<1)	0
子宮ポリープ	0	1 (<1)	0	1 (<1)	0
バルトリン嚢腫	2 (<1)	0	0	0	0
乳房腫大	0	0	0	0	1 (<1)
乳房硬結	1 (<1)	0	0	0	0
子宮頚管ポリープ	0	0	0	0	1 (<1)
生殖器病変	1 (<1)	0	0	0	0
機能性子宮出血	0	0	0	0	1 (<1)

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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
子宮頚部びらん	1 (<1)	0	0	0	0
腟分泌物	1 (<1)	0	0	0	0
	1 (<1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
先天性、家族性および遺伝性障害					
異形成母斑症候群	0	1 (<1)	1 (<1)	2 (<1)	0
角膜ジストロフィー	0	0	1 (<1)	1 (<1)	0
先天性心臓疾患	0	1 (<1)	0	1 (<1)	0
陰嚢水瘤	0	0	1 (<1)	1 (<1)	0
ラウン・ギャノン・レバイン症候群	0	0	1 (<1)	1 (<1)	0
ジルベール症候群	1 (<1)	0	0	0	0
過誤腫	0	0	0	0	1 (<1)
	144 (23)	131 (21)	167 (27)	298 (24)	108 (37)
一般・全身障害および投与部位の状態					
疲労	70 (11)	79 (13)	83 (13)	162 (13)	25 (9)
発熱	19 (3)	12 (2)	27 (4)	39 (3)	10 (3)
無力症	14 (2)	14 (2)	14 (2)	28 (2)	13 (4)
疼痛	6 (<1)	12 (2)	12 (2)	24 (2)	3 (1)
熱感	2 (<1)	12 (2)	11 (2)	23 (2)	4 (1)
インフルエンザ様疾患	7 (1)	9 (1)	12 (2)	21 (2)	2 (<1)
胸痛	8 (1)	7 (1)	13 (2)	20 (2)	2 (<1)
末梢性浮腫	15 (2)	6 (<1)	12 (2)	18 (1)	2 (<1)

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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
歩行障害	7 (1)	6 (<1)	6 (<1)	12 (<1)	6 (2)
非心臓性胸痛	2 (<1)	3 (<1)	6 (<1)	9 (<1)	2 (<1)
胸部不快感	5 (<1)	4 (<1)	2 (<1)	6 (<1)	0
悪寒	5 (<1)	3 (<1)	3 (<1)	6 (<1)	4 (1)
易刺激性	3 (<1)	4 (<1)	2 (<1)	6 (<1)	0
倦怠感	1 (<1)	1 (<1)	4 (<1)	5 (<1)	1 (<1)
嚢胞	1 (<1)	0	4 (<1)	4 (<1)	0
顔面痛	3 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
冷感	1 (<1)	0	2 (<1)	2 (<1)	0
高熱	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
炎症	0	0	2 (<1)	2 (<1)	0
医療機器による疼痛	0	0	2 (<1)	2 (<1)	0
粘膜乾燥	0	1 (<1)	1 (<1)	2 (<1)	0
浮腫	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
圧痛	0	0	2 (<1)	2 (<1)	0
医療機器不具合	0	1 (<1)	0	1 (<1)	0
不快感	0	0	1 (<1)	1 (<1)	0
異常感	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
びくびく感	0	0	1 (<1)	1 (<1)	0
全身性浮腫	0	1 (<1)	0	1 (<1)	0
重力性浮腫	0	0	1 (<1)	1 (<1)	0
閉塞性ヘルニア	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
注入部位血腫	0	1 (<1)	0	1 (<1)	0
注射部位血腫	0	0	1 (<1)	1 (<1)	2 (<1)
注射部位硬結	0	0	1 (<1)	1 (<1)	7 (2)
局所腫脹	0	1 (<1)	0	1 (<1)	0
足のもつれ	1 (<1)	1 (<1)	0	1 (<1)	0
腫瘤	0	1 (<1)	0	1 (<1)	0
不活発	0	0	1 (<1)	1 (<1)	0
軟部組織の炎症	0	1 (<1)	0	1 (<1)	0
腫脹	0	0	1 (<1)	1 (<1)	0
口渇	0	0	1 (<1)	1 (<1)	0
血管穿刺部位血腫	0	0	1 (<1)	1 (<1)	0
血管穿刺部位出血	0	1 (<1)	0	1 (<1)	0
血管穿刺部位疼痛	0	1 (<1)	0	1 (<1)	0
血管穿刺部位反応	0	1 (<1)	0	1 (<1)	0
嚢胞破裂	0	0	0	0	1 (<1)
医療機器関連眼合併症	1 (<1)	0	0	0	0
体温変動感	1 (<1)	0	0	0	0
全身症状	1 (<1)	0	0	0	0
ヘルニア痛	1 (<1)	0	0	0	0
空腹	1 (<1)	0	0	0	0
注射直後反応	0	0	0	0	4 (1)
注射部位乾燥	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
注射部位知覚不全	0	0	0	0	1 (<1)
注射部位紅斑	0	0	0	0	25 (9)
注射部位血管外漏出	0	0	0	0	1 (<1)
注射部位出血	0	0	0	0	2 (<1)
注射部位過敏反応	0	0	0	0	1 (<1)
注射部位肥厚	0	0	0	0	3 (1)
注射部位炎症	0	0	0	0	1 (<1)
注射部位腫瘤	0	0	0	0	6 (2)
注射部位結節	0	0	0	0	1 (<1)
注射部位浮腫	0	0	0	0	3 (1)
注射部位疼痛	0	0	0	0	24 (8)
注射部位そう痒感	0	0	0	0	9 (3)
注射部位発疹	0	0	0	0	3 (1)
注射部位反応	0	0	0	0	5 (2)
注射部位瘢痕	0	0	0	0	1 (<1)
注射部位腫脹	0	0	0	0	6 (2)
注射部位蕁麻疹	0	0	0	0	3 (1)
注射部位熱感	0	0	0	0	3 (1)
微石症	0	0	0	0	1 (<1)
壊死	0	0	0	0	1 (<1)
ワクチン接種部位疼痛	1 (<1)	0	0	0	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
臨床検査	160 (26)	165 (26)	171 (28)	336 (27)	83 (29)
アラニン・アミノトランスフェラーゼ増加	30 (5)	35 (6)	38 (6)	73 (6)	16 (5)
尿中アルブミン陽性	24 (4)	31 (5)	24 (4)	55 (4)	15 (5)
尿中蛋白陽性	19 (3)	27 (4)	19 (3)	46 (4)	15 (5)
アスパラギン酸アミノトランスフェラーゼ増加	11 (2)	23 (4)	21 (3)	44 (4)	10 (3)
尿中血陽性	6 (<1)	14 (2)	17 (3)	31 (2)	4 (1)
γ－グルタミルトランスフェラーゼ増加	15 (2)	14 (2)	9 (1)	23 (2)	6 (2)
白血球数減少	0	11 (2)	11 (2)	22 (2)	1 (<1)
尿中白血球陽性	8 (1)	13 (2)	9 (1)	22 (2)	6 (2)
尿中β２ミクログロブリン増加	12 (2)	9 (1)	12 (2)	21 (2)	5 (2)
血中ブドウ糖増加	5 (<1)	7 (1)	11 (2)	18 (1)	5 (2)
血中副甲状腺ホルモン増加	5 (<1)	8 (1)	9 (1)	17 (1)	1 (<1)
リンパ球数減少	1 (<1)	8 (1)	7 (1)	15 (1)	1 (<1)
体重減少	3 (<1)	8 (1)	7 (1)	15 (1)	2 (<1)
肝酵素上昇	7 (1)	7 (1)	6 (<1)	13 (1)	6 (2)
尿中ケトン体陽性	2 (<1)	6 (<1)	7 (1)	13 (1)	2 (<1)
体重増加	9 (1)	3 (<1)	9 (1)	12 (<1)	2 (<1)
好中球数増加	9 (1)	5 (<1)	5 (<1)	10 (<1)	1 (<1)
尿中赤血球陽性	5 (<1)	7 (1)	3 (<1)	10 (<1)	2 (<1)
白血球数増加	10 (2)	4 (<1)	4 (<1)	8 (<1)	4 (1)
血中クレアチニン増加	4 (<1)	3 (<1)	4 (<1)	7 (<1)	6 (2)
血中カリウム増加	0	4 (<1)	3 (<1)	7 (<1)	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ヘモグロビン減少	4 (<1)	4 (<1)	3 (<1)	7 (<1)	1 (<1)
β２ミクログロブリン増加	2 (<1)	1 (<1)	5 (<1)	6 (<1)	0
血中トリグリセリド増加	4 (<1)	4 (<1)	1 (<1)	5 (<1)	4 (1)
体温上昇	1 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
心電図ＱＴ延長	7 (1)	0	5 (<1)	5 (<1)	4 (1)
尿中ブドウ糖陽性	3 (<1)	3 (<1)	2 (<1)	5 (<1)	2 (<1)
肝機能検査異常	1 (<1)	2 (<1)	3 (<1)	5 (<1)	0
ビタミンＤ減少	2 (<1)	3 (<1)	2 (<1)	5 (<1)	1 (<1)
血中アルカリホスファターゼ増加	2 (<1)	3 (<1)	1 (<1)	4 (<1)	1 (<1)
血中コレステロール増加	2 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
血圧上昇	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
好酸球数増加	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
血液学的検査異常	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
リンパ球形態異常	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
好中球数減少	1 (<1)	4 (<1)	0	4 (<1)	1 (<1)
赤血球数減少	3 (<1)	3 (<1)	1 (<1)	4 (<1)	0
血中ビリルビン増加	8 (1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
血中乳酸脱水素酵素増加	2 (<1)	3 (<1)	0	3 (<1)	0
血中ナトリウム増加	0	1 (<1)	2 (<1)	3 (<1)	2 (<1)
血中尿素増加	1 (<1)	0	3 (<1)	3 (<1)	1 (<1)
心電図異常	4 (<1)	0	3 (<1)	3 (<1)	0
ヘマトクリット減少	3 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
低比重リポ蛋白増加	0	1 (<1)	2 (<1)	3 (<1)	1 (<1)
血小板数減少	2 (<1)	3 (<1)	0	3 (<1)	0
血中クロール増加	0	0	2 (<1)	2 (<1)	0
血中葉酸減少	0	1 (<1)	1 (<1)	2 (<1)	0
血中ケトン体増加	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
血中尿酸増加	2 (<1)	0	2 (<1)	2 (<1)	0
心電図ＳＴ部分下降	1 (<1)	1 (<1)	1 (<1)	2 (<1)	2 (<1)
心拍数増加	2 (<1)	2 (<1)	0	2 (<1)	0
高比重リポ蛋白増加	1 (<1)	0	2 (<1)	2 (<1)	0
リンパ球数増加	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
ビタミンD増加	0	0	2 (<1)	2 (<1)	0
アラニン・アミノトランスフェラーゼ異常	0	0	1 (<1)	1 (<1)	2 (<1)
アレルギー検査	0	0	1 (<1)	1 (<1)	0
抗ＳＳＡ抗体陽性	0	1 (<1)	0	1 (<1)	0
抗痙攣剤濃度減少	0	0	1 (<1)	1 (<1)	0
血中カルシウム減少	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
血中カルシウム増加	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
血中クレアチニン異常	0	1 (<1)	0	1 (<1)	0
血中免疫グロブリンM増加	0	0	1 (<1)	1 (<1)	0
血中鉄減少	1 (<1)	1 (<1)	0	1 (<1)	0
血中副甲状腺ホルモン異常	0	0	1 (<1)	1 (<1)	0
血中カリウム減少	2 (<1)	0	1 (<1)	1 (<1)	0

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3: A subject was counted only once within each system organ class/preferred term.
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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血圧低下	0	1 (<1)	0	1 (<1)	0
拡張期血圧上昇	0	0	1 (<1)	1 (<1)	0
血中ナトリウム減少	0	0	1 (<1)	1 (<1)	0
血中甲状腺刺激ホルモン増加	0	0	1 (<1)	1 (<1)	0
体温低下	0	1 (<1)	0	1 (<1)	0
呼吸音異常	0	1 (<1)	0	1 (<1)	0
心雑音	2 (<1)	1 (<1)	0	1 (<1)	0
結腸内視鏡検査	0	1 (<1)	0	1 (<1)	0
尿中結晶陽性	4 (<1)	0	1 (<1)	1 (<1)	0
白血球百分率数異常	0	0	1 (<1)	1 (<1)	0
心筋虚血の心電図所見	0	1 (<1)	0	1 (<1)	0
心電図Ｔ波振幅減少	1 (<1)	0	1 (<1)	1 (<1)	0
好酸球数異常	1 (<1)	0	1 (<1)	1 (<1)	0
好酸球百分率増加	0	1 (<1)	0	1 (<1)	0
エプスタイン・バーウイルス抗体陽性	0	0	1 (<1)	1 (<1)	0
大腸菌検査陽性	0	1 (<1)	0	1 (<1)	0
γ－グルタミルトランスフェラーゼ異常	1 (<1)	0	1 (<1)	1 (<1)	0
心拍数減少	0	0	1 (<1)	1 (<1)	0
ヒト乳頭腫ウイルス検査陽性	0	1 (<1)	0	1 (<1)	0
ヒステロスコピー	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
眼圧上昇	0	1 (<1)	0	1 (<1)	0
検査	0	0	1 (<1)	1 (<1)	0
リンパ節触知	0	0	1 (<1)	1 (<1)	0
リンパ球百分率減少	1 (<1)	1 (<1)	0	1 (<1)	0
単球数増加	0	0	1 (<1)	1 (<1)	0
神経学的検査異常	0	1 (<1)	0	1 (<1)	0
好中球百分率増加	1 (<1)	1 (<1)	0	1 (<1)	0
脳核磁気共鳴画像異常	0	1 (<1)	0	1 (<1)	0
血小板数	0	1 (<1)	0	1 (<1)	0
血小板数増加	3 (<1)	0	1 (<1)	1 (<1)	1 (<1)
ロンベルグ徴候陽性	0	1 (<1)	0	1 (<1)	0
腎機能検査異常	0	1 (<1)	0	1 (<1)	0
残尿量増加	0	1 (<1)	0	1 (<1)	0
呼吸数増加	0	0	1 (<1)	1 (<1)	0
血清フェリチン減少	0	0	1 (<1)	1 (<1)	0
子宮頚部スミア異常	1 (<1)	0	1 (<1)	1 (<1)	0
尿円柱	0	0	1 (<1)	1 (<1)	0
ビタミンＢ１２減少	2 (<1)	1 (<1)	0	1 (<1)	0
抗核抗体増加	1 (<1)	0	0	0	0
動脈雑音	1 (<1)	0	0	0	0
アスパラギン酸アミノトランスフェラーゼ異常	0	0	0	0	1 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
細菌検査	2 (<1)	0	0	0	0
細菌検査陽性	0	0	0	0	2 (<1)
血中アルカリホスファターゼ異常	0	0	0	0	1 (<1)
血中重炭酸塩減少	1 (<1)	0	0	0	0
血中ビリルビン異常	0	0	0	0	1 (<1)
血中ビリルビン減少	1 (<1)	0	0	0	0
血中クロール減少	1 (<1)	0	0	0	0
血中クレアチン異常	1 (<1)	0	0	0	0
血中ブドウ糖減少	1 (<1)	0	0	0	1 (<1)
血中乳酸脱水素酵素異常	0	0	0	0	1 (<1)
血中マグネシウム減少	1 (<1)	0	0	0	0
血中副甲状腺ホルモン減少	1 (<1)	0	0	0	0
血中リン減少	1 (<1)	0	0	0	0
収縮期血圧上昇	1 (<1)	0	0	0	0
中枢神経系機能検査異常	1 (<1)	0	0	0	0
心電図ＰＲ延長	1 (<1)	0	0	0	0
心電図異常ＱＲＳ群	1 (<1)	0	0	0	0
心電図ＱＲＳ群延長	1 (<1)	0	0	0	0
心電図２相性Ｔ波	0	0	0	0	1 (<1)
心電図Ｔ波逆転	1 (<1)	0	0	0	2 (<1)
全血球数異常	1 (<1)	0	0	0	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
握力低下	0	0	0	0	2 (<1)
Ａ型インフルエンザウイルス検査陽性	1 (<1)	0	0	0	0
リンパ球数異常	0	0	0	0	1 (<1)
後骨髄球百分率増加	1 (<1)	0	0	0	0
単球数減少	0	0	0	0	1 (<1)
骨髄球数増加	1 (<1)	0	0	0	0
骨髄球百分率増加	1 (<1)	0	0	0	0
好中球数異常	0	0	0	0	1 (<1)
好中球百分率異常	1 (<1)	0	0	0	0
便潜血陽性	0	0	0	0	1 (<1)
ＱＲＳ軸異常	2 (<1)	0	0	0	0
トランスアミナーゼ上昇	1 (<1)	0	0	0	0
膀胱超音波検査異常	1 (<1)	0	0	0	0
尿細胞診異常	1 (<1)	0	0	0	0
前庭機能検査異常	0	0	0	0	1 (<1)
白血球数異常	0	0	0	0	1 (<1)
傷害、中毒および処置合併症	111 (18)	85 (14)	100 (16)	185 (15)	31 (11)
挫傷	17 (3)	21 (3)	22 (4)	43 (3)	4 (1)
転倒	18 (3)	19 (3)	19 (3)	38 (3)	10 (3)
関節捻挫	11 (2)	12 (2)	12 (2)	24 (2)	2 (<1)
節足動物咬傷	8 (1)	4 (<1)	7 (1)	11 (<1)	1 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
肉離れ	3 (<1)	4 (<1)	7 (1)	11 (<1)	1 (<1)
足骨折	2 (<1)	5 (<1)	5 (<1)	10 (<1)	2 (<1)
処置による疼痛	3 (<1)	4 (<1)	5 (<1)	9 (<1)	1 (<1)
四肢損傷	2 (<1)	3 (<1)	4 (<1)	7 (<1)	2 (<1)
擦過傷	3 (<1)	2 (<1)	4 (<1)	6 (<1)	0
半月板障害	2 (<1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
交通事故	5 (<1)	3 (<1)	3 (<1)	6 (<1)	2 (<1)
皮膚裂傷	6 (<1)	4 (<1)	2 (<1)	6 (<1)	1 (<1)
靱帯断裂	4 (<1)	1 (<1)	4 (<1)	5 (<1)	0
サンバーン	4 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
歯牙破折	1 (<1)	3 (<1)	2 (<1)	5 (<1)	0
骨格損傷	6 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
熱傷	7 (1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
外傷性血腫	0	3 (<1)	1 (<1)	4 (<1)	1 (<1)
足関節部骨折	0	1 (<1)	2 (<1)	3 (<1)	1 (<1)
節足動物刺傷	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
関節損傷	6 (<1)	1 (<1)	2 (<1)	3 (<1)	0
むち打ち損傷	2 (<1)	3 (<1)	0	3 (<1)	3 (1)
創傷	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
動物咬傷	2 (<1)	2 (<1)	0	2 (<1)	1 (<1)
鎖骨骨折	0	1 (<1)	1 (<1)	2 (<1)	0
脳振盪	1 (<1)	2 (<1)	0	2 (<1)	2 (<1)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
上顎炎	2 (<1)	0	2 (<1)	2 (<1)	1 (<1)
眼外傷	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
顔面損傷	0	1 (<1)	1 (<1)	2 (<1)	0
損傷	0	0	2 (<1)	2 (<1)	1 (<1)
関節脱臼	1 (<1)	2 (<1)	0	2 (<1)	0
筋断裂	0	2 (<1)	0	2 (<1)	0
頚部損傷	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
橈骨骨折	0	1 (<1)	1 (<1)	2 (<1)	2 (<1)
脊椎圧迫骨折	0	2 (<1)	0	2 (<1)	0
手首関節骨折	0	0	2 (<1)	2 (<1)	0
偶発的過量投与	0	1 (<1)	0	1 (<1)	0
アルコール中毒	0	0	1 (<1)	1 (<1)	0
凍瘡	0	1 (<1)	0	1 (<1)	0
造影剤反応	0	0	1 (<1)	1 (<1)	0
眼瞼損傷	0	1 (<1)	0	1 (<1)	0
顔面骨骨折	0	1 (<1)	0	1 (<1)	0
尾骨骨折	1 (<1)	0	1 (<1)	1 (<1)	0
頭部損傷	3 (<1)	1 (<1)	0	1 (<1)	1 (<1)
瘢痕ヘルニア	1 (<1)	1 (<1)	0	1 (<1)	0
閉塞性瘢痕ヘルニア	0	0	1 (<1)	1 (<1)	0
靭帯損傷	0	0	1 (<1)	1 (<1)	0
神経損傷	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
過量投与	0	1 (<1)	0	1 (<1)	0
処置後出血	0	1 (<1)	0	1 (<1)	0
処置後浮腫	0	0	1 (<1)	1 (<1)	0
術後発熱	0	1 (<1)	0	1 (<1)	0
処置による悪心	1 (<1)	1 (<1)	0	1 (<1)	0
処置による嘔吐	0	1 (<1)	0	1 (<1)	0
放射線皮膚損傷	0	0	1 (<1)	1 (<1)	0
反復性挫傷	1 (<1)	1 (<1)	0	1 (<1)	0
網膜損傷	1 (<1)	1 (<1)	0	1 (<1)	0
肋骨骨折	0	0	1 (<1)	1 (<1)	0
引っかき傷	0	0	1 (<1)	1 (<1)	0
軟部組織損傷	0	1 (<1)	0	1 (<1)	0
滑膜断裂	0	0	1 (<1)	1 (<1)	0
舌損傷	0	1 (<1)	0	1 (<1)	0
外傷性脳損傷	0	1 (<1)	0	1 (<1)	0
外傷性骨折	0	0	1 (<1)	1 (<1)	0
上肢骨折	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
ワクチン接種合併症	1 (<1)	0	1 (<1)	1 (<1)	0
創し開	0	0	1 (<1)	1 (<1)	0
労働災害	1 (<1)	0	0	0	0
動物による引っかき傷	0	0	0	0	1 (<1)
第２度熱傷	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
眼部化学的損傷	1 (<1)	0	0	0	0
角膜擦過傷	1 (<1)	0	0	0	0
大腿骨頚部骨折	1 (<1)	0	0	0	0
大腿骨骨折	0	0	0	0	1 (<1)
腓骨骨折	1 (<1)	0	0	0	0
前腕骨折	0	0	0	0	1 (<1)
眼内異物	1 (<1)	0	0	0	0
手骨折	2 (<1)	0	0	0	2 (<1)
筋損傷	2 (<1)	0	0	0	0
処置後合併症	2 (<1)	0	0	0	1 (<1)
外傷後疼痛	1 (<1)	0	0	0	2 (<1)
術後創合併症	0	0	0	0	1 (<1)
ストレス骨折	0	0	0	0	1 (<1)
腱損傷	1 (<1)	0	0	0	0
腱断裂	2 (<1)	0	0	0	1 (<1)
脛骨骨折	2 (<1)	0	0	0	0
有毒性刺傷	1 (<1)	0	0	0	0
第７神経損傷	0	0	0	0	1 (<1)
創傷出血	1 (<1)	0	0	0	0
外科および内科処置	5 (<1)	6 (<1)	4 (<1)	10 (<1)	4 (1)
抜歯	2 (<1)	3 (<1)	0	3 (<1)	2 (<1)

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
子宮摘出	0	1 (<1)	1 (<1)	2 (<1)	0
乳房腫瘤摘除	0	1 (<1)	0	1 (<1)	0
デンタルケア	0	0	1 (<1)	1 (<1)	0
女性不妊手術	0	1 (<1)	0	1 (<1)	0
椎間板手術	0	0	1 (<1)	1 (<1)	0
静脈ステント挿入	0	0	1 (<1)	1 (<1)	0
子宮頚部円錐切除	1 (<1)	0	0	0	0
嚢胞ドレナージ	1 (<1)	0	0	0	0
入院	0	0	0	0	1 (<1)
色素性母斑切除	1 (<1)	0	0	0	0
不妊手術	0	0	0	0	1 (<1)
社会環境	3 (<1)	1 (<1)	0	1 (<1)	0
閉経	0	1 (<1)	0	1 (<1)	0
元タバコ使用者	1 (<1)	0	0	0	0
社会問題	1 (<1)	0	0	0	0
職場でのストレス	1 (<1)	0	0	0	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	115 (100)	112 (100)	109 (100)	221 (100)	49 (100)
Number of subjects with an event	106 (92)	103 (92)	103 (94)	206 (93)	43 (88)
感染症および寄生虫症	45 (39)	55 (49)	53 (49)	108 (49)	17 (35)
鼻咽頭炎	12 (10)	12 (11)	16 (15)	28 (13)	3 (6)
尿路感染	14 (12)	12 (11)	12 (11)	24 (11)	5 (10)
上気道感染	7 (6)	10 (9)	9 (8)	19 (9)	4 (8)
インフルエンザ	8 (7)	5 (4)	10 (9)	15 (7)	2 (4)
咽頭炎	5 (4)	4 (4)	8 (7)	12 (5)	2 (4)
胃腸炎	0	4 (4)	4 (4)	8 (4)	0
副鼻腔炎	1 (<1)	4 (4)	4 (4)	8 (4)	2 (4)
蜂巣炎	0	4 (4)	2 (2)	6 (3)	0
ウイルス感染	0	4 (4)	2 (2)	6 (3)	1 (2)
鼻炎	0	4 (4)	1 (<1)	5 (2)	1 (2)
せつ	0	2 (2)	1 (<1)	3 (1)	0
帯状疱疹	0	1 (<1)	2 (2)	3 (1)	0
ウイルス性上気道感染	1 (<1)	2 (2)	1 (<1)	3 (1)	0
外陰膣真菌感染	1 (<1)	2 (2)	1 (<1)	3 (1)	3 (6)
気管支炎	0	0	2 (2)	2 (<1)	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
感染性結膜炎	0	1 (<1)	1 (<1)	2 (<1)	0
下気道感染	1 (<1)	0	2 (2)	2 (<1)	0
口腔ヘルペス	0	1 (<1)	1 (<1)	2 (<1)	0
中耳炎	0	2 (2)	0	2 (<1)	0
骨盤内炎症性疾患	1 (<1)	0	2 (2)	2 (<1)	0
細菌性副鼻腔炎	0	1 (<1)	1 (<1)	2 (<1)	0
歯膿瘍	1 (<1)	0	2 (2)	2 (<1)	0
腸チフス熱	0	0	2 (2)	2 (<1)	0
急性副鼻腔炎	0	0	1 (<1)	1 (<1)	0
無症候性細菌尿	0	1 (<1)	0	1 (<1)	0
細菌感染	0	1 (<1)	0	1 (<1)	0
乳房蜂巣炎	0	0	1 (<1)	1 (<1)	0
デング熱	0	1 (<1)	0	1 (<1)	1 (2)
耳感染	1 (<1)	0	1 (<1)	1 (<1)	0
毛包炎	0	1 (<1)	0	1 (<1)	0
ウイルス性胃腸炎	0	1 (<1)	0	1 (<1)	0
ヘリコバクター性胃炎	0	1 (<1)	0	1 (<1)	0
咬傷感染	0	1 (<1)	0	1 (<1)	0
伝染性単核症	0	1 (<1)	0	1 (<1)	0
カンジダ性間擦疹	0	0	1 (<1)	1 (<1)	0
喉頭炎	0	0	1 (<1)	1 (<1)	0
シラミ寄生	0	1 (<1)	0	1 (<1)	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
マイコプラズマ感染	0	0	1 (<1)	1 (<1)	0
爪真菌症	0	1 (<1)	0	1 (<1)	0
ウイルス感染後疲労症候群	0	1 (<1)	0	1 (<1)	0
膿皮症	0	1 (<1)	0	1 (<1)	0
膿疱性皮疹	0	1 (<1)	0	1 (<1)	0
気道感染	0	1 (<1)	0	1 (<1)	0
陰嚢膿瘍	0	0	1 (<1)	1 (<1)	0
軟部組織感染	0	1 (<1)	0	1 (<1)	0
扁桃炎	1 (<1)	1 (<1)	0	1 (<1)	0
歯感染	0	1 (<1)	0	1 (<1)	0
気管炎	0	0	1 (<1)	1 (<1)	0
腟感染	0	0	1 (<1)	1 (<1)	2 (4)
細菌性腟炎	2 (2)	1 (<1)	0	1 (<1)	1 (2)
ウイルス性咽頭炎	0	1 (<1)	0	1 (<1)	0
外陰部炎	0	1 (<1)	0	1 (<1)	0
熱傷部感染	1 (<1)	0	0	0	0
膀胱炎	1 (<1)	0	0	0	0
感染性下痢	1 (<1)	0	0	0	0
細菌性性器感染	0	0	0	0	1 (2)
歯肉感染	1 (<1)	0	0	0	0
Ｈ１Ｎ１インフルエンザ	1 (<1)	0	0	0	0
感染性皮脂嚢腫	1 (<1)	0	0	0	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
迷路炎	0	0	0	0	1 (2)
限局性感染	3 (3)	0	0	0	0
口腔カンジダ症	1 (<1)	0	0	0	0
爪囲炎	1 (<1)	0	0	0	0
術後創感染	1 (<1)	0	0	0	0
ライター症候群	1 (<1)	0	0	0	0
消化器結核	1 (<1)	0	0	0	0
細菌性上気道感染	1 (<1)	0	0	0	0
細菌性尿路感染	1 (<1)	0	0	0	0
膣膿瘍	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	4 (3)	1 (<1)	0	1 (<1)	0
脂肪腫	0	1 (<1)	0	1 (<1)	0
線維腫	1 (<1)	0	0	0	0
メラノサイト性母斑	1 (<1)	0	0	0	0
皮膚乳頭腫	1 (<1)	0	0	0	0
子宮平滑筋腫	1 (<1)	0	0	0	0
血液およびリンパ系障害	7 (6)	7 (6)	11 (10)	18 (8)	1 (2)
貧血	5 (4)	4 (4)	9 (8)	13 (6)	0
白血球増加症	2 (2)	2 (2)	0	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白血球減少症	0	0	1 (<1)	1 (<1)	0
リンパ節症	0	0	1 (<1)	1 (<1)	0
好中球増加症	1 (<1)	0	1 (<1)	1 (<1)	0
血小板減少症	0	1 (<1)	0	1 (<1)	1 (2)
免疫系障害	2 (2)	1 (<1)	1 (<1)	2 (<1)	1 (2)
食物アレルギー	0	0	1 (<1)	1 (<1)	0
過敏症	1 (<1)	1 (<1)	0	1 (<1)	0
アナフィラキシー反応	0	0	0	0	1 (2)
季節性アレルギー	1 (<1)	0	0	0	0
内分泌障害	2 (2)	2 (2)	2 (2)	4 (2)	1 (2)
甲状腺腫	0	2 (2)	0	2 (<1)	0
間脳性内分泌障害	0	0	1 (<1)	1 (<1)	0
甲状腺機能低下症	2 (2)	0	1 (<1)	1 (<1)	1 (2)
代謝および栄養障害	15 (13)	14 (13)	7 (6)	21 (10)	7 (14)
食欲減退	7 (6)	9 (8)	1 (<1)	10 (5)	2 (4)
高コレステロール血症	0	2 (2)	1 (<1)	3 (1)	1 (2)
高血糖	2 (2)	0	2 (2)	2 (<1)	0
高脂血症	0	1 (<1)	1 (<1)	2 (<1)	0
糖尿病	2 (2)	0	1 (<1)	1 (<1)	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
耐糖能障害	0	0	1 (<1)	1 (<1)	1 (2)
高トリグリセリド血症	1 (<1)	1 (<1)	0	1 (<1)	2 (4)
高尿酸血症	0	1 (<1)	0	1 (<1)	2 (4)
過小食	0	0	1 (<1)	1 (<1)	0
ビタミン欠乏症	0	1 (<1)	0	1 (<1)	0
ビタミンD欠乏	1 (<1)	0	1 (<1)	1 (<1)	1 (2)
糖尿病性ケトアシドーシス	2 (2)	0	0	0	0
多飲症	1 (<1)	0	0	0	0
精神障害	26 (23)	16 (14)	14 (13)	30 (14)	8 (16)
うつ病	11 (10)	3 (3)	7 (6)	10 (5)	5 (10)
不眠症	8 (7)	5 (4)	5 (5)	10 (5)	2 (4)
不安	4 (3)	5 (4)	2 (2)	7 (3)	1 (2)
抑うつ気分	3 (3)	3 (3)	1 (<1)	4 (2)	0
ストレス	0	1 (<1)	1 (<1)	2 (<1)	1 (2)
初期不眠症	0	0	1 (<1)	1 (<1)	0
リビドー減退	0	1 (<1)	0	1 (<1)	0
気分変化	0	0	1 (<1)	1 (<1)	0
気分動揺	1 (<1)	1 (<1)	0	1 (<1)	0
精神症状	0	1 (<1)	0	1 (<1)	0
精神病性障害	0	0	1 (<1)	1 (<1)	0
怒り	1 (<1)	0	0	0	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
不安障害	1 (<1)	0	0	0	0
閉所恐怖症	0	0	0	0	1 (2)
抑うつ症状	1 (<1)	0	0	0	0
躁病	1 (<1)	0	0	0	0
神経過敏	1 (<1)	0	0	0	0
パニック発作	1 (<1)	0	0	0	0
神経系障害	76 (66)	59 (53)	51 (47)	110 (50)	31 (63)
多発性硬化症再発	44 (38)	28 (25)	26 (24)	54 (24)	16 (33)
頭痛	17 (15)	20 (18)	23 (21)	43 (19)	12 (24)
錯感覚	12 (10)	9 (8)	6 (6)	15 (7)	2 (4)
感覚鈍麻	11 (10)	7 (6)	7 (6)	14 (6)	4 (8)
浮動性めまい	5 (4)	5 (4)	4 (4)	9 (4)	2 (4)
灼熱感	1 (<1)	5 (4)	2 (2)	7 (3)	0
筋痙直	4 (3)	2 (2)	3 (3)	5 (2)	1 (2)
味覚異常	0	3 (3)	1 (<1)	4 (2)	1 (2)
振戦	2 (2)	2 (2)	2 (2)	4 (2)	0
運動失調	1 (<1)	1 (<1)	2 (2)	3 (1)	0
反射亢進	1 (<1)	2 (2)	1 (<1)	3 (1)	0
片頭痛	5 (4)	1 (<1)	2 (2)	3 (1)	1 (2)
傾眠	3 (3)	1 (<1)	2 (2)	3 (1)	1 (2)
健忘	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
平衡障害	1 (<1)	0	2 (2)	2 (<1)	1 (2)
振動覚低下	1 (<1)	2 (2)	0	2 (<1)	0
異常感覚	1 (<1)	2 (2)	0	2 (<1)	0
過眠症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
レルミット徴候	0	1 (<1)	1 (<1)	2 (<1)	0
神経痛	1 (<1)	2 (2)	0	2 (<1)	1 (2)
眼振	0	0	2 (2)	2 (<1)	0
三叉神経痛	0	2 (2)	0	2 (<1)	0
失認症	0	1 (<1)	0	1 (<1)	0
帯状感	0	0	1 (<1)	1 (<1)	0
痙攣	4 (3)	1 (<1)	0	1 (<1)	0
構語障害	1 (<1)	1 (<1)	0	1 (<1)	0
大発作痙攣	2 (2)	0	1 (<1)	1 (<1)	0
頭部動揺	0	1 (<1)	0	1 (<1)	0
知覚過敏	2 (2)	0	1 (<1)	1 (<1)	1 (2)
運動機能障害	0	1 (<1)	0	1 (<1)	0
多発性硬化症	1 (<1)	1 (<1)	0	1 (<1)	2 (4)
神経学的症状	0	0	1 (<1)	1 (<1)	0
部分発作	0	1 (<1)	0	1 (<1)	0
失神寸前の状態	0	0	1 (<1)	1 (<1)	1 (2)
二次性進行型多発性硬化症	0	0	1 (<1)	1 (<1)	0
鎮静	0	0	1 (<1)	1 (<1)	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
失神	0	0	1 (<1)	1 (<1)	0
緊張性頭痛	2 (2)	0	1 (<1)	1 (<1)	1 (2)
ウートホフ現象	0	1 (<1)	0	1 (<1)	0
失語症	0	0	0	0	1 (2)
手根管症候群	1 (<1)	0	0	0	0
認知障害	0	0	0	0	1 (2)
複雑部分発作	1 (<1)	0	0	0	0
脳症	1 (<1)	0	0	0	0
顔面痙攣	0	0	0	0	1 (2)
不全片麻痺	0	0	0	0	1 (2)
記憶障害	1 (<1)	0	0	0	2 (4)
末梢性ニューロパチー	1 (<1)	0	0	0	0
後頭神経痛	0	0	0	0	1 (2)
錐体路症候群	1 (<1)	0	0	0	0
感覚障害	1 (<1)	0	0	0	0
感覚消失	0	0	0	0	1 (2)
副鼻腔炎に伴う頭痛	1 (<1)	0	0	0	0
第７脳神経麻痺	1 (<1)	0	0	0	0
眼障害	17 (15)	11 (10)	10 (9)	21 (10)	8 (16)
眼痛	2 (2)	2 (2)	3 (3)	5 (2)	2 (4)
霧視	7 (6)	1 (<1)	2 (2)	3 (1)	1 (2)

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
複視	4 (3)	1 (<1)	1 (<1)	2 (<1)	1 (2)
流涙増加	0	1 (<1)	1 (<1)	2 (<1)	0
羞明	0	1 (<1)	1 (<1)	2 (<1)	0
光視症	0	1 (<1)	1 (<1)	2 (<1)	0
屈折障害	1 (<1)	2 (2)	0	2 (<1)	0
黒内障	0	1 (<1)	0	1 (<1)	0
眼瞼痙攣	1 (<1)	1 (<1)	0	1 (<1)	0
結膜炎	1 (<1)	0	1 (<1)	1 (<1)	1 (2)
アレルギー性結膜炎	0	0	1 (<1)	1 (<1)	0
眼乾燥	2 (2)	0	1 (<1)	1 (<1)	0
眼刺激	0	0	1 (<1)	1 (<1)	0
眼部腫脹	0	0	1 (<1)	1 (<1)	0
眼瞼下垂	0	0	1 (<1)	1 (<1)	0
動揺視	0	1 (<1)	0	1 (<1)	0
ブドウ膜炎	0	1 (<1)	0	1 (<1)	1 (2)
視力低下	3 (3)	1 (<1)	0	1 (<1)	1 (2)
視力障害	0	1 (<1)	0	1 (<1)	1 (2)
片側失明	0	0	0	0	1 (2)
眼充血	1 (<1)	0	0	0	1 (2)
耳および迷路障害	5 (4)	7 (6)	9 (8)	16 (7)	4 (8)
回転性めまい	2 (2)	2 (2)	7 (6)	9 (4)	3 (6)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
耳痛	1 (<1)	2 (2)	1 (<1)	3 (1)	0
耳鳴	0	1 (<1)	1 (<1)	2 (<1)	0
耳管障害	0	0	1 (<1)	1 (<1)	0
乗物酔い	0	1 (<1)	0	1 (<1)	0
鼓膜充血	0	1 (<1)	0	1 (<1)	0
頭位性回転性めまい	1 (<1)	1 (<1)	0	1 (<1)	0
耳不快感	0	0	0	0	1 (2)
中耳の炎症	1 (<1)	0	0	0	0
心臓障害	1 (<1)	3 (3)	2 (2)	5 (2)	1 (2)
頻脈	0	2 (2)	0	2 (<1)	1 (2)
急性冠動脈症候群	0	0	1 (<1)	1 (<1)	0
上室性期外収縮	0	1 (<1)	0	1 (<1)	0
心室性期外収縮	0	0	1 (<1)	1 (<1)	0
動悸	1 (<1)	0	0	0	0
血管障害	6 (5)	13 (12)	13 (12)	26 (12)	4 (8)
潮紅	2 (2)	10 (9)	7 (6)	17 (8)	1 (2)
ほてり	1 (<1)	2 (2)	2 (2)	4 (2)	2 (4)
高血圧	2 (2)	1 (<1)	3 (3)	4 (2)	2 (4)
深部静脈血栓症	0	0	1 (<1)	1 (<1)	0
低血圧	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
起立性低血圧	1 (<1)	0	0	0	0
蒼白	1 (<1)	0	0	0	0
末梢冷感	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	22 (19)	16 (14)	21 (19)	37 (17)	7 (14)
咳嗽	11 (10)	8 (7)	10 (9)	18 (8)	2 (4)
口腔咽頭痛	3 (3)	2 (2)	6 (6)	8 (4)	3 (6)
鼻漏	4 (3)	1 (<1)	3 (3)	4 (2)	0
鼻閉	2 (2)	1 (<1)	2 (2)	3 (1)	0
喘息	0	1 (<1)	1 (<1)	2 (<1)	0
アレルギー性咽頭炎	0	1 (<1)	0	1 (<1)	0
労作性呼吸困難	0	1 (<1)	0	1 (<1)	0
しゃっくり	0	0	1 (<1)	1 (<1)	0
胸水	0	1 (<1)	0	1 (<1)	0
湿性咳嗽	1 (<1)	1 (<1)	0	1 (<1)	0
アレルギー性鼻炎	2 (2)	0	1 (<1)	1 (<1)	0
睡眠時無呼吸症候群	0	0	1 (<1)	1 (<1)	0
上気道うっ血	2 (2)	0	1 (<1)	1 (<1)	0
上気道咳症候群	0	0	1 (<1)	1 (<1)	0
喘鳴	0	1 (<1)	0	1 (<1)	0
発声障害	1 (<1)	0	0	0	0
呼吸困難	1 (<1)	0	0	0	2 (4)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
鼻出血	0	0	0	0	1 (2)
上気道分泌増加	1 (<1)	0	0	0	0
鼻中隔穿孔	0	0	0	0	1 (2)
気道うっ血	1 (<1)	0	0	0	0
低音性連続性ラ音	1 (<1)	0	0	0	0
副鼻腔障害	1 (<1)	0	0	0	0
くしゃみ	1 (<1)	0	0	0	1 (2)
咽喉刺激感	1 (<1)	0	0	0	0
胃腸障害	36 (31)	44 (39)	51 (47)	95 (43)	13 (27)
下痢	8 (7)	13 (12)	18 (17)	31 (14)	2 (4)
腹痛	5 (4)	10 (9)	6 (6)	16 (7)	1 (2)
嘔吐	5 (4)	9 (8)	7 (6)	16 (7)	3 (6)
悪心	8 (7)	9 (8)	6 (6)	15 (7)	4 (8)
上腹部痛	6 (5)	1 (<1)	9 (8)	10 (5)	1 (2)
胃炎	3 (3)	4 (4)	6 (6)	10 (5)	0
便秘	8 (7)	3 (3)	6 (6)	9 (4)	3 (6)
消化不良	0	5 (4)	4 (4)	9 (4)	1 (2)
歯痛	4 (3)	4 (4)	4 (4)	8 (4)	1 (2)
胃食道逆流性疾患	2 (2)	1 (<1)	5 (5)	6 (3)	0
下腹部痛	0	1 (<1)	3 (3)	4 (2)	0
口内乾燥	1 (<1)	3 (3)	1 (<1)	4 (2)	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
胃酸過多	2 (2)	4 (4)	0	4 (2)	0
嚥下障害	1 (<1)	2 (2)	1 (<1)	3 (1)	0
鼓腸	2 (2)	3 (3)	0	3 (1)	0
腹部不快感	0	0	2 (2)	2 (<1)	0
大腸炎	0	1 (<1)	1 (<1)	2 (<1)	0
心窩部不快感	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腹部膨満	0	1 (<1)	0	1 (<1)	0
アフタ性口内炎	0	0	1 (<1)	1 (<1)	0
便通不規則	0	0	1 (<1)	1 (<1)	0
口腔灼熱感症候群	0	0	1 (<1)	1 (<1)	0
便意切迫	0	0	1 (<1)	1 (<1)	1 (2)
十二指腸炎	0	0	1 (<1)	1 (<1)	0
変色便	0	0	1 (<1)	1 (<1)	0
痔核	0	0	1 (<1)	1 (<1)	0
炎症性腸疾患	0	0	1 (<1)	1 (<1)	0
過敏性腸症候群	0	0	1 (<1)	1 (<1)	0
口腔内潰瘍形成	1 (<1)	1 (<1)	0	1 (<1)	0
膵炎	0	1 (<1)	0	1 (<1)	0
消化性潰瘍	0	0	1 (<1)	1 (<1)	0
流涎過多	0	1 (<1)	0	1 (<1)	0
口内炎	0	1 (<1)	0	1 (<1)	0
腹部圧痛	0	0	0	0	1 (2)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
呼気臭	1 (<1)	0	0	0	0
便失禁	1 (<1)	0	0	0	0
歯肉腫脹	1 (<1)	0	0	0	0
血便排泄	1 (<1)	0	0	0	0
腹膜出血	1 (<1)	0	0	0	0
直腸攣縮	0	0	0	0	1 (2)
舌乾燥	1 (<1)	0	0	0	0
埋伏歯	1 (<1)	0	0	0	1 (2)
臍ヘルニア	1 (<1)	0	0	0	0
肝胆道系障害	0	1 (<1)	0	1 (<1)	1 (2)
高トランスアミナーゼ血症	0	1 (<1)	0	1 (<1)	0
胆石症	0	0	0	0	1 (2)
皮膚および皮下組織障害	26 (23)	20 (18)	26 (24)	46 (21)	12 (24)
そう痒症	8 (7)	7 (6)	11 (10)	18 (8)	2 (4)
発疹	3 (3)	5 (4)	8 (7)	13 (6)	0
ざ瘡	3 (3)	2 (2)	3 (3)	5 (2)	1 (2)
アレルギー性皮膚炎	1 (<1)	2 (2)	3 (3)	5 (2)	0
脱毛症	6 (5)	3 (3)	0	3 (1)	2 (4)
紅斑	2 (2)	1 (<1)	2 (2)	3 (1)	0
多汗症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (2)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
過角化	0	2 (2)	0	2 (<1)	0
斑状皮疹	0	0	2 (2)	2 (<1)	0
そう痒性皮疹	0	0	2 (2)	2 (<1)	0
蕁麻疹	2 (2)	0	2 (2)	2 (<1)	0
水疱	0	1 (<1)	0	1 (<1)	0
皮膚炎	1 (<1)	0	1 (<1)	1 (<1)	0
皮膚乾燥	2 (2)	1 (<1)	0	1 (<1)	0
斑状出血	1 (<1)	0	1 (<1)	1 (<1)	0
剥脱性発疹	0	1 (<1)	0	1 (<1)	0
掌蹠角化症	0	1 (<1)	0	1 (<1)	0
特発性蕁麻疹	0	1 (<1)	0	1 (<1)	0
睫毛眉毛脱落症	0	1 (<1)	0	1 (<1)	0
痒疹	0	1 (<1)	0	1 (<1)	0
乾癬	1 (<1)	0	1 (<1)	1 (<1)	0
皮膚色素脱失	0	0	1 (<1)	1 (<1)	0
皮膚剥脱	0	1 (<1)	0	1 (<1)	0
皮膚色素過剰	1 (<1)	1 (<1)	0	1 (<1)	1 (2)
皮膚色素減少	0	1 (<1)	0	1 (<1)	0
皮膚刺激	0	1 (<1)	0	1 (<1)	0
頭部粃糠疹	0	0	0	0	1 (2)
ざ瘡様皮膚炎	1 (<1)	0	0	0	0
接触性皮膚炎	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
爪床の炎症	1 (<1)	0	0	0	0
神経皮膚炎	0	0	0	0	1 (2)
寝汗	1 (<1)	0	0	0	0
爪破損	1 (<1)	0	0	0	0
色素沈着障害	1 (<1)	0	0	0	0
全身性そう痒症	1 (<1)	0	0	0	1 (2)
斑状丘疹状皮疹	1 (<1)	0	0	0	0
脂漏性皮膚炎	0	0	0	0	1 (2)
皮膚硬結	0	0	0	0	1 (2)
皮膚病変	1 (<1)	0	0	0	0
顔面腫脹	1 (<1)	0	0	0	2 (4)
裂毛	1 (<1)	0	0	0	0
筋骨格系および結合組織障害	42 (37)	34 (30)	29 (27)	63 (29)	17 (35)
背部痛	13 (11)	14 (13)	8 (7)	22 (10)	8 (16)
四肢痛	10 (9)	11 (10)	10 (9)	21 (10)	6 (12)
関節痛	10 (9)	10 (9)	6 (6)	16 (7)	3 (6)
筋痙縮	6 (5)	4 (4)	5 (5)	9 (4)	3 (6)
筋力低下	5 (4)	5 (4)	3 (3)	8 (4)	2 (4)
頚部痛	4 (3)	5 (4)	3 (3)	8 (4)	2 (4)
筋肉痛	2 (2)	3 (3)	2 (2)	5 (2)	1 (2)
関節腫脹	1 (<1)	2 (2)	1 (<1)	3 (1)	1 (2)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋骨格痛	7 (6)	1 (<1)	2 (2)	3 (1)	2 (4)
関節炎	0	1 (<1)	1 (<1)	2 (<1)	0
筋骨格硬直	5 (4)	1 (<1)	1 (<1)	2 (<1)	5 (10)
関節障害	0	0	1 (<1)	1 (<1)	0
腋窩腫瘤	1 (<1)	1 (<1)	0	1 (<1)	0
骨痛	1 (<1)	0	1 (<1)	1 (<1)	0
筋緊張	1 (<1)	0	1 (<1)	1 (<1)	0
筋骨格系胸痛	1 (<1)	1 (<1)	0	1 (<1)	0
ミオキミア	0	0	1 (<1)	1 (<1)	0
四肢の結節	0	0	1 (<1)	1 (<1)	0
骨壊死	0	1 (<1)	0	1 (<1)	1 (2)
骨減少症	0	1 (<1)	0	1 (<1)	0
重感	1 (<1)	1 (<1)	0	1 (<1)	0
腱炎	0	0	1 (<1)	1 (<1)	0
関節硬直	0	0	0	0	1 (2)
四肢不快感	1 (<1)	0	0	0	0
筋攣縮	1 (<1)	0	0	0	0
筋骨格不快感	2 (2)	0	0	0	0
顎痛	0	0	0	0	1 (2)
多発性関節炎	1 (<1)	0	0	0	0
腎および尿路障害	23 (20)	29 (26)	31 (28)	60 (27)	8 (16)

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Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
蛋白尿	5 (4)	17 (15)	20 (18)	37 (17)	3 (6)
血尿	6 (5)	8 (7)	5 (5)	13 (6)	1 (2)
ミクロアルブミン尿	0	6 (5)	3 (3)	9 (4)	1 (2)
頻尿	4 (3)	3 (3)	4 (4)	7 (3)	0
尿意切迫	2 (2)	2 (2)	3 (3)	5 (2)	0
ケトン尿	3 (3)	1 (<1)	2 (2)	3 (1)	1 (2)
排尿困難	3 (3)	1 (<1)	1 (<1)	2 (<1)	0
排尿躊躇	3 (3)	1 (<1)	1 (<1)	2 (<1)	1 (2)
非感染性膀胱炎	0	0	1 (<1)	1 (<1)	0
糖尿	3 (3)	1 (<1)	0	1 (<1)	0
神経因性膀胱	0	1 (<1)	0	1 (<1)	0
腎機能障害	0	0	1 (<1)	1 (<1)	0
腎尿細管性アシドーシス	0	0	1 (<1)	1 (<1)	0
切迫性尿失禁	0	0	1 (<1)	1 (<1)	1 (2)
尿閉	0	0	1 (<1)	1 (<1)	0
尿路結石	1 (<1)	0	0	0	0
高血圧性腎症	0	0	0	0	1 (2)
白血球尿	1 (<1)	0	0	0	0
夜間頻尿	0	0	0	0	1 (2)
膿尿	0	0	0	0	1 (2)
腎仙痛	1 (<1)	0	0	0	0
腹圧性尿失禁	1 (<1)	0	0	0	0

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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尿失禁	0	0	0	0	1 (2)
尿路痛	1 (<1)	0	0	0	1 (2)
生殖系および乳房障害	11 (10)	11 (10)	11 (10)	22 (10)	3 (6)
月経過多	1 (<1)	2 (2)	2 (2)	4 (2)	1 (2)
乳房痛	0	0	3 (3)	3 (1)	0
勃起不全	0	2 (2)	1 (<1)	3 (1)	0
不規則月経	0	1 (<1)	2 (2)	3 (1)	0
月経困難症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (2)
卵巣嚢胞破裂	1 (<1)	2 (2)	0	2 (<1)	0
頻発月経	0	1 (<1)	1 (<1)	2 (<1)	1 (2)
腟出血	2 (2)	2 (2)	0	2 (<1)	0
無月経	1 (<1)	0	1 (<1)	1 (<1)	0
月経遅延	1 (<1)	0	1 (<1)	1 (<1)	1 (2)
不正子宮出血	0	1 (<1)	0	1 (<1)	0
卵巣嚢胞	1 (<1)	1 (<1)	0	1 (<1)	0
骨盤痛	3 (3)	1 (<1)	0	1 (<1)	0
多嚢胞性卵巣	0	1 (<1)	0	1 (<1)	0
前立腺炎	0	0	1 (<1)	1 (<1)	0
乳房嚢胞	0	0	0	0	1 (2)
乳房腫瘤	1 (<1)	0	0	0	0
月経障害	1 (<1)	0	0	0	0

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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
希発月経	1 (<1)	0	0	0	0
性機能不全	1 (<1)	0	0	0	0
子宮ポリープ	1 (<1)	0	0	0	0
外陰腟痛	1 (<1)	0	0	0	0
一般・全身障害および投与部位の状態	39 (34)	31 (28)	38 (35)	69 (31)	17 (35)
発熱	20 (17)	14 (13)	16 (15)	30 (14)	7 (14)
疲労	11 (10)	10 (9)	10 (9)	20 (9)	4 (8)
歩行障害	3 (3)	2 (2)	5 (5)	7 (3)	0
無力症	4 (3)	3 (3)	2 (2)	5 (2)	0
疼痛	4 (3)	3 (3)	2 (2)	5 (2)	2 (4)
熱感	0	3 (3)	1 (<1)	4 (2)	0
末梢性浮腫	3 (3)	0	4 (4)	4 (2)	1 (2)
胸部不快感	0	0	2 (2)	2 (<1)	1 (2)
胸痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
顔面痛	0	1 (<1)	1 (<1)	2 (<1)	1 (2)
腫脹	0	2 (2)	0	2 (<1)	0
腋窩痛	0	0	1 (<1)	1 (<1)	0
悪寒	2 (2)	1 (<1)	0	1 (<1)	0
医療機器関連眼合併症	0	1 (<1)	0	1 (<1)	0
脂肪壊死	0	1 (<1)	0	1 (<1)	0

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
インフルエンザ様疾患	2 (2)	0	1 (<1)	1 (<1)	0
易刺激性	2 (2)	0	1 (<1)	1 (<1)	1 (2)
浮腫	0	1 (<1)	0	1 (<1)	0
圧痛	0	0	1 (<1)	1 (<1)	0
適用部位浮腫	0	0	0	0	1 (2)
注射部位変色	0	0	0	0	1 (2)
注射部位紅斑	0	0	0	0	3 (6)
注射部位血腫	0	0	0	0	1 (2)
注射部位腫瘤	0	0	0	0	1 (2)
注射部位疼痛	0	0	0	0	3 (6)
注射部位そう痒感	0	0	0	0	3 (6)
注射部位腫脹	0	0	0	0	3 (6)
倦怠感	0	0	0	0	1 (2)
骨盤腔内腫瘤	1 (<1)	0	0	0	0
口渇	1 (<1)	0	0	0	0
臨床検査	33 (29)	41 (37)	39 (36)	80 (36)	21 (43)
尿中アルブミン陽性	3 (3)	15 (13)	12 (11)	27 (12)	3 (6)
アラニン・アミノトランスフェラーゼ増加	8 (7)	9 (8)	10 (9)	19 (9)	4 (8)
アスパラギン酸アミノトランスフェラーゼ増加	7 (6)	10 (9)	8 (7)	18 (8)	4 (8)
血中副甲状腺ホルモン増加	1 (<1)	6 (5)	7 (6)	13 (6)	1 (2)
血中ブドウ糖増加	2 (2)	3 (3)	7 (6)	10 (5)	2 (4)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
γ－グルタミルトランスフェラーゼ増加	3 (3)	6 (5)	2 (2)	8 (4)	1 (2)
ヘモグロビン減少	1 (<1)	4 (4)	3 (3)	7 (3)	0
尿中白血球陽性	5 (4)	1 (<1)	6 (6)	7 (3)	3 (6)
尿中β２ミクログロブリン増加	2 (2)	3 (3)	3 (3)	6 (3)	0
ヘマトクリット減少	1 (<1)	4 (4)	2 (2)	6 (3)	0
白血球数増加	4 (3)	4 (4)	2 (2)	6 (3)	1 (2)
β２ミクログロブリン増加	0	3 (3)	2 (2)	5 (2)	0
血中クレアチニン増加	1 (<1)	3 (3)	1 (<1)	4 (2)	0
血中トリグリセリド増加	1 (<1)	2 (2)	2 (2)	4 (2)	2 (4)
尿中ケトン体陽性	0	1 (<1)	3 (3)	4 (2)	0
体重減少	0	2 (2)	2 (2)	4 (2)	1 (2)
血中クレアチン増加	0	2 (2)	1 (<1)	3 (1)	0
尿中血陽性	1 (<1)	2 (2)	1 (<1)	3 (1)	0
好中球数減少	1 (<1)	2 (2)	1 (<1)	3 (1)	0
尿中赤血球陽性	1 (<1)	1 (<1)	2 (2)	3 (1)	0
白血球数減少	1 (<1)	2 (2)	1 (<1)	3 (1)	0
血中ビリルビン増加	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
血中コレステロール増加	0	1 (<1)	1 (<1)	2 (<1)	0
血中乳酸脱水素酵素増加	2 (2)	2 (2)	0	2 (<1)	0
リンパ球数減少	0	1 (<1)	1 (<1)	2 (<1)	0
好中球数増加	2 (2)	1 (<1)	1 (<1)	2 (<1)	1 (2)
尿中蛋白陽性	3 (3)	1 (<1)	1 (<1)	2 (<1)	0

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
赤血球数減少	0	1 (<1)	1 (<1)	2 (<1)	0
赤血球数増加	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
ビタミンＤ減少	0	2 (2)	0	2 (<1)	0
ビタミンＤ増加	2 (2)	0	2 (2)	2 (<1)	0
アラニン・アミノトランスフェラーゼ異常	0	1 (<1)	0	1 (<1)	0
アスパラギン酸アミノトランスフェラーゼ異常	0	1 (<1)	0	1 (<1)	0
細菌検査陽性	2 (2)	0	1 (<1)	1 (<1)	0
血中アルカリホスファターゼ異常	0	1 (<1)	0	1 (<1)	0
血中アルカリホスファターゼ増加	5 (4)	1 (<1)	0	1 (<1)	0
血中重炭酸塩減少	0	1 (<1)	0	1 (<1)	0
血中ブドウ糖減少	0	0	1 (<1)	1 (<1)	0
血中尿素増加	0	0	1 (<1)	1 (<1)	0
尿中結晶陽性	2 (2)	1 (<1)	0	1 (<1)	0
心電図ＱＴ延長	0	1 (<1)	0	1 (<1)	1 (2)
心電図Ｔ波逆転	0	1 (<1)	0	1 (<1)	0
γ－グルタミルトランスフェラーゼ異常	0	1 (<1)	0	1 (<1)	0
γ－グルタミルトランスフェラーゼ減少	0	1 (<1)	0	1 (<1)	0
胃内ｐＨ上昇	0	0	1 (<1)	1 (<1)	0
尿中ブドウ糖陽性	0	0	1 (<1)	1 (<1)	1 (2)
肝酵素上昇	3 (3)	0	1 (<1)	1 (<1)	1 (2)
高比重リポ蛋白増加	0	0	1 (<1)	1 (<1)	0
肝機能検査異常	1 (<1)	1 (<1)	0	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
低比重リポ蛋白増加	0	0	1 (<1)	1 (<1)	0
リンパ球数増加	1 (<1)	1 (<1)	0	1 (<1)	0
医学的観察	0	0	1 (<1)	1 (<1)	0
単球数減少	0	0	1 (<1)	1 (<1)	0
血小板数減少	0	1 (<1)	0	1 (<1)	3 (6)
血小板数増加	0	1 (<1)	0	1 (<1)	0
つぎ足歩行検査異常	0	1 (<1)	0	1 (<1)	0
ビタミンＢ１２減少	0	1 (<1)	0	1 (<1)	0
血中リン増加	1 (<1)	0	0	0	0
血圧低下	1 (<1)	0	0	0	0
血中尿酸増加	0	0	0	0	1 (2)
心電図Ｔ波振幅減少	0	0	0	0	1 (2)
好酸球数増加	1 (<1)	0	0	0	0
心音異常	1 (<1)	0	0	0	0
体重増加	0	0	0	0	2 (4)
傷害、中毒および処置合併症	18 (16)	13 (12)	15 (14)	28 (13)	10 (20)
転倒	1 (<1)	2 (2)	3 (3)	5 (2)	4 (8)
四肢損傷	3 (3)	2 (2)	2 (2)	4 (2)	1 (2)
挫傷	2 (2)	0	3 (3)	3 (1)	1 (2)
擦過傷	1 (<1)	0	2 (2)	2 (<1)	2 (4)

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3: A subject was counted only once within each system organ class/preferred term.
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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
足骨折	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
熱傷	1 (<1)	0	2 (2)	2 (<1)	0
足関節部骨折	0	1 (<1)	0	1 (<1)	0
節足動物刺傷	0	1 (<1)	0	1 (<1)	0
上顆炎	0	1 (<1)	0	1 (<1)	0
大腿骨骨折	0	1 (<1)	0	1 (<1)	0
腸脛靭帯症候群	0	0	1 (<1)	1 (<1)	0
切開部位痛	0	1 (<1)	0	1 (<1)	0
関節脱臼	0	1 (<1)	0	1 (<1)	0
下肢骨折	0	0	1 (<1)	1 (<1)	0
半月板障害	1 (<1)	1 (<1)	0	1 (<1)	0
肉離れ	2 (2)	0	1 (<1)	1 (<1)	0
術後発熱	0	1 (<1)	0	1 (<1)	0
処置による低血圧	0	1 (<1)	0	1 (<1)	0
処置による疼痛	0	0	1 (<1)	1 (<1)	1 (2)
橈骨骨折	1 (<1)	0	1 (<1)	1 (<1)	0
交通事故	0	0	1 (<1)	1 (<1)	1 (2)
皮膚裂傷	1 (<1)	0	1 (<1)	1 (<1)	0
むち打ち損傷	0	1 (<1)	0	1 (<1)	0
節足動物咬傷	1 (<1)	0	0	0	1 (2)
気圧性中耳炎	0	0	0	0	1 (2)
眼外傷	1 (<1)	0	0	0	0

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
顔面損傷	0	0	0	0	1 (2)
手骨折	0	0	0	0	2 (4)
関節捻挫	3 (3)	0	0	0	1 (2)
靭帯損傷	1 (<1)	0	0	0	0
口唇損傷	0	0	0	0	1 (2)
外傷後疼痛	1 (<1)	0	0	0	0
腱断裂	1 (<1)	0	0	0	0
治療薬毒性	1 (<1)	0	0	0	0
歯牙破折	1 (<1)	0	0	0	0
手首関節骨折	1 (<1)	0	0	0	0
外科および内科処置	1 (<1)	2 (2)	0	2 (<1)	0
ヘルニア修復	0	1 (<1)	0	1 (<1)	0
抜歯	1 (<1)	1 (<1)	0	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-RACE-A.SAS DATE: 02DEC2015

Table 278: Incidence of Serious Adverse Events by System Organ Class and Preferred Term - by Race Group: Studies 109MS301 and 109MS302

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
Page 1 of 16
(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	623 (100)	625 (100)	621 (100)	1246 (100)	291 (100)
Number of subjects with an event	123 (20)	105 (17)	92 (15)	197 (16)	53 (18)
感染症および寄生虫症	7 (1)	8 (1)	9 (1)	17 (1)	4 (1)
胃腸炎	0	3 (<1)	0	3 (<1)	0
尿路感染	0	1 (<1)	2 (<1)	3 (<1)	0
Ｈ１Ｎ１インフルエンザ	0	1 (<1)	1 (<1)	2 (<1)	0
肺炎	2 (<1)	2 (<1)	0	2 (<1)	2 (<1)
虫垂炎	0	1 (<1)	0	1 (<1)	1 (<1)
蜂巣炎	0	0	1 (<1)	1 (<1)	0
ダグラス窩膿瘍	0	0	1 (<1)	1 (<1)	0
ウイルス性胃腸炎	0	0	1 (<1)	1 (<1)	0
インフルエンザ	1 (<1)	0	1 (<1)	1 (<1)	0
扁桃周囲膿瘍	0	0	1 (<1)	1 (<1)	0
急性腎盂腎炎	0	0	1 (<1)	1 (<1)	0
外陰部膿瘍	0	0	1 (<1)	1 (<1)	0
ボレリア感染	1 (<1)	0	0	0	0
細菌性心内膜炎	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
鼻咽頭炎	1 (<1)	0	0	0	0
膿胸	0	0	0	0	1 (<1)
敗血症	2 (<1)	0	0	0	0
気管炎	1 (<1)	0	0	0	0
ウイルス感染	0	0	0	0	1 (<1)
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	4 (<1)	4 (<1)	3 (<1)	7 (<1)	5 (2)
子宮平滑筋腫	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
肺の良性新生物	0	1 (<1)	0	1 (<1)	0
乳癌	1 (<1)	0	1 (<1)	1 (<1)	0
子宮頚部癌	0	0	1 (<1)	1 (<1)	1 (<1)
神経鞘腫	0	1 (<1)	0	1 (<1)	0
移行上皮癌	0	1 (<1)	0	1 (<1)	0
基底細胞癌	1 (<1)	0	0	0	1 (<1)
乳房新生物	1 (<1)	0	0	0	0
子宮内膜癌	0	0	0	0	1 (<1)
血管腫	1 (<1)	0	0	0	0
転移性甲状腺癌	0	0	0	0	1 (<1)
血液およびリンパ系障害	1 (<1)	0	0	0	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
小球性貧血	1 (<1)	0	0	0	0
免疫系障害	0	1 (<1)	2 (<1)	3 (<1)	2 (<1)
過敏症	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
アナフィラキシー様反応	0	0	1 (<1)	1 (<1)	0
アナフィラキシー反応	0	0	0	0	1 (<1)
内分泌障害	0	1 (<1)	1 (<1)	2 (<1)	0
甲状腺腫	0	1 (<1)	1 (<1)	2 (<1)	0
代謝および栄養障害	0	0	2 (<1)	2 (<1)	0
脱水	0	0	1 (<1)	1 (<1)	0
低血糖症	0	0	1 (<1)	1 (<1)	0
精神障害	4 (<1)	4 (<1)	1 (<1)	5 (<1)	4 (1)
抑うつ気分を伴う適応障害	0	1 (<1)	0	1 (<1)	0
双極１型障害	0	1 (<1)	0	1 (<1)	0
全般性不安障害	0	1 (<1)	0	1 (<1)	0
躁病	0	1 (<1)	0	1 (<1)	0
自己愛性人格障害	0	1 (<1)	0	1 (<1)	0
自殺念慮	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
自殺企図	0	0	1 (<1)	1 (<1)	1 (<1)
不安	1 (<1)	0	0	0	0
自殺既遂	0	0	0	0	1 (<1)
うつ病	2 (<1)	0	0	0	2 (<1)
神経系障害	89 (14)	65 (10)	55 (9)	120 (10)	34 (12)
多発性硬化症再発	85 (14)	63 (10)	48 (8)	111 (9)	30 (10)
頭痛	0	0	3 (<1)	3 (<1)	0
意識変容状態	0	0	1 (<1)	1 (<1)	0
良性頭蓋内圧亢進	0	0	1 (<1)	1 (<1)	0
構語障害	0	0	1 (<1)	1 (<1)	0
てんかん	1 (<1)	1 (<1)	0	1 (<1)	0
舌咽神経痛	0	1 (<1)	0	1 (<1)	0
大発作痙攣	0	0	1 (<1)	1 (<1)	1 (<1)
虚血性脳卒中	0	0	1 (<1)	1 (<1)	0
多発性硬化症	1 (<1)	0	1 (<1)	1 (<1)	0
神経学的症状	0	1 (<1)	0	1 (<1)	0
後頭神経痛	0	0	1 (<1)	1 (<1)	0
下肢静止不能症候群	0	0	1 (<1)	1 (<1)	0
一過性全健忘	0	0	1 (<1)	1 (<1)	0
一過性脳虚血発作	0	1 (<1)	0	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
横静脈洞血栓症	0	0	1 (<1)	1 (<1)	0
失語症	0	0	0	0	1 (<1)
脳血管発作	1 (<1)	0	0	0	0
脳血管障害	0	0	0	0	1 (<1)
意識消失	1 (<1)	0	0	0	1 (<1)
片頭痛	1 (<1)	0	0	0	0
部分発作	0	0	0	0	1 (<1)
眼障害	3 (<1)	0	0	0	0
眼痛	1 (<1)	0	0	0	0
ホームズ・アディー瞳孔	1 (<1)	0	0	0	0
視力低下	1 (<1)	0	0	0	0
耳および迷路障害	0	0	1 (<1)	1 (<1)	1 (<1)
頭位性回転性めまい	0	0	1 (<1)	1 (<1)	0
前庭性運動失調	0	0	0	0	1 (<1)
心臓障害	0	0	3 (<1)	3 (<1)	1 (<1)
徐脈	0	0	1 (<1)	1 (<1)	0
心不全	0	0	1 (<1)	1 (<1)	0
うっ血性心不全	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心筋炎	0	0	0	0	1 (<1)
血管障害	0	2 (<1)	1 (<1)	3 (<1)	1 (<1)
静脈瘤	0	1 (<1)	1 (<1)	2 (<1)	0
潮紅	0	1 (<1)	0	1 (<1)	0
深部静脈血栓症	0	0	0	0	1 (<1)
呼吸器、胸郭および縦隔障害	0	2 (<1)	0	2 (<1)	0
喘息	0	1 (<1)	0	1 (<1)	0
誤嚥性肺炎	0	1 (<1)	0	1 (<1)	0
胃腸障害	4 (<1)	7 (1)	4 (<1)	11 (<1)	0
腹痛	0	2 (<1)	0	2 (<1)	0
嘔吐	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腹部ヘルニア	0	1 (<1)	0	1 (<1)	0
下腹部痛	0	0	1 (<1)	1 (<1)	0
便秘	0	1 (<1)	0	1 (<1)	0
憩室穿孔	0	1 (<1)	0	1 (<1)	0
胃腸障害	0	1 (<1)	0	1 (<1)	0
胃腸出血	1 (<1)	0	1 (<1)	1 (<1)	0
裂孔ヘルニア	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腸閉塞	0	0	1 (<1)	1 (<1)	0
悪心	1 (<1)	1 (<1)	0	1 (<1)	0
大腸炎	1 (<1)	0	0	0	0
潰瘍性大腸炎	1 (<1)	0	0	0	0
急性膵炎	1 (<1)	0	0	0	0
肝胆道系障害	0	2 (<1)	1 (<1)	3 (<1)	1 (<1)
胆石症	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
胆管結石	0	0	1 (<1)	1 (<1)	0
胆汁うっ滞性肝炎	0	1 (<1)	0	1 (<1)	0
皮膚および皮下組織障害	0	1 (<1)	0	1 (<1)	0
スティーブンス・ジョンソン症候群	0	1 (<1)	0	1 (<1)	0
筋骨格系および結合組織障害	2 (<1)	5 (<1)	3 (<1)	8 (<1)	0
背部痛	0	2 (<1)	1 (<1)	3 (<1)	0
関節痛	0	1 (<1)	0	1 (<1)	0
滑液包炎	0	1 (<1)	0	1 (<1)	0
変形性関節症	1 (<1)	0	1 (<1)	1 (<1)	0
シェーグレン症候群	0	1 (<1)	0	1 (<1)	0
変形性脊椎症	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
滑液嚢腫	1 (<1)	0	0	0	0
腎および尿路障害	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
膀胱機能障害	0	1 (<1)	0	1 (<1)	0
膀胱穿孔	0	0	1 (<1)	1 (<1)	0
腎仙痛	0	0	1 (<1)	1 (<1)	0
尿管瘤	0	1 (<1)	0	1 (<1)	0
膀胱憩室	1 (<1)	0	0	0	0
腎下垂症	1 (<1)	0	0	0	0
妊娠、産褥および周産期の状態	2 (<1)	0	0	0	0
自然流産	1 (<1)	0	0	0	0
妊娠浮腫	1 (<1)	0	0	0	0
生殖系および乳房障害	4 (<1)	2 (<1)	3 (<1)	5 (<1)	2 (<1)
卵巣嚢胞	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
腺筋症	0	0	1 (<1)	1 (<1)	0
子宮内膜症	0	1 (<1)	0	1 (<1)	0
不正子宮出血	0	0	1 (<1)	1 (<1)	1 (<1)
バルトリン嚢腫	1 (<1)	0	0	0	0
子宮出血	2 (<1)	0	0	0	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
先天性、家族性および遺伝性障害	0	0	1 (<1)	1 (<1)	0
陰嚢水瘤	0	0	1 (<1)	1 (<1)	0
一般・全身障害および投与部位の状態	2 (<1)	0	5 (<1)	5 (<1)	1 (<1)
無力症	1 (<1)	0	1 (<1)	1 (<1)	0
閉塞性ヘルニア	0	0	1 (<1)	1 (<1)	0
非心臓性胸痛	0	0	1 (<1)	1 (<1)	0
末梢性浮腫	0	0	1 (<1)	1 (<1)	1 (<1)
発熱	0	0	1 (<1)	1 (<1)	0
インフルエンザ様疾患	1 (<1)	0	0	0	0
臨床検査	1 (<1)	1 (<1)	3 (<1)	4 (<1)	0
アレルギー検査	0	0	1 (<1)	1 (<1)	0
血中ブドウ糖増加	0	0	1 (<1)	1 (<1)	0
結腸内視鏡検査	0	1 (<1)	0	1 (<1)	0
検査	0	0	1 (<1)	1 (<1)	0
肝酵素上昇	1 (<1)	0	0	0	0
傷害、中毒および処置合併症	6 (<1)	6 (<1)	6 (<1)	12 (<1)	3 (1)
肉離れ	0	0	2 (<1)	2 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
手首関節骨折	0	0	2 (<1)	2 (<1)	0
アルコール中毒	0	0	1 (<1)	1 (<1)	0
足関節部骨折	0	0	1 (<1)	1 (<1)	0
脳振盪	0	1 (<1)	0	1 (<1)	0
顔面骨骨折	0	1 (<1)	0	1 (<1)	0
靭帯断裂	0	1 (<1)	0	1 (<1)	0
過量投与	0	1 (<1)	0	1 (<1)	0
交通事故	0	1 (<1)	0	1 (<1)	1 (<1)
外傷性脳損傷	0	1 (<1)	0	1 (<1)	0
外傷性血腫	0	1 (<1)	0	1 (<1)	0
眼外傷	1 (<1)	0	0	0	0
大腿骨頚部骨折	1 (<1)	0	0	0	0
大腿骨骨折	0	0	0	0	1 (<1)
手骨折	1 (<1)	0	0	0	0
橈骨骨折	0	0	0	0	1 (<1)
腱断裂	2 (<1)	0	0	0	0
脛骨骨折	1 (<1)	0	0	0	0
むち打ち損傷	0	0	0	0	1 (<1)
外科および内科処置	1 (<1)	3 (<1)	2 (<1)	5 (<1)	1 (<1)
乳房腫瘤摘除	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(White)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
女性不妊手術	0	1 (<1)	0	1 (<1)	0
子宮摘出	0	1 (<1)	0	1 (<1)	0
椎間板手術	0	0	1 (<1)	1 (<1)	0
静脈ステント挿入	0	0	1 (<1)	1 (<1)	0
子宮頚部円錐切除	1 (<1)	0	0	0	0
不妊手術	0	0	0	0	1 (<1)
社会環境	1 (<1)	0	0	0	0
社会問題	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	115 (100)	112 (100)	109 (100)	221 (100)	49 (100)
Number of subjects with an event	34 (30)	25 (22)	22 (20)	47 (21)	5 (10)
感染症および寄生虫症	4 (3)	9 (8)	6 (6)	15 (7)	0
胃腸炎	0	3 (3)	3 (3)	6 (3)	0
蜂巣炎	0	2 (2)	1 (<1)	3 (1)	0
ウイルス感染	0	2 (2)	1 (<1)	3 (1)	0
副鼻腔炎	0	1 (<1)	1 (<1)	2 (<1)	0
骨盤内炎症性疾患	1 (<1)	0	1 (<1)	1 (<1)	0
ウイルス感染後疲労症候群	0	1 (<1)	0	1 (<1)	0
感染性下痢	1 (<1)	0	0	0	0
Ｈ１Ｎ１インフルエンザ	1 (<1)	0	0	0	0
ライター症候群	1 (<1)	0	0	0	0
消化器結核	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	2 (2)	0	0	0	0
線維腫	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
子宮平滑筋腫	1 (<1)	0	0	0	0
血液およびリンパ系障害	1 (<1)	0	0	0	0
貧血	1 (<1)	0	0	0	0
免疫系障害	0	0	0	0	1 (2)
アナフィラキシー反応	0	0	0	0	1 (2)
内分泌障害	0	0	1 (<1)	1 (<1)	0
間脳性内分泌障害	0	0	1 (<1)	1 (<1)	0
代謝および栄養障害	1 (<1)	0	0	0	0
糖尿病性ケトアシドーシス	1 (<1)	0	0	0	0
神経系障害	25 (22)	13 (12)	12 (11)	25 (11)	4 (8)
多発性硬化症再発	23 (20)	13 (12)	12 (11)	25 (11)	4 (8)
片頭痛	1 (<1)	0	1 (<1)	1 (<1)	0
神経学的症状	0	0	1 (<1)	1 (<1)	0
部分発作	0	1 (<1)	0	1 (<1)	0
痙攣	3 (3)	0	0	0	0
脳症	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
大発作痙攣	2 (2)	0	0	0	0
心臓障害	0	0	1 (<1)	1 (<1)	0
急性冠動脈症候群	0	0	1 (<1)	1 (<1)	0
血管障害	0	0	2 (2)	2 (<1)	0
深部静脈血栓症	0	0	1 (<1)	1 (<1)	0
潮紅	0	0	1 (<1)	1 (<1)	0
呼吸器、胸郭および縦隔障害	0	1 (<1)	0	1 (<1)	0
胸水	0	1 (<1)	0	1 (<1)	0
胃腸障害	1 (<1)	1 (<1)	4 (4)	5 (2)	0
胃炎	0	0	2 (2)	2 (<1)	0
嘔吐	0	1 (<1)	1 (<1)	2 (<1)	0
十二指腸炎	0	0	1 (<1)	1 (<1)	0
腹膜出血	1 (<1)	0	0	0	0
皮膚および皮下組織障害	1 (<1)	0	1 (<1)	1 (<1)	0
そう痒症	0	0	1 (<1)	1 (<1)	0
アレルギー性皮膚炎	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋骨格系および結合組織障害	1 (<1)	0	0	0	0
多発性関節炎	1 (<1)	0	0	0	0
生殖系および乳房障害	2 (2)	2 (2)	0	2 (<1)	0
月経過多	0	1 (<1)	0	1 (<1)	0
卵巣嚢胞破裂	0	1 (<1)	0	1 (<1)	0
月経障害	1 (<1)	0	0	0	0
骨盤痛	1 (<1)	0	0	0	0
一般・全身障害および投与部位の状態	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
発熱	0	1 (<1)	1 (<1)	2 (<1)	0
骨盤腔内腫瘤	1 (<1)	0	0	0	0
臨床検査	1 (<1)	0	2 (2)	2 (<1)	0
尿中β２ミクログロブリン増加	0	0	1 (<1)	1 (<1)	0
医学的観察	0	0	1 (<1)	1 (<1)	0
肝酵素上昇	1 (<1)	0	0	0	0
傷害、中毒および処置合併症	3 (3)	4 (4)	2 (2)	6 (3)	0
転倒	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by race group: Studies 109MS301 and 109MS302
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(Other)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
大腿骨骨折	0	1 (<1)	0	1 (<1)	0
足骨折	0	1 (<1)	0	1 (<1)	0
半月板障害	1 (<1)	1 (<1)	0	1 (<1)	0
術後発熱	0	1 (<1)	0	1 (<1)	0
処置による低血圧	0	1 (<1)	0	1 (<1)	0
橈骨骨折	0	0	1 (<1)	1 (<1)	0
交通事故	0	0	1 (<1)	1 (<1)	0
靭帯損傷	1 (<1)	0	0	0	0
腱断裂	1 (<1)	0	0	0	0
治療薬毒性	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-RACE-A.SAS DATE: 02DEC2015

Table 279: Incidence of Adverse Events by System Organ Class and Preferred Term - by Body Weight: Studies 109MS301 and 109MS302

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	73 (100)	90 (100)	75 (100)	165 (100)	42 (100)
Number of subjects with an event	71 (97)	85 (94)	69 (92)	154 (93)	33 (79)
感染症および寄生虫症	39 (53)	52 (58)	44 (59)	96 (58)	18 (43)
鼻咽頭炎	12 (16)	15 (17)	14 (19)	29 (18)	1 (2)
尿路感染	12 (16)	14 (16)	12 (16)	26 (16)	8 (19)
上気道感染	7 (10)	14 (16)	10 (13)	24 (15)	5 (12)
胃腸炎	1 (1)	7 (8)	4 (5)	11 (7)	1 (2)
インフルエンザ	4 (5)	5 (6)	6 (8)	11 (7)	3 (7)
鼻炎	2 (3)	5 (6)	3 (4)	8 (5)	1 (2)
副鼻腔炎	0	5 (6)	3 (4)	8 (5)	0
咽頭炎	4 (5)	5 (6)	2 (3)	7 (4)	4 (10)
ウイルス感染	0	6 (7)	0	6 (4)	0
気管支炎	4 (5)	3 (3)	1 (1)	4 (2)	0
ウイルス性胃腸炎	0	0	4 (5)	4 (2)	1 (2)
口腔ヘルペス	2 (3)	1 (1)	3 (4)	4 (2)	0
気道感染	1 (1)	3 (3)	1 (1)	4 (2)	1 (2)
膀胱炎	2 (3)	3 (3)	0	3 (2)	1 (2)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ウイルス性消化管感染	1 (1)	2 (2)	1 (1)	3 (2)	0
帯状疱疹	2 (3)	2 (2)	1 (1)	3 (2)	0
腟感染	0	1 (1)	2 (3)	3 (2)	0
ウイルス性上気道感染	1 (1)	2 (2)	1 (1)	3 (2)	0
外陰腟真菌感染	0	3 (3)	0	3 (2)	0
蜂巣炎	0	2 (2)	0	2 (1)	0
感染性結膜炎	1 (1)	1 (1)	1 (1)	2 (1)	0
単純ヘルペス	0	2 (2)	0	2 (1)	1 (2)
シラミ寄生	0	2 (2)	0	2 (1)	0
下気道感染	0	0	2 (3)	2 (1)	0
歯膿瘍	0	1 (1)	1 (1)	2 (1)	0
細菌性腟炎	0	2 (2)	0	2 (1)	0
外陰部腟カンジダ症	1 (1)	2 (2)	0	2 (1)	0
急性扁桃炎	0	1 (1)	0	1 (<1)	1 (2)
無症候性細菌尿	0	1 (1)	0	1 (<1)	0
細菌尿	0	0	1 (1)	1 (<1)	0
カンジダ症	0	1 (1)	0	1 (<1)	0
ダグラス窩膿瘍	0	0	1 (1)	1 (<1)	0
耳感染	1 (1)	0	1 (1)	1 (<1)	0
ノロウイルス性胃腸炎	0	1 (1)	0	1 (<1)	0
陰部ヘルペス	0	1 (1)	0	1 (<1)	0

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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
喉頭炎	0	0	1 (1)	1 (<1)	1 (2)
爪真菌症	1 (1)	1 (1)	0	1 (<1)	0
口腔カンジダ症	0	1 (1)	0	1 (<1)	0
口腔真菌感染	0	1 (1)	0	1 (<1)	0
中耳炎	0	1 (1)	0	1 (<1)	0
爪囲炎	0	1 (1)	0	1 (<1)	0
肺炎	0	1 (1)	0	1 (<1)	0
ウイルス感染後疲労症候群	0	1 (1)	0	1 (<1)	0
急性腎盂腎炎	0	0	1 (1)	1 (<1)	0
膿皮症	0	1 (1)	0	1 (<1)	0
扁桃炎	1 (1)	1 (1)	0	1 (<1)	0
気管炎	0	1 (1)	0	1 (<1)	0
腸チフス熱	0	0	1 (1)	1 (<1)	0
細菌性上気道感染	0	1 (1)	0	1 (<1)	0
熱傷部感染	1 (1)	0	0	0	0
眼感染	1 (1)	0	0	0	0
せつ	1 (1)	0	0	0	0
消化管感染	1 (1)	0	0	0	0
泌尿生殖器感染	1 (1)	0	0	0	0
Ｈ１Ｎ１インフルエンザ	1 (1)	0	0	0	0
感染性皮脂嚢腫	1 (1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
迷路炎	1 (1)	0	0	0	0
レンサ球菌性咽頭炎	1 (1)	0	0	0	0
腎盂腎炎	1 (1)	0	0	0	0
卵管卵巣炎	2 (3)	0	0	0	0
足部白癬	1 (1)	0	0	0	0
歯感染	1 (1)	0	0	0	0
水痘	0	0	0	0	1 (2)
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	1 (1)	1 (1)	0	1 (<1)	0
メラノサイト性母斑	0	1 (1)	0	1 (<1)	0
子宮平滑筋腫	1 (1)	0	0	0	0
血液およびリンパ系障害	6 (8)	11 (12)	3 (4)	14 (8)	4 (10)
貧血	2 (3)	5 (6)	2 (3)	7 (4)	0
白血球増加症	0	2 (2)	0	2 (1)	0
白血球減少症	1 (1)	1 (1)	1 (1)	2 (1)	0
リンパ球減少症	1 (1)	2 (2)	0	2 (1)	0
好中球増加症	1 (1)	2 (2)	0	2 (1)	1 (2)
リンパ節症	1 (1)	1 (1)	0	1 (<1)	2 (5)
好中球減少症	1 (1)	1 (1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
妊娠貧血	1 (1)	0	0	0	0
血小板減少症	0	0	0	0	1 (2)
免疫系障害	0	3 (3)	2 (3)	5 (3)	0
過敏症	0	2 (2)	1 (1)	3 (2)	0
季節性アレルギー	0	1 (1)	1 (1)	2 (1)	0
内分泌障害	0	1 (1)	2 (3)	3 (2)	0
甲状腺腫	0	1 (1)	1 (1)	2 (1)	0
甲状腺機能亢進症	0	0	1 (1)	1 (<1)	0
代謝および栄養障害	8 (11)	7 (8)	2 (3)	9 (5)	1 (2)
食欲減退	5 (7)	5 (6)	0	5 (3)	1 (2)
高コレステロール血症	0	2 (2)	0	2 (1)	0
異常体重減少	0	0	1 (1)	1 (<1)	0
脱水	0	0	1 (1)	1 (<1)	0
高血糖	2 (3)	0	0	0	0
高トリグリセリド血症	1 (1)	0	0	0	0
低カリウム血症	1 (1)	0	0	0	0
精神障害	18 (25)	12 (13)	10 (13)	22 (13)	5 (12)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
うつ病	7 (10)	5 (6)	5 (7)	10 (6)	4 (10)
不安	4 (5)	4 (4)	1 (1)	5 (3)	1 (2)
不眠症	2 (3)	4 (4)	1 (1)	5 (3)	2 (5)
転換性障害	0	0	1 (1)	1 (<1)	0
多幸気分	0	1 (1)	0	1 (<1)	0
リビド消失	0	1 (1)	0	1 (<1)	0
大うつ病	0	0	1 (1)	1 (<1)	0
睡眠障害	1 (1)	0	1 (1)	1 (<1)	0
自殺念慮	0	0	1 (1)	1 (<1)	0
感情不安定	1 (1)	0	0	0	0
抑うつ気分	1 (1)	0	0	0	0
リビドー減退	1 (1)	0	0	0	0
躁病	1 (1)	0	0	0	0
神経過敏	0	0	0	0	1 (2)
ストレス	1 (1)	0	0	0	0
緊張	1 (1)	0	0	0	0
神経系障害	48 (66)	57 (63)	31 (41)	88 (53)	20 (48)
多発性硬化症再発	38 (52)	23 (26)	20 (27)	43 (26)	16 (38)
頭痛	11 (15)	24 (27)	7 (9)	31 (19)	4 (10)
錯感覚	4 (5)	10 (11)	6 (8)	16 (10)	1 (2)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
感覚鈍麻	5 (7)	5 (6)	3 (4)	8 (5)	1 (2)
浮動性めまい	3 (4)	4 (4)	2 (3)	6 (4)	1 (2)
灼熱感	1 (1)	3 (3)	1 (1)	4 (2)	0
筋痙直	1 (1)	4 (4)	0	4 (2)	3 (7)
平衡障害	1 (1)	1 (1)	2 (3)	3 (2)	0
片頭痛	2 (3)	3 (3)	0	3 (2)	1 (2)
傾眠	1 (1)	1 (1)	2 (3)	3 (2)	0
振戦	0	3 (3)	0	3 (2)	0
三叉神経痛	0	3 (3)	0	3 (2)	0
痙攣	0	1 (1)	1 (1)	2 (1)	0
多発性硬化症	1 (1)	1 (1)	1 (1)	2 (1)	3 (7)
不随意性筋収縮	0	2 (2)	0	2 (1)	0
失認症	0	1 (1)	0	1 (<1)	0
運動失調	0	0	1 (1)	1 (<1)	0
協調運動異常	0	1 (1)	0	1 (<1)	0
味覚異常	1 (1)	1 (1)	0	1 (<1)	1 (2)
てんかん	0	0	1 (1)	1 (<1)	1 (2)
片側頭痛	1 (1)	1 (1)	0	1 (<1)	0
知覚過敏	0	0	1 (1)	1 (<1)	0
過眠症	0	1 (1)	0	1 (<1)	0
レルミット徴候	2 (3)	0	1 (1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腰髄神経根障害	0	1 (1)	0	1 (<1)	0
前兆を伴う片頭痛	0	0	1 (1)	1 (<1)	0
運動機能障害	0	1 (1)	0	1 (<1)	0
神経学的症状	0	0	1 (1)	1 (<1)	0
下肢静止不能症候群	0	0	1 (1)	1 (<1)	0
坐骨神経痛	2 (3)	0	1 (1)	1 (<1)	0
感覚障害	1 (1)	1 (1)	0	1 (<1)	0
失神	0	0	1 (1)	1 (<1)	0
緊張性頭痛	1 (1)	0	1 (1)	1 (<1)	0
記憶障害	1 (1)	0	0	0	0
振動覚亢進	1 (1)	0	0	0	0
眼障害	5 (7)	7 (8)	8 (11)	15 (9)	1 (2)
眼痛	1 (1)	2 (2)	3 (4)	5 (3)	0
霧視	2 (3)	1 (1)	2 (3)	3 (2)	0
流涙増加	1 (1)	1 (1)	1 (1)	2 (1)	0
視力障害	0	1 (1)	1 (1)	2 (1)	0
黒内障	0	1 (1)	0	1 (<1)	0
両眼球運動障害	0	0	1 (1)	1 (<1)	0
眼瞼痙攣	0	0	1 (1)	1 (<1)	0
失明	0	0	1 (1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白内障	0	1 (1)	0	1 (<1)	0
眼運動障害	0	0	1 (1)	1 (<1)	0
眼瞼下垂	0	0	1 (1)	1 (<1)	0
眼筋麻痺	0	0	1 (1)	1 (<1)	0
視神経萎縮	0	0	1 (1)	1 (<1)	0
羞明	0	1 (1)	0	1 (<1)	0
屈折障害	0	1 (1)	0	1 (<1)	0
ブドウ膜炎	0	1 (1)	0	1 (<1)	0
複視	1 (1)	0	0	0	0
視力低下	1 (1)	0	0	0	1 (2)
耳および迷路障害	4 (5)	5 (6)	7 (9)	12 (7)	2 (5)
回転性めまい	3 (4)	3 (3)	6 (8)	9 (5)	2 (5)
耳痛	0	1 (1)	0	1 (<1)	0
聴覚過敏	0	1 (1)	0	1 (<1)	0
頭位性回転性めまい	1 (1)	0	1 (1)	1 (<1)	0
心臓障害	1 (1)	5 (6)	5 (7)	10 (6)	3 (7)
動悸	0	1 (1)	1 (1)	2 (1)	0
第一度房室ブロック	0	0	1 (1)	1 (<1)	0
徐脈	0	0	1 (1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
右脚ブロック	0	1 (1)	0	1 (<1)	0
期外収縮	0	1 (1)	0	1 (<1)	0
洞性徐脈	0	1 (1)	0	1 (<1)	0
洞性頻脈	0	0	1 (1)	1 (<1)	0
上室性期外収縮	0	1 (1)	0	1 (<1)	0
頻脈	1 (1)	0	1 (1)	1 (<1)	0
ウォルフ・パーキンソン・ホワイト症候群	0	1 (1)	0	1 (<1)	0
心房細動	0	0	0	0	1 (2)
伝導障害	0	0	0	0	1 (2)
心筋炎	0	0	0	0	1 (2)
発作性頻脈	0	0	0	0	1 (2)
血管障害	4 (5)	30 (33)	23 (31)	53 (32)	1 (2)
潮紅	0	25 (28)	18 (24)	43 (26)	1 (2)
ほてり	0	5 (6)	6 (8)	11 (7)	0
血腫	1 (1)	1 (1)	1 (1)	2 (1)	0
高血圧	1 (1)	1 (1)	1 (1)	2 (1)	0
血管障害	0	0	1 (1)	1 (<1)	0
動脈硬化症	0	0	1 (1)	1 (<1)	0
低血圧	2 (3)	0	1 (1)	1 (<1)	0
微小血管症	0	1 (1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
末梢性虚血	0	1 (1)	0	1 (<1)	0
静脈炎	0	0	1 (1)	1 (<1)	0
レイノー現象	0	1 (1)	0	1 (<1)	0
静脈瘤	0	1 (1)	0	1 (<1)	0
腹腔内血腫	0	0	0	0	1 (2)
蒼白	1 (1)	0	0	0	0
呼吸器、胸郭および縦隔障害	8 (11)	17 (19)	10 (13)	27 (16)	4 (10)
口腔咽頭痛	4 (5)	7 (8)	2 (3)	9 (5)	2 (5)
咳嗽	3 (4)	5 (6)	3 (4)	8 (5)	1 (2)
鼻閉	0	2 (2)	0	2 (1)	0
鼻漏	1 (1)	1 (1)	1 (1)	2 (1)	0
咽喉乾燥	0	1 (1)	0	1 (<1)	0
呼吸困難	1 (1)	1 (1)	0	1 (<1)	0
労作性呼吸困難	0	1 (1)	0	1 (<1)	0
鼻出血	0	0	1 (1)	1 (<1)	0
過換気	0	0	1 (1)	1 (<1)	0
鼻中隔弯曲	0	1 (1)	0	1 (<1)	0
胸膜炎	0	0	1 (1)	1 (<1)	0
気胸	0	0	1 (1)	1 (<1)	0
アレルギー性鼻炎	0	1 (1)	0	1 (<1)	1 (2)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
低音性連続性ラ音	0	1 (1)	0	1 (<1)	0
喘鳴	0	0	1 (1)	1 (<1)	0
アレルギー性呼吸器疾患	1 (1)	0	0	0	0
上気道分泌増加	1 (1)	0	0	0	0
胃腸障害	24 (33)	46 (51)	36 (48)	82 (50)	5 (12)
悪心	8 (11)	12 (13)	12 (16)	24 (15)	2 (5)
上腹部痛	5 (7)	5 (6)	10 (13)	15 (9)	0
腹痛	2 (3)	8 (9)	5 (7)	13 (8)	0
下痢	5 (7)	10 (11)	3 (4)	13 (8)	1 (2)
嘔吐	4 (5)	10 (11)	3 (4)	13 (8)	0
消化不良	1 (1)	6 (7)	2 (3)	8 (5)	0
便秘	2 (3)	1 (1)	6 (8)	7 (4)	1 (2)
胃炎	2 (3)	6 (7)	1 (1)	7 (4)	2 (5)
胃腸障害	0	5 (6)	2 (3)	7 (4)	0
歯痛	2 (3)	5 (6)	2 (3)	7 (4)	0
口内乾燥	0	2 (2)	3 (4)	5 (3)	0
腹部不快感	0	2 (2)	1 (1)	3 (2)	0
心窩部不快感	0	1 (1)	1 (1)	2 (1)	0
おくび	0	1 (1)	1 (1)	2 (1)	0
鼓腸	1 (1)	2 (2)	0	2 (1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
胃食道逆流性疾患	0	2 (2)	0	2 (1)	0
胃酸過多	0	2 (2)	0	2 (1)	0
口腔内潰瘍形成	0	1 (1)	1 (1)	2 (1)	0
口内炎	0	2 (2)	0	2 (1)	0
アフタ性口内炎	0	0	1 (1)	1 (<1)	0
口腔灼熱感症候群	0	0	1 (1)	1 (<1)	0
小腸炎	0	0	1 (1)	1 (<1)	0
胃十二指腸炎	0	0	1 (1)	1 (<1)	0
歯肉出血	0	1 (1)	0	1 (<1)	0
歯肉腫脹	0	1 (1)	0	1 (<1)	0
腸管ポリープ	0	1 (1)	0	1 (<1)	0
嚥下痛	0	1 (1)	0	1 (<1)	0
口の錯感覚	0	1 (1)	0	1 (<1)	0
直腸出血	0	1 (1)	0	1 (<1)	0
逆流性食道炎	0	1 (1)	0	1 (<1)	0
埋伏歯	0	0	1 (1)	1 (<1)	0
腹部膨満	1 (1)	0	0	0	0
腹部硬直	1 (1)	0	0	0	0
齲歯	1 (1)	0	0	0	0
嚥下障害	1 (1)	0	0	0	0
腸炎	1 (1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腹膜出血	1 (1)	0	0	0	0
歯の発育障害	1 (1)	0	0	0	0
肝胆道系障害	2 (3)	0	0	0	0
肝炎	1 (1)	0	0	0	0
高ビリルビン血症	1 (1)	0	0	0	0
皮膚および皮下組織障害	13 (18)	22 (24)	24 (32)	46 (28)	10 (24)
そう痒症	1 (1)	6 (7)	6 (8)	12 (7)	0
発疹	1 (1)	7 (8)	3 (4)	10 (6)	1 (2)
紅斑	2 (3)	2 (2)	5 (7)	7 (4)	1 (2)
脱毛症	2 (3)	4 (4)	0	4 (2)	2 (5)
多汗症	0	2 (2)	2 (3)	4 (2)	0
寝汗	0	2 (2)	2 (3)	4 (2)	1 (2)
蕁麻疹	0	0	4 (5)	4 (2)	0
ざ瘡	0	1 (1)	2 (3)	3 (2)	1 (2)
アレルギー性皮膚炎	0	1 (1)	2 (3)	3 (2)	0
皮膚乾燥	0	2 (2)	0	2 (1)	0
斑状皮疹	0	0	2 (3)	2 (1)	0
皮膚灼熱感	0	0	2 (3)	2 (1)	0
皮膚のつっぱり感	0	1 (1)	1 (1)	2 (1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
斑状出血	2 (3)	0	1 (1)	1 (<1)	0
過角化	0	1 (1)	0	1 (<1)	0
掌蹠角化症	0	1 (1)	0	1 (<1)	0
内出血発生の増加傾向	0	0	1 (1)	1 (<1)	0
光線過敏性反応	0	1 (1)	0	1 (<1)	0
痒疹	0	1 (1)	0	1 (<1)	0
乾癬	1 (1)	0	1 (1)	1 (<1)	0
全身性皮疹	0	0	1 (1)	1 (<1)	0
酒さ	1 (1)	1 (1)	0	1 (<1)	0
皮膚色素過剰	0	1 (1)	0	1 (<1)	0
皮膚病変	1 (1)	1 (1)	0	1 (<1)	0
顔面腫脹	0	0	1 (1)	1 (<1)	1 (2)
頭部粃糠疹	0	0	0	0	1 (2)
皮膚炎	3 (4)	0	0	0	1 (2)
接触性皮膚炎	0	0	0	0	1 (2)
湿疹	1 (1)	0	0	0	0
皮下出血	0	0	0	0	1 (2)
顔面感覚鈍麻	1 (1)	0	0	0	0
神経皮膚炎	0	0	0	0	1 (2)
皮下結節	0	0	0	0	1 (2)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋骨格系および結合組織障害	18 (25)	27 (30)	19 (25)	46 (28)	9 (21)
背部痛	6 (8)	15 (17)	6 (8)	21 (13)	5 (12)
関節痛	4 (5)	8 (9)	6 (8)	14 (8)	1 (2)
四肢痛	4 (5)	9 (10)	4 (5)	13 (8)	1 (2)
筋痙縮	1 (1)	5 (6)	7 (9)	12 (7)	0
頚部痛	3 (4)	3 (3)	2 (3)	5 (3)	1 (2)
関節腫脹	0	2 (2)	1 (1)	3 (2)	0
筋力低下	3 (4)	2 (2)	1 (1)	3 (2)	1 (2)
関節硬直	0	0	2 (3)	2 (1)	0
筋骨格系胸痛	1 (1)	1 (1)	1 (1)	2 (1)	0
筋骨格痛	1 (1)	1 (1)	1 (1)	2 (1)	1 (2)
筋骨格硬直	1 (1)	2 (2)	0	2 (1)	2 (5)
重感	1 (1)	1 (1)	1 (1)	2 (1)	0
関節炎	0	1 (1)	0	1 (<1)	0
滑液包炎	0	1 (1)	0	1 (<1)	0
尾骨痛	0	0	1 (1)	1 (<1)	0
椎間板突出	0	0	1 (1)	1 (<1)	0
筋骨格不快感	0	0	1 (1)	1 (<1)	0
筋肉痛	2 (3)	0	1 (1)	1 (<1)	1 (2)
腱炎	2 (3)	0	1 (1)	1 (<1)	0
弾発指	0	0	1 (1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
骨痛	1 (1)	0	0	0	0
側腹部痛	0	0	0	0	1 (2)
骨壊死	0	0	0	0	1 (2)
骨粗鬆症	1 (1)	0	0	0	0
顎痛	1 (1)	0	0	0	0
関節リウマチ	1 (1)	0	0	0	0
腎および尿路障害	12 (16)	16 (18)	18 (24)	34 (21)	7 (17)
蛋白尿	7 (10)	10 (11)	7 (9)	17 (10)	5 (12)
ミクロアルブミン尿	3 (4)	3 (3)	7 (9)	10 (6)	2 (5)
血尿	3 (4)	5 (6)	3 (4)	8 (5)	2 (5)
ケトン尿	0	3 (3)	1 (1)	4 (2)	0
切迫性尿失禁	0	1 (1)	1 (1)	2 (1)	1 (2)
尿失禁	0	1 (1)	1 (1)	2 (1)	0
尿臭異常	0	1 (1)	1 (1)	2 (1)	0
膀胱刺激症状	0	1 (1)	0	1 (<1)	0
膀胱痛	0	1 (1)	0	1 (<1)	0
膀胱穿孔	0	0	1 (1)	1 (<1)	0
出血性膀胱炎	0	1 (1)	0	1 (<1)	0
排尿困難	1 (1)	1 (1)	0	1 (<1)	0
糖尿	0	1 (1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白血球尿	0	0	1 (1)	1 (<1)	0
尿意切迫	0	1 (1)	0	1 (<1)	0
頻尿	1 (1)	1 (1)	0	1 (<1)	0
腎尿細管性アシドーシス	0	0	1 (1)	1 (<1)	0
排尿躊躇	0	0	1 (1)	1 (<1)	0
尿閉	0	0	1 (1)	1 (<1)	0
膀胱機能障害	1 (1)	0	0	0	0
妊娠、産褥および周産期の状態	1 (1)	0	0	0	0
妊娠浮腫	1 (1)	0	0	0	0
生殖系および乳房障害	7 (10)	12 (13)	9 (12)	21 (13)	4 (10)
月経困難症	1 (1)	3 (3)	1 (1)	4 (2)	0
不規則月経	0	1 (1)	2 (3)	3 (2)	0
不正子宮出血	0	1 (1)	2 (3)	3 (2)	0
無月経	1 (1)	1 (1)	1 (1)	2 (1)	0
月経過多	2 (3)	1 (1)	1 (1)	2 (1)	0
卵巣嚢胞	0	2 (2)	0	2 (1)	1 (2)
骨盤痛	1 (1)	1 (1)	1 (1)	2 (1)	0
バルトリン腺炎	0	0	1 (1)	1 (<1)	0
乳房嚢胞	0	1 (1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
月経遅延	2 (3)	0	1 (1)	1 (<1)	1 (2)
希発月経	0	1 (1)	0	1 (<1)	0
早発閉経	0	1 (1)	0	1 (<1)	0
腟出血	0	1 (1)	0	1 (<1)	0
線維嚢胞性乳腺疾患	1 (1)	0	0	0	0
機能性子宮出血	0	0	0	0	1 (2)
月経障害	1 (1)	0	0	0	1 (2)
頻発月経	0	0	0	0	1 (2)
先天性、家族性および遺伝性障害	1 (1)	0	1 (1)	1 (<1)	0
角膜ジストロフィー	0	0	1 (1)	1 (<1)	0
ジルベール症候群	1 (1)	0	0	0	0
一般・全身障害および投与部位の状態	20 (27)	26 (29)	16 (21)	42 (25)	20 (48)
疲労	11 (15)	14 (16)	7 (9)	21 (13)	3 (7)
発熱	6 (8)	9 (10)	5 (7)	14 (8)	3 (7)
無力症	3 (4)	4 (4)	3 (4)	7 (4)	2 (5)
胸痛	0	3 (3)	1 (1)	4 (2)	0
歩行障害	3 (4)	1 (1)	3 (4)	4 (2)	1 (2)
疼痛	0	2 (2)	1 (1)	3 (2)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
末梢性浮腫	1 (1)	0	2 (3)	2 (1)	0
腋窩痛	0	0	1 (1)	1 (<1)	0
胸部不快感	0	0	1 (1)	1 (<1)	0
嚢胞	0	0	1 (1)	1 (<1)	0
医療機器関連眼合併症	1 (1)	1 (1)	0	1 (<1)	0
顔面痛	0	0	1 (1)	1 (<1)	0
熱感	0	1 (1)	0	1 (<1)	0
注射部位血腫	0	0	1 (1)	1 (<1)	0
倦怠感	0	1 (1)	0	1 (<1)	0
非心臓性胸痛	0	1 (1)	0	1 (<1)	1 (2)
浮腫	0	1 (1)	0	1 (<1)	0
腫脹	0	1 (1)	0	1 (<1)	0
圧痛	0	0	1 (1)	1 (<1)	0
適用部位浮腫	0	0	0	0	1 (2)
注射部位変色	0	0	0	0	1 (2)
注射部位知覚不全	0	0	0	0	1 (2)
注射部位紅斑	0	0	0	0	3 (7)
注射部位浮腫	0	0	0	0	1 (2)
注射部位疼痛	0	0	0	0	5 (12)
注射部位そう痒感	0	0	0	0	1 (2)
注射部位腫脹	0	0	0	0	1 (2)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
易刺激性	1 (1)	0	0	0	0
微石症	0	0	0	0	1 (2)
臨床検査	20 (27)	23 (26)	24 (32)	47 (28)	13 (31)
アラニン・アミノトランスフェラーゼ増加	1 (1)	6 (7)	4 (5)	10 (6)	3 (7)
尿中アルブミン陽性	5 (7)	8 (9)	2 (3)	10 (6)	2 (5)
アスパラギン酸アミノトランスフェラーゼ増加	0	7 (8)	3 (4)	10 (6)	3 (7)
血中副甲状腺ホルモン増加	2 (3)	3 (3)	4 (5)	7 (4)	1 (2)
血中ブドウ糖増加	0	1 (1)	4 (5)	5 (3)	0
ヘモグロビン減少	1 (1)	2 (2)	3 (4)	5 (3)	0
尿中蛋白陽性	4 (5)	1 (1)	4 (5)	5 (3)	0
白血球数増加	2 (3)	2 (2)	3 (4)	5 (3)	0
尿中β２ミクログロブリン増加	3 (4)	3 (3)	1 (1)	4 (2)	0
尿中血陽性	1 (1)	0	4 (5)	4 (2)	0
γ－グルタミルトランスフェラーゼ増加	1 (1)	3 (3)	1 (1)	4 (2)	1 (2)
ヘマトクリット減少	2 (3)	2 (2)	2 (3)	4 (2)	0
尿中白血球陽性	4 (5)	1 (1)	3 (4)	4 (2)	1 (2)
白血球数減少	0	1 (1)	2 (3)	3 (2)	0
β２ミクログロブリン増加	0	1 (1)	1 (1)	2 (1)	0
血中クレアチニン増加	0	2 (2)	0	2 (1)	0
リンパ球数減少	0	0	2 (3)	2 (1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
好中球数減少	0	1 (1)	1 (1)	2 (1)	0
赤血球数減少	1 (1)	1 (1)	1 (1)	2 (1)	0
ビタミンＤ減少	0	2 (2)	0	2 (1)	0
ビタミンＤ増加	1 (1)	0	2 (3)	2 (1)	0
アラニン・アミノトランスフェラーゼ異常	0	1 (1)	0	1 (<1)	0
アスパラギン酸アミノトランスフェラーゼ異常	0	1 (1)	0	1 (<1)	0
細菌検査陽性	1 (1)	0	1 (1)	1 (<1)	0
血中アルカリホスファターゼ異常	0	1 (1)	0	1 (<1)	0
血中アルカリホスファターゼ増加	0	0	1 (1)	1 (<1)	0
血中コレステロール増加	1 (1)	0	1 (1)	1 (<1)	0
血中鉄減少	0	1 (1)	0	1 (<1)	0
血中乳酸脱水素酵素増加	0	1 (1)	0	1 (<1)	0
血中カリウム増加	0	0	1 (1)	1 (<1)	0
結腸内視鏡検査	0	1 (1)	0	1 (<1)	0
心電図ＱＴ延長	2 (3)	1 (1)	0	1 (<1)	0
心電図ＳＴ部分下降	0	0	1 (1)	1 (<1)	1 (2)
大腸菌検査陽性	0	1 (1)	0	1 (<1)	0
γ－グルタミルトランスフェラーゼ異常	0	1 (1)	0	1 (<1)	0
血液学的検査異常	1 (1)	1 (1)	0	1 (<1)	0
心拍数増加	0	1 (1)	0	1 (<1)	0
高比重リポ蛋白増加	0	0	1 (1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
リンパ球形態異常	0	0	1 (1)	1 (<1)	0
単球数減少	0	0	1 (1)	1 (<1)	0
好中球数増加	1 (1)	0	1 (1)	1 (<1)	0
脳核磁気共鳴画像異常	1 (1)	1 (1)	0	1 (<1)	0
血小板数増加	0	1 (1)	0	1 (<1)	0
赤血球数増加	0	1 (1)	0	1 (<1)	0
尿中赤血球陽性	0	0	1 (1)	1 (<1)	1 (2)
尿中ケトン体陽性	0	1 (1)	0	1 (<1)	0
血中重炭酸塩減少	1 (1)	0	0	0	0
血中ビリルビン増加	1 (1)	0	0	0	1 (2)
血中カルシウム増加	1 (1)	0	0	0	0
血中ナトリウム増加	0	0	0	0	1 (2)
血中トリグリセリド増加	1 (1)	0	0	0	1 (2)
尿中結晶陽性	1 (1)	0	0	0	0
心電図異常	1 (1)	0	0	0	0
尿中ブドウ糖陽性	0	0	0	0	1 (2)
肝酵素上昇	0	0	0	0	1 (2)
血小板数減少	0	0	0	0	3 (7)
前庭機能検査異常	0	0	0	0	1 (2)
体重減少	0	0	0	0	1 (2)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
傷害、中毒および処置合併症	9 (12)	17 (19)	8 (11)	25 (15)	3 (7)
転倒	5 (7)	4 (4)	3 (4)	7 (4)	0
足骨折	0	3 (3)	0	3 (2)	0
関節捻挫	0	2 (2)	1 (1)	3 (2)	0
挫傷	1 (1)	1 (1)	1 (1)	2 (1)	0
大腿骨骨折	0	1 (1)	1 (1)	2 (1)	0
半月板障害	0	1 (1)	1 (1)	2 (1)	0
交通事故	0	0	2 (3)	2 (1)	0
動物咬傷	0	1 (1)	0	1 (<1)	0
足関節部骨折	0	1 (1)	0	1 (<1)	0
節足動物咬傷	0	0	1 (1)	1 (<1)	0
造影剤反応	0	0	1 (1)	1 (<1)	0
眼外傷	0	0	1 (1)	1 (<1)	0
尾骨骨折	0	0	1 (1)	1 (<1)	0
関節損傷	1 (1)	1 (1)	0	1 (<1)	0
靭帯断裂	0	0	1 (1)	1 (<1)	0
筋断裂	0	1 (1)	0	1 (<1)	0
肉離れ	0	1 (1)	0	1 (<1)	0
処置後浮腫	0	0	1 (1)	1 (<1)	0
処置による疼痛	0	0	1 (1)	1 (<1)	0
網膜損傷	0	1 (1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
骨格損傷	1 (1)	0	1 (1)	1 (<1)	0
皮膚裂傷	0	1 (1)	0	1 (<1)	0
熱傷	1 (1)	1 (1)	0	1 (<1)	1 (2)
外傷性血腫	0	1 (1)	0	1 (<1)	0
むち打ち損傷	0	1 (1)	0	1 (<1)	0
創し開	0	0	1 (1)	1 (<1)	0
擦過傷	1 (1)	0	0	0	0
手骨折	0	0	0	0	1 (2)
頭部損傷	2 (3)	0	0	0	1 (2)
関節脱臼	1 (1)	0	0	0	0
頚部損傷	0	0	0	0	1 (2)
有毒性刺傷	1 (1)	0	0	0	0
外科および内科処置	0	1 (1)	0	1 (<1)	0
女性不妊手術	0	1 (1)	0	1 (<1)	0
社会環境	0	1 (1)	0	1 (<1)	0
閉経	0	1 (1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	628 (100)	597 (100)	606 (100)	1203 (100)	270 (100)
Number of subjects with an event	582 (93)	569 (95)	565 (93)	1134 (94)	235 (87)
感染症および寄生虫症	356 (57)	360 (60)	375 (62)	735 (61)	137 (51)
鼻咽頭炎	126 (20)	131 (22)	143 (24)	274 (23)	44 (16)
尿路感染	75 (12)	82 (14)	74 (12)	156 (13)	32 (12)
上気道感染	68 (11)	73 (12)	74 (12)	147 (12)	17 (6)
インフルエンザ	53 (8)	40 (7)	53 (9)	93 (8)	9 (3)
副鼻腔炎	23 (4)	28 (5)	43 (7)	71 (6)	8 (3)
気管支炎	20 (3)	26 (4)	44 (7)	70 (6)	14 (5)
胃腸炎	22 (4)	30 (5)	27 (4)	57 (5)	4 (1)
咽頭炎	23 (4)	24 (4)	24 (4)	48 (4)	9 (3)
鼻炎	21 (3)	17 (3)	17 (3)	34 (3)	6 (2)
気道感染	12 (2)	14 (2)	18 (3)	32 (3)	8 (3)
口腔ヘルペス	21 (3)	20 (3)	10 (2)	30 (2)	6 (2)
ウイルス性胃腸炎	14 (2)	13 (2)	14 (2)	27 (2)	4 (1)
膀胱炎	15 (2)	8 (1)	16 (3)	24 (2)	4 (1)
ウイルス感染	14 (2)	11 (2)	10 (2)	21 (2)	4 (1)

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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
喉頭炎	5 (<1)	8 (1)	10 (2)	18 (1)	0
耳感染	9 (1)	4 (<1)	13 (2)	17 (1)	2 (<1)
ウイルス性上気道感染	7 (1)	10 (2)	7 (1)	17 (1)	5 (2)
中耳炎	1 (<1)	7 (1)	9 (1)	16 (1)	1 (<1)
扁桃炎	7 (1)	7 (1)	8 (1)	15 (1)	2 (<1)
外陰腟真菌感染	11 (2)	5 (<1)	10 (2)	15 (1)	4 (1)
消化管感染	5 (<1)	4 (<1)	10 (2)	14 (1)	2 (<1)
帯状疱疹	7 (1)	6 (1)	8 (1)	14 (1)	2 (<1)
歯膿瘍	8 (1)	7 (1)	6 (<1)	13 (1)	4 (1)
腟感染	2 (<1)	8 (1)	5 (<1)	13 (1)	5 (2)
感染性結膜炎	1 (<1)	3 (<1)	7 (1)	10 (<1)	0
麦粒腫	4 (<1)	4 (<1)	4 (<1)	8 (<1)	0
歯感染	3 (<1)	3 (<1)	5 (<1)	8 (<1)	4 (1)
せつ	1 (<1)	5 (<1)	1 (<1)	6 (<1)	0
下気道感染	4 (<1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
爪真菌症	1 (<1)	6 (1)	0	6 (<1)	0
レンサ球菌性咽頭炎	8 (1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
咽頭扁桃炎	1 (<1)	4 (<1)	2 (<1)	6 (<1)	1 (<1)
肺炎	3 (<1)	3 (<1)	3 (<1)	6 (<1)	6 (2)
ウイルス性気道感染	4 (<1)	5 (<1)	1 (<1)	6 (<1)	0
気管炎	2 (<1)	4 (<1)	2 (<1)	6 (<1)	2 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
外陰部腟カンジダ症	2 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
細菌尿	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
蜂巣炎	1 (<1)	3 (<1)	1 (<1)	4 (<1)	1 (<1)
ウイルス性消化管感染	3 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
Ｈ１Ｎ１インフルエンザ	1 (<1)	2 (<1)	2 (<1)	4 (<1)	2 (<1)
皮下組織膿瘍	0	2 (<1)	2 (<1)	4 (<1)	0
癜風	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
遊走性紅斑	0	1 (<1)	2 (<1)	3 (<1)	0
毛包炎	4 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
陰部ヘルペス	2 (<1)	3 (<1)	0	3 (<1)	1 (<1)
ヘリコバクター性胃炎	0	1 (<1)	2 (<1)	3 (<1)	1 (<1)
咬傷感染	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
歯周感染	2 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
細菌性副鼻腔炎	0	2 (<1)	1 (<1)	3 (<1)	0
急性副鼻腔炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
急性扁桃炎	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
細菌感染	1 (<1)	2 (<1)	0	2 (<1)	0
細菌性結膜炎	0	1 (<1)	1 (<1)	2 (<1)	0
眼感染	2 (<1)	2 (<1)	0	2 (<1)	0
ヘリコバクター感染	0	1 (<1)	1 (<1)	2 (<1)	0
単純ヘルペス	2 (<1)	0	2 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
切開部位感染	0	2 (<1)	0	2 (<1)	0
伝染性単核症	0	1 (<1)	1 (<1)	2 (<1)	0
限局性感染	1 (<1)	2 (<1)	0	2 (<1)	0
口腔カンジダ症	2 (<1)	0	2 (<1)	2 (<1)	0
外耳炎	1 (<1)	2 (<1)	0	2 (<1)	1 (<1)
骨盤内炎症性疾患	1 (<1)	0	2 (<1)	2 (<1)	0
術後創感染	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
陰嚢膿瘍	0	0	2 (<1)	2 (<1)	0
細菌性腟炎	2 (<1)	2 (<1)	0	2 (<1)	2 (<1)
外陰部炎	0	2 (<1)	0	2 (<1)	0
ダニ症	0	0	1 (<1)	1 (<1)	0
虫垂炎	0	1 (<1)	0	1 (<1)	1 (<1)
無症候性細菌尿	1 (<1)	0	1 (<1)	1 (<1)	0
ボレリア感染	2 (<1)	1 (<1)	0	1 (<1)	0
乳房膿瘍	0	0	1 (<1)	1 (<1)	0
ウイルス性気管支炎	0	0	1 (<1)	1 (<1)	1 (<1)
気管支肺炎	0	1 (<1)	0	1 (<1)	0
子宮頚管炎	0	1 (<1)	0	1 (<1)	1 (<1)
ウイルス性結膜炎	1 (<1)	0	1 (<1)	1 (<1)	0
デング熱	0	1 (<1)	0	1 (<1)	1 (<1)
感染性皮膚炎	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
感染性湿疹	0	0	1 (<1)	1 (<1)	0
エプスタイン・バーウイルス感染	0	0	1 (<1)	1 (<1)	0
大腸菌性尿路感染	0	1 (<1)	0	1 (<1)	0
熱性感染症	1 (<1)	0	1 (<1)	1 (<1)	0
ロタウイルス胃腸炎	0	1 (<1)	0	1 (<1)	0
性器カンジダ症	0	1 (<1)	0	1 (<1)	0
細菌性性器感染	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
泌尿生殖器感染	0	1 (<1)	0	1 (<1)	0
ジアルジア症	0	1 (<1)	0	1 (<1)	0
歯肉感染	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
神経合併症を伴う帯状疱疹感染	0	1 (<1)	0	1 (<1)	0
眼帯状疱疹	0	0	1 (<1)	1 (<1)	0
膿痂疹	0	0	1 (<1)	1 (<1)	0
感染性嚢腫	1 (<1)	1 (<1)	0	1 (<1)	0
感染性皮脂嚢腫	0	0	1 (<1)	1 (<1)	0
感染	0	0	1 (<1)	1 (<1)	1 (<1)
迷路炎	1 (<1)	1 (<1)	0	1 (<1)	0
シラミ寄生	0	0	1 (<1)	1 (<1)	0
マイコプラズマ感染	0	0	1 (<1)	1 (<1)	0
口腔真菌感染	1 (<1)	0	1 (<1)	1 (<1)	0
爪囲炎	1 (<1)	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
扁桃周囲膿瘍	0	0	1 (<1)	1 (<1)	0
歯髄炎	1 (<1)	1 (<1)	0	1 (<1)	0
腎盂腎炎	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
膿疱性皮疹	0	1 (<1)	0	1 (<1)	1 (<1)
卵管卵巣炎	0	1 (<1)	0	1 (<1)	0
皮膚細菌感染	0	0	1 (<1)	1 (<1)	0
皮膚感染	0	1 (<1)	0	1 (<1)	0
軟部組織感染	0	1 (<1)	0	1 (<1)	0
気管気管支炎	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
腸チフス熱	0	0	1 (<1)	1 (<1)	0
細菌性上気道感染	1 (<1)	1 (<1)	0	1 (<1)	0
真菌性尿路感染	0	1 (<1)	0	1 (<1)	0
泌尿生殖器真菌感染	0	0	1 (<1)	1 (<1)	0
ガードネレラ菌性腟炎	0	1 (<1)	0	1 (<1)	0
水痘	0	1 (<1)	0	1 (<1)	0
ウイルス性咽頭炎	1 (<1)	1 (<1)	0	1 (<1)	0
ウイルス性鼻炎	0	0	1 (<1)	1 (<1)	0
外陰部膿瘍	0	0	1 (<1)	1 (<1)	0
膿瘍	1 (<1)	0	0	0	0
顎膿瘍	1 (<1)	0	0	0	0
四肢膿瘍	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
肛門膿瘍	1 (<1)	0	0	0	0
カンジダ症	0	0	0	0	1 (<1)
慢性副鼻腔炎	0	0	0	0	1 (<1)
医療機器関連感染	1 (<1)	0	0	0	0
感染性下痢	1 (<1)	0	0	0	0
細菌性心内膜炎	1 (<1)	0	0	0	0
真菌感染	2 (<1)	0	0	0	1 (<1)
皮膚真菌感染	0	0	0	0	1 (<1)
真菌性消化管感染	1 (<1)	0	0	0	0
ヘルペスウイルス感染	1 (<1)	0	0	0	1 (<1)
寄生虫感染	0	0	0	0	1 (<1)
ライム病	0	0	0	0	1 (<1)
乳様突起炎	0	0	0	0	1 (<1)
ムンプス	1 (<1)	0	0	0	0
パラインフルエンザウイルス感染	1 (<1)	0	0	0	0
子宮傍組織炎	0	0	0	0	1 (<1)
耳下腺炎	0	0	0	0	1 (<1)
細菌性咽頭炎	2 (<1)	0	0	0	1 (<1)
ウイルス感染後疲労症候群	1 (<1)	0	0	0	0
膿胸	0	0	0	0	1 (<1)
ライター症候群	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
猩紅熱	1 (<1)	0	0	0	0
敗血症	2 (<1)	0	0	0	0
レンサ球菌感染	1 (<1)	0	0	0	0
白癬感染	1 (<1)	0	0	0	0
足部白癬	3 (<1)	0	0	0	0
消化器結核	1 (<1)	0	0	0	0
細菌性尿路感染	1 (<1)	0	0	0	0
尿路性敗血症	2 (<1)	0	0	0	0
膣膿瘍	1 (<1)	0	0	0	0
創傷感染	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	13 (2)	19 (3)	22 (4)	41 (3)	7 (3)
皮膚乳頭腫	1 (<1)	5 (<1)	3 (<1)	8 (<1)	0
脂肪腫	0	3 (<1)	4 (<1)	7 (<1)	1 (<1)
メラノサイト性母斑	3 (<1)	1 (<1)	4 (<1)	5 (<1)	1 (<1)
子宮平滑筋腫	0	2 (<1)	3 (<1)	5 (<1)	2 (<1)
線維腫	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
乳腺線維腺腫	0	1 (<1)	1 (<1)	2 (<1)	0
肺新生物	0	1 (<1)	1 (<1)	2 (<1)	0
甲状腺新生物	1 (<1)	2 (<1)	0	2 (<1)	0

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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
基底細胞癌	0	1 (<1)	0	1 (<1)	0
肺の良性新生物	0	1 (<1)	0	1 (<1)	0
乳癌	1 (<1)	0	1 (<1)	1 (<1)	0
子宮頚部癌	0	0	1 (<1)	1 (<1)	1 (<1)
泌尿生殖器新生物	0	0	1 (<1)	1 (<1)	0
血管腫	1 (<1)	0	1 (<1)	1 (<1)	0
肝臓血管腫	0	0	1 (<1)	1 (<1)	0
神経鞘腫	0	1 (<1)	0	1 (<1)	0
乳頭腫	0	0	1 (<1)	1 (<1)	0
脂漏性角化症	0	0	1 (<1)	1 (<1)	0
外陰腟ヒト乳頭腫ウイルス感染	0	1 (<1)	0	1 (<1)	0
アクロコルドン	1 (<1)	0	0	0	0
リンパ節の良性新生物	1 (<1)	0	0	0	0
乳房新生物	1 (<1)	0	0	0	0
子宮内膜癌	0	0	0	0	1 (<1)
線維性組織球腫	0	0	0	0	1 (<1)
皮膚の新生物	1 (<1)	0	0	0	0
口腔新生物	1 (<1)	0	0	0	0
良性副甲状腺腫瘍	1 (<1)	0	0	0	0
転移性甲状腺癌	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血液およびリンパ系障害	26 (4)	36 (6)	48 (8)	84 (7)	7 (3)
リンパ球減少症	1 (<1)	14 (2)	17 (3)	31 (3)	0
貧血	13 (2)	8 (1)	16 (3)	24 (2)	4 (1)
白血球減少症	0	6 (1)	9 (1)	15 (1)	0
リンパ節症	2 (<1)	3 (<1)	6 (<1)	9 (<1)	2 (<1)
好中球増加症	4 (<1)	2 (<1)	5 (<1)	7 (<1)	0
好酸球増加症	0	1 (<1)	5 (<1)	6 (<1)	0
白血球増加症	4 (<1)	5 (<1)	1 (<1)	6 (<1)	0
鉄欠乏性貧血	3 (<1)	3 (<1)	2 (<1)	5 (<1)	0
好中球減少症	0	0	3 (<1)	3 (<1)	0
血小板減少症	0	2 (<1)	0	2 (<1)	0
正色素性正球性貧血	0	0	1 (<1)	1 (<1)	0
低色素性貧血	0	0	0	0	1 (<1)
リンパ節炎	1 (<1)	0	0	0	0
小球性貧血	1 (<1)	0	0	0	0
血小板増加症	1 (<1)	0	0	0	0
免疫系障害	15 (2)	16 (3)	16 (3)	32 (3)	8 (3)
過敏症	2 (<1)	9 (2)	5 (<1)	14 (1)	1 (<1)
季節性アレルギー	8 (1)	2 (<1)	6 (<1)	8 (<1)	3 (1)
食物アレルギー	1 (<1)	4 (<1)	2 (<1)	6 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
薬物過敏症	3 (<1)	1 (<1)	2 (<1)	3 (<1)	2 (<1)
造影剤アレルギー	0	1 (<1)	0	1 (<1)	0
家塵アレルギー	2 (<1)	0	1 (<1)	1 (<1)	0
免疫不全症	0	0	1 (<1)	1 (<1)	0
続発性免疫不全症	0	0	1 (<1)	1 (<1)	0
アナフィラキシー反応	0	0	0	0	2 (<1)
内分泌障害	8 (1)	5 (<1)	8 (1)	13 (1)	3 (1)
甲状腺機能低下症	4 (<1)	1 (<1)	3 (<1)	4 (<1)	2 (<1)
甲状腺腫	0	2 (<1)	0	2 (<1)	1 (<1)
副甲状腺機能亢進症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
自己免疫性甲状腺炎	0	1 (<1)	0	1 (<1)	0
間脳性内分泌障害	0	0	1 (<1)	1 (<1)	0
原発性副甲状腺機能亢進症	0	0	1 (<1)	1 (<1)	0
エストロゲン欠乏症	0	0	1 (<1)	1 (<1)	0
甲状腺腫瘤	0	0	1 (<1)	1 (<1)	0
副腎腫瘤	1 (<1)	0	0	0	0
甲状腺機能亢進症	2 (<1)	0	0	0	0
代謝および栄養障害	41 (7)	39 (7)	42 (7)	81 (7)	14 (5)
食欲減退	8 (1)	11 (2)	12 (2)	23 (2)	3 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
高コレステロール血症	3 (<1)	5 (<1)	6 (<1)	11 (<1)	2 (<1)
ビタミンD欠乏	4 (<1)	4 (<1)	6 (<1)	10 (<1)	1 (<1)
高血糖	5 (<1)	3 (<1)	5 (<1)	8 (<1)	1 (<1)
脱水	1 (<1)	3 (<1)	1 (<1)	4 (<1)	0
糖尿病	3 (<1)	1 (<1)	2 (<1)	3 (<1)	0
脂質異常症	0	0	3 (<1)	3 (<1)	0
耐糖能障害	0	1 (<1)	2 (<1)	3 (<1)	0
高脂血症	4 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
鉄欠乏	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
ビタミンＢ１２欠乏	0	0	3 (<1)	3 (<1)	0
高トリグリセリド血症	2 (<1)	1 (<1)	1 (<1)	2 (<1)	4 (1)
低カリウム血症	0	1 (<1)	1 (<1)	2 (<1)	0
ビタミン欠乏症	1 (<1)	2 (<1)	0	2 (<1)	0
２型糖尿病	0	2 (<1)	0	2 (<1)	0
糖尿病性ケトアシドーシス	2 (<1)	0	1 (<1)	1 (<1)	0
痛風	1 (<1)	1 (<1)	0	1 (<1)	0
高ナトリウム血症	0	0	1 (<1)	1 (<1)	0
高尿酸血症	0	1 (<1)	0	1 (<1)	3 (1)
低血糖症	0	0	1 (<1)	1 (<1)	0
過小食	0	0	1 (<1)	1 (<1)	0
低リン酸血症	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
食欲亢進	3 (<1)	1 (<1)	0	1 (<1)	0
亜鉛欠乏	0	0	1 (<1)	1 (<1)	0
葉酸欠乏	1 (<1)	0	0	0	0
高カルシウム血症	1 (<1)	0	0	0	0
高カリウム血症	1 (<1)	0	0	0	1 (<1)
ビタミンD過剰症	1 (<1)	0	0	0	0
低ナトリウム血症	1 (<1)	0	0	0	0
肥満	1 (<1)	0	0	0	0
精神障害	127 (20)	106 (18)	104 (17)	210 (17)	41 (15)
うつ病	51 (8)	43 (7)	37 (6)	80 (7)	16 (6)
不眠症	33 (5)	26 (4)	24 (4)	50 (4)	8 (3)
不安	20 (3)	25 (4)	23 (4)	48 (4)	5 (2)
抑うつ気分	13 (2)	11 (2)	6 (<1)	17 (1)	4 (1)
睡眠障害	9 (1)	6 (1)	6 (<1)	12 (<1)	2 (<1)
感情障害	3 (<1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
気分動揺	3 (<1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
気分変化	0	2 (<1)	3 (<1)	5 (<1)	0
ストレス	3 (<1)	3 (<1)	2 (<1)	5 (<1)	3 (1)
パニック発作	1 (<1)	0	4 (<1)	4 (<1)	0
抑うつ症状	3 (<1)	1 (<1)	2 (<1)	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
初期不眠症	0	0	3 (<1)	3 (<1)	0
リビドー減退	0	2 (<1)	1 (<1)	3 (<1)	0
神経過敏	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
神経症	0	2 (<1)	1 (<1)	3 (<1)	0
感情不安定	3 (<1)	0	2 (<1)	2 (<1)	2 (<1)
身体表現性障害	3 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
自殺念慮	1 (<1)	2 (<1)	0	2 (<1)	1 (<1)
異常行動	0	1 (<1)	0	1 (<1)	0
異常な夢	1 (<1)	0	1 (<1)	1 (<1)	0
抑うつ気分を伴う適応障害	0	1 (<1)	0	1 (<1)	0
不安障害	2 (<1)	1 (<1)	0	1 (<1)	0
双極１型障害	0	1 (<1)	0	1 (<1)	0
歯ぎしり	1 (<1)	0	1 (<1)	1 (<1)	0
燃え尽き症候群	0	1 (<1)	0	1 (<1)	0
情動障害	0	0	1 (<1)	1 (<1)	0
全般性不安障害	0	1 (<1)	0	1 (<1)	0
幻聴	0	1 (<1)	0	1 (<1)	0
大うつ病	0	0	1 (<1)	1 (<1)	0
躁病	0	1 (<1)	0	1 (<1)	0
自己愛性人格障害	0	1 (<1)	0	1 (<1)	0
パニック障害	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
人格変化	0	1 (<1)	0	1 (<1)	0
精神症状	0	1 (<1)	0	1 (<1)	0
精神病性障害	0	0	1 (<1)	1 (<1)	0
落ち着きのなさ	0	1 (<1)	0	1 (<1)	0
自殺企図	0	0	1 (<1)	1 (<1)	1 (<1)
適応障害	0	0	0	0	1 (<1)
攻撃性	1 (<1)	0	0	0	0
激越	1 (<1)	0	0	0	0
怒り	1 (<1)	0	0	0	0
気晴らし食い	1 (<1)	0	0	0	0
精神緩慢	1 (<1)	0	0	0	0
自殺既遂	0	0	0	0	1 (<1)
錯乱状態	1 (<1)	0	0	0	0
性的興奮障害	1 (<1)	0	0	0	0
不快気分	1 (<1)	0	0	0	0
多幸気分	1 (<1)	0	0	0	0
幻覚	1 (<1)	0	0	0	0
故意の自傷行為	0	0	0	0	1 (<1)
精神障害	0	0	0	0	1 (<1)
中期不眠症	1 (<1)	0	0	0	0
悪夢	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
強迫性障害	1 (<1)	0	0	0	0
タバコ乱用	1 (<1)	0	0	0	0
神経系障害	416 (66)	309 (52)	318 (52)	627 (52)	137 (51)
多発性硬化症再発	280 (45)	181 (30)	153 (25)	334 (28)	91 (34)
頭痛	101 (16)	95 (16)	105 (17)	200 (17)	38 (14)
錯感覚	57 (9)	39 (7)	46 (8)	85 (7)	11 (4)
感覚鈍麻	36 (6)	21 (4)	36 (6)	57 (5)	12 (4)
浮動性めまい	28 (4)	23 (4)	27 (4)	50 (4)	7 (3)
灼熱感	10 (2)	14 (2)	23 (4)	37 (3)	0
片頭痛	19 (3)	16 (3)	19 (3)	35 (3)	3 (1)
筋痙直	25 (4)	12 (2)	14 (2)	26 (2)	4 (1)
感覚障害	7 (1)	8 (1)	9 (1)	17 (1)	1 (<1)
平衡障害	7 (1)	8 (1)	7 (1)	15 (1)	1 (<1)
異常感覚	2 (<1)	12 (2)	3 (<1)	15 (1)	0
多発性硬化症	14 (2)	5 (<1)	6 (<1)	11 (<1)	4 (1)
坐骨神経痛	4 (<1)	7 (1)	4 (<1)	11 (<1)	2 (<1)
緊張性頭痛	6 (<1)	5 (<1)	6 (<1)	11 (<1)	2 (<1)
振戦	8 (1)	6 (1)	5 (<1)	11 (<1)	2 (<1)
レルミット徴候	5 (<1)	3 (<1)	7 (1)	10 (<1)	1 (<1)
神経痛	5 (<1)	7 (1)	3 (<1)	10 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
傾眠	7 (1)	4 (<1)	6 (<1)	10 (<1)	2 (<1)
構語障害	1 (<1)	3 (<1)	6 (<1)	9 (<1)	0
味覚異常	0	3 (<1)	5 (<1)	8 (<1)	0
健忘	4 (<1)	4 (<1)	3 (<1)	7 (<1)	0
失神	4 (<1)	1 (<1)	6 (<1)	7 (<1)	2 (<1)
認知障害	0	1 (<1)	5 (<1)	6 (<1)	1 (<1)
前兆を伴う片頭痛	2 (<1)	6 (1)	0	6 (<1)	1 (<1)
副鼻腔炎に伴う頭痛	1 (<1)	2 (<1)	4 (<1)	6 (<1)	2 (<1)
ウートホフ現象	3 (<1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
注意力障害	0	2 (<1)	3 (<1)	5 (<1)	1 (<1)
記憶障害	4 (<1)	4 (<1)	1 (<1)	5 (<1)	3 (1)
下肢静止不能症候群	4 (<1)	2 (<1)	3 (<1)	5 (<1)	4 (1)
三叉神経痛	8 (1)	2 (<1)	3 (<1)	5 (<1)	2 (<1)
運動失調	2 (<1)	1 (<1)	3 (<1)	4 (<1)	0
帯状感	0	1 (<1)	3 (<1)	4 (<1)	0
知覚過敏	4 (<1)	3 (<1)	1 (<1)	4 (<1)	0
神経圧迫	1 (<1)	0	4 (<1)	4 (<1)	0
失神寸前の状態	3 (<1)	2 (<1)	2 (<1)	4 (<1)	2 (<1)
過眠症	3 (<1)	1 (<1)	2 (<1)	3 (<1)	0
味覚消失	0	1 (<1)	1 (<1)	2 (<1)	0
頚髄神経根痛	1 (<1)	0	2 (<1)	2 (<1)	2 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
頚原性頭痛	0	1 (<1)	1 (<1)	2 (<1)	0
振動覚低下	2 (<1)	2 (<1)	0	2 (<1)	0
てんかん	1 (<1)	2 (<1)	0	2 (<1)	0
顔面不全麻痺	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
大発作痙攣	2 (<1)	0	2 (<1)	2 (<1)	0
頭部動揺	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
不全片麻痺	2 (<1)	0	2 (<1)	2 (<1)	0
反射亢進	4 (<1)	2 (<1)	0	2 (<1)	1 (<1)
肋間神経痛	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
意識消失	2 (<1)	0	2 (<1)	2 (<1)	1 (<1)
不随意性筋収縮	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
眼振	0	0	2 (<1)	2 (<1)	0
視神経炎	0	1 (<1)	1 (<1)	2 (<1)	0
一過性脳虚血発作	0	1 (<1)	1 (<1)	2 (<1)	0
意識変容状態	0	0	1 (<1)	1 (<1)	0
自律神経失調	0	0	1 (<1)	1 (<1)	0
手根管症候群	5 (<1)	1 (<1)	0	1 (<1)	2 (<1)
小脳症候群	1 (<1)	0	1 (<1)	1 (<1)	0
概日リズム睡眠障害	0	1 (<1)	0	1 (<1)	0
不器用	0	1 (<1)	0	1 (<1)	1 (<1)
協調運動異常	0	0	1 (<1)	1 (<1)	0

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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
泣き	0	0	1 (<1)	1 (<1)	0
体位性めまい	0	1 (<1)	0	1 (<1)	0
てんかんの前兆	0	1 (<1)	0	1 (<1)	0
顔面神経障害	0	0	1 (<1)	1 (<1)	0
顔面部神経痛	0	1 (<1)	0	1 (<1)	0
蟻走感	0	0	1 (<1)	1 (<1)	1 (<1)
舌咽神経痛	0	1 (<1)	0	1 (<1)	0
思考散乱	0	0	1 (<1)	1 (<1)	0
脳圧低下	0	0	1 (<1)	1 (<1)	0
虚血性脳卒中	0	0	1 (<1)	1 (<1)	0
嗜眠	0	0	1 (<1)	1 (<1)	0
腰髄神経根障害	1 (<1)	1 (<1)	0	1 (<1)	0
運動機能障害	0	0	1 (<1)	1 (<1)	0
神経学的症状	0	1 (<1)	0	1 (<1)	0
末梢性ニューロパチー	2 (<1)	0	1 (<1)	1 (<1)	1 (<1)
部分発作	0	1 (<1)	0	1 (<1)	0
腓骨神経麻痺	0	1 (<1)	0	1 (<1)	1 (<1)
睡眠の質低下	0	1 (<1)	0	1 (<1)	1 (<1)
頚髄神経根炎	0	1 (<1)	0	1 (<1)	0
逆行性健忘	0	1 (<1)	0	1 (<1)	0
二次性進行型多発性硬化症	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
鎮静	0	0	1 (<1)	1 (<1)	0
感覚消失	0	1 (<1)	0	1 (<1)	0
舌の麻痺	0	1 (<1)	0	1 (<1)	0
一過性全健忘	0	0	1 (<1)	1 (<1)	0
横静脈洞血栓症	0	0	1 (<1)	1 (<1)	0
血管性頭痛	0	0	1 (<1)	1 (<1)	0
第７脳神経麻痺	1 (<1)	1 (<1)	0	1 (<1)	0
視野欠損	1 (<1)	1 (<1)	0	1 (<1)	0
異痛症	1 (<1)	0	0	0	0
失語症	1 (<1)	0	0	0	1 (<1)
中枢神経系病変	1 (<1)	0	0	0	0
中枢痛症候群	1 (<1)	0	0	0	0
脳血管発作	1 (<1)	0	0	0	0
脳血管障害	0	0	0	0	1 (<1)
頚腕症候群	1 (<1)	0	0	0	0
痙攣	3 (<1)	0	0	0	0
よだれ	1 (<1)	0	0	0	0
ジストニー	0	0	0	0	1 (<1)
脳症	1 (<1)	0	0	0	0
顔面痙攣	2 (<1)	0	0	0	1 (<1)
痙性歩行	1 (<1)	0	0	0	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
片側頭痛	3 (<1)	0	0	0	1 (<1)
ホルネル症候群	1 (<1)	0	0	0	0
筋緊張亢進	1 (<1)	0	0	0	0
筋緊張低下	1 (<1)	0	0	0	0
不全単麻痺	1 (<1)	0	0	0	1 (<1)
単麻痺	1 (<1)	0	0	0	0
後頭神経痛	1 (<1)	0	0	0	1 (<1)
起立不耐性	0	0	0	0	1 (<1)
嗅覚錯誤	1 (<1)	0	0	0	0
周期性四肢運動障害	0	0	0	0	1 (<1)
錐体路症候群	1 (<1)	0	0	0	0
片頭痛発作重積	1 (<1)	0	0	0	0
足根管症候群	0	0	0	0	1 (<1)
温度覚鈍麻	1 (<1)	0	0	0	0
振動覚亢進	1 (<1)	0	0	0	1 (<1)
眼障害	76 (12)	58 (10)	60 (10)	118 (10)	22 (8)
眼痛	10 (2)	9 (2)	12 (2)	21 (2)	3 (1)
霧視	16 (3)	8 (1)	11 (2)	19 (2)	5 (2)
結膜炎	6 (<1)	7 (1)	6 (<1)	13 (1)	2 (<1)
複視	9 (1)	5 (<1)	7 (1)	12 (<1)	3 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
視力障害	5 (<1)	6 (1)	4 (<1)	10 (<1)	1 (<1)
眼瞼痙攣	6 (<1)	4 (<1)	4 (<1)	8 (<1)	0
眼乾燥	4 (<1)	7 (1)	1 (<1)	8 (<1)	1 (<1)
視力低下	9 (1)	4 (<1)	3 (<1)	7 (<1)	2 (<1)
アレルギー性結膜炎	2 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
眼充血	0	2 (<1)	2 (<1)	4 (<1)	0
眼の異常感	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
眼瞼炎	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
硝子体浮遊物	0	2 (<1)	1 (<1)	3 (<1)	0
白内障	1 (<1)	0	2 (<1)	2 (<1)	0
霰粒腫	1 (<1)	2 (<1)	0	2 (<1)	0
眼刺激	1 (<1)	0	2 (<1)	2 (<1)	0
緑内障	1 (<1)	0	2 (<1)	2 (<1)	0
光視症	0	1 (<1)	1 (<1)	2 (<1)	0
ブドウ膜炎	0	0	2 (<1)	2 (<1)	2 (<1)
眼精疲労	1 (<1)	0	1 (<1)	1 (<1)	0
アレルギー性眼瞼炎	0	0	1 (<1)	1 (<1)	0
失明	0	0	1 (<1)	1 (<1)	0
眼瞼湿疹	0	1 (<1)	0	1 (<1)	0
眼出血	0	1 (<1)	0	1 (<1)	0
眼そう痒症	2 (<1)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
眼部腫脹	0	0	1 (<1)	1 (<1)	1 (<1)
眼瞼嚢胞	0	1 (<1)	0	1 (<1)	0
眼瞼障害	0	0	1 (<1)	1 (<1)	0
眼瞼浮腫	0	0	1 (<1)	1 (<1)	0
眼瞼下垂	0	0	1 (<1)	1 (<1)	0
遠視	2 (<1)	1 (<1)	0	1 (<1)	0
角膜炎	0	0	1 (<1)	1 (<1)	0
流涙増加	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
瞼板腺炎	0	0	1 (<1)	1 (<1)	0
夜盲	0	0	1 (<1)	1 (<1)	0
眼球運動失調	0	1 (<1)	0	1 (<1)	0
開放隅角緑内障	0	0	1 (<1)	1 (<1)	0
動揺視	0	1 (<1)	0	1 (<1)	0
全眼球炎	0	1 (<1)	0	1 (<1)	0
羞明	1 (<1)	0	1 (<1)	1 (<1)	0
老視	0	1 (<1)	0	1 (<1)	0
屈折障害	1 (<1)	1 (<1)	0	1 (<1)	0
強膜炎	0	1 (<1)	0	1 (<1)	0
乾燥症候群	0	1 (<1)	0	1 (<1)	0
一過性失明	1 (<1)	0	0	0	1 (<1)
片側失明	0	0	0	0	1 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
嚢下白内障	1 (<1)	0	0	0	0
結膜出血	1 (<1)	0	0	0	1 (<1)
結膜刺激	1 (<1)	0	0	0	0
眼瞼紅斑	2 (<1)	0	0	0	0
眼のアレルギー	0	0	0	0	1 (<1)
眼の障害	1 (<1)	0	0	0	0
眼瞼刺激	1 (<1)	0	0	0	0
眼瞼そう痒症	1 (<1)	0	0	0	0
虹彩毛様体炎	0	0	0	0	1 (<1)
黄斑浮腫	1 (<1)	0	0	0	0
近視	1 (<1)	0	0	0	1 (<1)
翼状片	1 (<1)	0	0	0	0
閃輝暗点	1 (<1)	0	0	0	0
硝子体出血	1 (<1)	0	0	0	0
耳および迷路障害	44 (7)	33 (6)	55 (9)	88 (7)	16 (6)
回転性めまい	29 (5)	18 (3)	35 (6)	53 (4)	9 (3)
耳痛	2 (<1)	4 (<1)	8 (1)	12 (<1)	1 (<1)
耳鳴	6 (<1)	4 (<1)	7 (1)	11 (<1)	2 (<1)
頭位性回転性めまい	2 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
耳不快感	0	1 (<1)	2 (<1)	3 (<1)	2 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
聴力低下	2 (<1)	0	3 (<1)	3 (<1)	0
耳閉	1 (<1)	0	2 (<1)	2 (<1)	0
乗物酔い	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
難聴	1 (<1)	1 (<1)	0	1 (<1)	0
感音性難聴	0	1 (<1)	0	1 (<1)	0
耳出血	0	1 (<1)	0	1 (<1)	0
耳管障害	0	0	1 (<1)	1 (<1)	0
耳管機能障害	0	0	1 (<1)	1 (<1)	0
外耳障害	0	0	1 (<1)	1 (<1)	0
外耳痛	0	1 (<1)	0	1 (<1)	0
聴覚過敏	0	0	1 (<1)	1 (<1)	0
鼓膜充血	0	1 (<1)	0	1 (<1)	0
耳垢栓塞	1 (<1)	0	0	0	1 (<1)
外耳道紅斑	1 (<1)	0	0	0	0
中耳の炎症	1 (<1)	0	0	0	0
前庭性運動失調	0	0	0	0	1 (<1)
前庭障害	1 (<1)	0	0	0	0
心臓障害	29 (5)	35 (6)	36 (6)	71 (6)	14 (5)
頻脈	3 (<1)	8 (1)	6 (<1)	14 (1)	5 (2)
動悸	7 (1)	8 (1)	5 (<1)	13 (1)	2 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心室性期外収縮	6 (<1)	2 (<1)	6 (<1)	8 (<1)	0
第一度房室ブロック	1 (<1)	5 (<1)	2 (<1)	7 (<1)	2 (<1)
上室性期外収縮	2 (<1)	4 (<1)	3 (<1)	7 (<1)	1 (<1)
狭心症	0	3 (<1)	2 (<1)	5 (<1)	0
洞性徐脈	2 (<1)	1 (<1)	3 (<1)	4 (<1)	0
期外収縮	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
徐脈	1 (<1)	0	2 (<1)	2 (<1)	2 (<1)
左脚ブロック	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
心臓瘤	0	1 (<1)	1 (<1)	2 (<1)	0
僧帽弁逸脱	0	1 (<1)	1 (<1)	2 (<1)	0
洞性頻脈	3 (<1)	0	2 (<1)	2 (<1)	0
急性冠動脈症候群	0	0	1 (<1)	1 (<1)	0
心房細動	0	0	1 (<1)	1 (<1)	0
右脚ブロック	0	0	1 (<1)	1 (<1)	1 (<1)
心不全	0	0	1 (<1)	1 (<1)	0
心筋症	0	1 (<1)	0	1 (<1)	0
伝導障害	3 (<1)	1 (<1)	0	1 (<1)	0
結節性調律	0	0	1 (<1)	1 (<1)	0
頻脈性不整脈	0	0	1 (<1)	1 (<1)	0
ウォルフ・パーキンソン・ホワイト症候群	0	1 (<1)	0	1 (<1)	0
上室性不整脈	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
上室性頻脈	1 (<1)	0	0	0	0
発作性頻脈	1 (<1)	0	0	0	0
血管障害	70 (11)	246 (41)	215 (35)	461 (38)	20 (7)
潮紅	29 (5)	204 (34)	167 (28)	371 (31)	4 (1)
ほてり	14 (2)	39 (7)	39 (6)	78 (6)	5 (2)
高血圧	20 (3)	8 (1)	13 (2)	21 (2)	10 (4)
充血	0	2 (<1)	6 (<1)	8 (<1)	0
低血圧	1 (<1)	5 (<1)	0	5 (<1)	0
血腫	3 (<1)	1 (<1)	1 (<1)	2 (<1)	2 (<1)
起立性低血圧	2 (<1)	0	2 (<1)	2 (<1)	0
静脈瘤	0	2 (<1)	0	2 (<1)	0
高血圧クリーゼ	1 (<1)	0	1 (<1)	1 (<1)	0
静脈炎	2 (<1)	0	1 (<1)	1 (<1)	0
レイノー現象	2 (<1)	0	1 (<1)	1 (<1)	0
静脈痛	0	1 (<1)	0	1 (<1)	0
静脈不全	0	0	1 (<1)	1 (<1)	0
毛細血管脆弱	1 (<1)	0	0	0	0
深部静脈血栓症	0	0	0	0	1 (<1)
末梢冷感	3 (<1)	0	0	0	0
末梢性虚血	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
静脈狭窄	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	100 (16)	84 (14)	101 (17)	185 (15)	33 (12)
口腔咽頭痛	28 (4)	26 (4)	37 (6)	63 (5)	12 (4)
咳嗽	29 (5)	28 (5)	27 (4)	55 (5)	7 (3)
鼻漏	7 (1)	11 (2)	10 (2)	21 (2)	1 (<1)
呼吸困難	6 (<1)	5 (<1)	4 (<1)	9 (<1)	6 (2)
鼻閉	6 (<1)	4 (<1)	4 (<1)	8 (<1)	1 (<1)
アレルギー性鼻炎	5 (<1)	2 (<1)	6 (<1)	8 (<1)	1 (<1)
喘息	1 (<1)	6 (1)	1 (<1)	7 (<1)	2 (<1)
副鼻腔うっ血	1 (<1)	1 (<1)	6 (<1)	7 (<1)	0
鼻出血	6 (<1)	3 (<1)	3 (<1)	6 (<1)	2 (<1)
上気道咳症候群	1 (<1)	2 (<1)	4 (<1)	6 (<1)	0
湿性咳嗽	3 (<1)	2 (<1)	2 (<1)	4 (<1)	0
上気道うっ血	3 (<1)	0	4 (<1)	4 (<1)	2 (<1)
息詰まり	2 (<1)	0	3 (<1)	3 (<1)	0
口腔咽頭不快感	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
アレルギー性咽頭炎	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
発声障害	3 (<1)	0	2 (<1)	2 (<1)	1 (<1)
しゃっくり	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
咽頭紅斑	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0

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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
咽喉刺激感	1 (<1)	2 (<1)	0	2 (<1)	0
咽喉絞扼感	0	1 (<1)	1 (<1)	2 (<1)	0
喘鳴	1 (<1)	2 (<1)	0	2 (<1)	0
アレルギー性気管支炎	0	0	1 (<1)	1 (<1)	0
アレルギー性副鼻腔炎	1 (<1)	1 (<1)	0	1 (<1)	0
息詰まり感	0	1 (<1)	0	1 (<1)	0
咽喉乾燥	2 (<1)	1 (<1)	0	1 (<1)	0
鼻乾燥	2 (<1)	0	1 (<1)	1 (<1)	0
鼻浮腫	0	0	1 (<1)	1 (<1)	0
口腔咽頭プラーク	1 (<1)	1 (<1)	0	1 (<1)	0
口腔咽頭腫脹	0	0	1 (<1)	1 (<1)	0
呼吸時疼痛	0	0	1 (<1)	1 (<1)	0
副鼻腔分泌過多	0	0	1 (<1)	1 (<1)	0
咽頭嚢腫	0	1 (<1)	0	1 (<1)	0
咽頭腫瘤	0	0	1 (<1)	1 (<1)	0
胸水	0	1 (<1)	0	1 (<1)	0
誤嚥性肺炎	0	1 (<1)	0	1 (<1)	0
呼吸抑制	0	1 (<1)	0	1 (<1)	0
呼吸障害	0	0	1 (<1)	1 (<1)	0
気道うっ血	3 (<1)	0	1 (<1)	1 (<1)	0
気道の炎症	1 (<1)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
副鼻腔障害	1 (<1)	0	1 (<1)	1 (<1)	0
睡眠時無呼吸症候群	0	0	1 (<1)	1 (<1)	1 (<1)
声帯の炎症	0	0	1 (<1)	1 (<1)	0
声帯ポリープ	0	0	1 (<1)	1 (<1)	0
アレルギー性咳嗽	1 (<1)	0	0	0	0
アレルギー性呼吸器症状	1 (<1)	0	0	0	0
慢性気管支炎	1 (<1)	0	0	0	0
労作性呼吸困難	1 (<1)	0	0	0	0
喀血	1 (<1)	0	0	0	0
低換気	0	0	0	0	1 (<1)
鼻部不快感	1 (<1)	0	0	0	0
鼻中隔穿孔	0	0	0	0	1 (<1)
口腔咽頭水疱形成	1 (<1)	0	0	0	0
咽頭の炎症	1 (<1)	0	0	0	0
ラ音	2 (<1)	0	0	0	0
季節性鼻炎	0	0	0	0	1 (<1)
低音性連続性ラ音	2 (<1)	0	0	0	0
くしゃみ	1 (<1)	0	0	0	1 (<1)
上気道の炎症	1 (<1)	0	0	0	0
胃腸障害	238 (38)	281 (47)	320 (53)	601 (50)	50 (19)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
下痢	65 (10)	81 (14)	114 (19)	195 (16)	9 (3)
悪心	52 (8)	72 (12)	76 (13)	148 (12)	13 (5)
上腹部痛	37 (6)	61 (10)	67 (11)	128 (11)	4 (1)
腹痛	32 (5)	59 (10)	54 (9)	113 (9)	4 (1)
嘔吐	27 (4)	48 (8)	42 (7)	90 (7)	8 (3)
消化不良	13 (2)	27 (5)	29 (5)	56 (5)	5 (2)
便秘	29 (5)	21 (4)	20 (3)	41 (3)	6 (2)
胃腸障害	6 (<1)	11 (2)	28 (5)	39 (3)	1 (<1)
胃炎	8 (1)	14 (2)	17 (3)	31 (3)	2 (<1)
歯痛	15 (2)	11 (2)	19 (3)	30 (2)	3 (1)
胃食道逆流性疾患	12 (2)	11 (2)	16 (3)	27 (2)	1 (<1)
腹部不快感	10 (2)	14 (2)	9 (1)	23 (2)	1 (<1)
口内乾燥	6 (<1)	13 (2)	7 (1)	20 (2)	1 (<1)
鼓腸	11 (2)	6 (1)	9 (1)	15 (1)	2 (<1)
痔核	7 (1)	7 (1)	8 (1)	15 (1)	1 (<1)
腹部膨満	6 (<1)	3 (<1)	11 (2)	14 (1)	0
歯周炎	2 (<1)	2 (<1)	9 (1)	11 (<1)	0
下腹部痛	2 (<1)	3 (<1)	7 (1)	10 (<1)	0
嚥下障害	5 (<1)	5 (<1)	5 (<1)	10 (<1)	2 (<1)
食中毒	2 (<1)	4 (<1)	4 (<1)	8 (<1)	1 (<1)
齲歯	1 (<1)	2 (<1)	5 (<1)	7 (<1)	2 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
便失禁	2 (<1)	2 (<1)	3 (<1)	5 (<1)	0
歯肉炎	2 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
便意切迫	0	1 (<1)	3 (<1)	4 (<1)	2 (<1)
裂孔ヘルニア	1 (<1)	4 (<1)	0	4 (<1)	0
大腸炎	2 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
十二指腸潰瘍	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
小腸炎	0	1 (<1)	2 (<1)	3 (<1)	0
心窩部不快感	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
おくび	0	1 (<1)	2 (<1)	3 (<1)	0
胃障害	3 (<1)	1 (<1)	2 (<1)	3 (<1)	0
胃酸過多	2 (<1)	3 (<1)	0	3 (<1)	0
逆流性食道炎	2 (<1)	0	3 (<1)	3 (<1)	1 (<1)
腹部ヘルニア	0	2 (<1)	0	2 (<1)	0
腹部硬直	0	0	2 (<1)	2 (<1)	0
腹部圧痛	2 (<1)	0	2 (<1)	2 (<1)	0
異常便	1 (<1)	2 (<1)	0	2 (<1)	0
結腸ポリープ	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
腸憩室	0	0	2 (<1)	2 (<1)	1 (<1)
排便回数増加	0	1 (<1)	1 (<1)	2 (<1)	0
歯肉痛	1 (<1)	0	2 (<1)	2 (<1)	0
吐血	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
口の感覚鈍麻	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
過敏性腸症候群	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
食道炎	0	2 (<1)	0	2 (<1)	0
口腔内痛	0	1 (<1)	1 (<1)	2 (<1)	0
流涎過多	0	2 (<1)	0	2 (<1)	0
埋伏歯	1 (<1)	0	2 (<1)	2 (<1)	1 (<1)
唾液欠乏	0	1 (<1)	0	1 (<1)	0
便習慣変化	0	0	1 (<1)	1 (<1)	0
口唇炎	0	1 (<1)	0	1 (<1)	0
クローン病	0	1 (<1)	0	1 (<1)	0
憩室穿孔	0	1 (<1)	0	1 (<1)	0
十二指腸ポリープ	0	1 (<1)	0	1 (<1)	0
十二指腸炎	0	0	1 (<1)	1 (<1)	0
腸炎	0	0	1 (<1)	1 (<1)	0
胃潰瘍	0	0	1 (<1)	1 (<1)	0
出血性胃炎	0	1 (<1)	0	1 (<1)	1 (<1)
胃腸出血	1 (<1)	0	1 (<1)	1 (<1)	0
消化器痛	3 (<1)	1 (<1)	0	1 (<1)	1 (<1)
歯肉出血	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
歯肉嚢胞	0	0	1 (<1)	1 (<1)	0
歯肉障害	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
舌炎	0	1 (<1)	0	1 (<1)	0
舌痛	1 (<1)	0	1 (<1)	1 (<1)	0
血便排泄	2 (<1)	0	1 (<1)	1 (<1)	0
胃排出不全	0	1 (<1)	0	1 (<1)	0
炎症性腸疾患	0	0	1 (<1)	1 (<1)	0
腸閉塞	0	0	1 (<1)	1 (<1)	0
口唇水疱	0	1 (<1)	0	1 (<1)	0
弛緩歯	0	1 (<1)	0	1 (<1)	0
腰ヘルニア	0	0	1 (<1)	1 (<1)	0
マロリー・ワイス症候群	0	1 (<1)	0	1 (<1)	0
神経因性腸	0	0	1 (<1)	1 (<1)	0
嚥下痛	0	0	1 (<1)	1 (<1)	0
食道出血	0	1 (<1)	0	1 (<1)	0
食道痙攣	0	0	1 (<1)	1 (<1)	0
食道潰瘍	0	0	1 (<1)	1 (<1)	0
膵臓障害	0	0	1 (<1)	1 (<1)	0
膵炎	1 (<1)	1 (<1)	0	1 (<1)	0
口の錯感覚	2 (<1)	1 (<1)	0	1 (<1)	0
消化性潰瘍	0	0	1 (<1)	1 (<1)	0
歯周病	0	1 (<1)	0	1 (<1)	0
肛門周囲痛	2 (<1)	1 (<1)	0	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
逆流性胃炎	1 (<1)	0	1 (<1)	1 (<1)	0
唾液管閉塞	0	0	1 (<1)	1 (<1)	0
舌腫脹	0	1 (<1)	0	1 (<1)	0
舌苔	0	0	1 (<1)	1 (<1)	0
舌障害	0	0	1 (<1)	1 (<1)	0
歯の障害	1 (<1)	1 (<1)	0	1 (<1)	0
歯の磨耗	0	1 (<1)	0	1 (<1)	0
歯の脱落	1 (<1)	1 (<1)	0	1 (<1)	0
裂肛	1 (<1)	0	0	0	0
アフタ性口内炎	1 (<1)	0	0	0	0
根尖肉芽腫	0	0	0	0	1 (<1)
便通不規則	1 (<1)	0	0	0	0
呼気臭	1 (<1)	0	0	0	0
口唇のひび割れ	1 (<1)	0	0	0	0
潰瘍性大腸炎	1 (<1)	0	0	0	0
十二指腸胃逆流	1 (<1)	0	0	0	0
変色便	0	0	0	0	1 (<1)
胃ポリープ	1 (<1)	0	0	0	0
歯肉腫脹	1 (<1)	0	0	0	0
痔出血	0	0	0	0	1 (<1)
口唇乾燥	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
口腔内潰瘍形成	4 (<1)	0	0	0	0
急性膵炎	1 (<1)	0	0	0	0
直腸出血	1 (<1)	0	0	0	0
直腸攣縮	0	0	0	0	1 (<1)
口内炎	3 (<1)	0	0	0	1 (<1)
脆弱歯	1 (<1)	0	0	0	0
舌乾燥	1 (<1)	0	0	0	0
臍ヘルニア	1 (<1)	0	0	0	0
肝胆道系障害	8 (1)	8 (1)	13 (2)	21 (2)	6 (2)
肝障害	1 (<1)	1 (<1)	5 (<1)	6 (<1)	2 (<1)
胆石症	2 (<1)	1 (<1)	2 (<1)	3 (<1)	3 (1)
肝細胞融解性肝炎	0	1 (<1)	2 (<1)	3 (<1)	0
胆道ジスキネジー	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
肝嚢胞	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
胆管結石	2 (<1)	0	1 (<1)	1 (<1)	0
胆嚢浮腫	0	0	1 (<1)	1 (<1)	0
脂肪肝	1 (<1)	1 (<1)	0	1 (<1)	0
肝炎	0	0	1 (<1)	1 (<1)	0
胆汁うっ滞性肝炎	0	1 (<1)	0	1 (<1)	0
高トランスアミナーゼ血症	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
中毒性肝炎	1 (<1)	0	0	0	0
高ビリルビン血症	1 (<1)	0	0	0	0
皮膚および皮下組織障害	120 (19)	198 (33)	196 (32)	394 (33)	44 (16)
発疹	17 (3)	45 (8)	47 (8)	92 (8)	7 (3)
そう痒症	24 (4)	46 (8)	44 (7)	90 (7)	7 (3)
紅斑	6 (<1)	34 (6)	44 (7)	78 (6)	4 (1)
多汗症	8 (1)	13 (2)	23 (4)	36 (3)	4 (1)
脱毛症	14 (2)	13 (2)	10 (2)	23 (2)	4 (1)
寝汗	7 (1)	11 (2)	12 (2)	23 (2)	0
アレルギー性皮膚炎	4 (<1)	11 (2)	5 (<1)	16 (1)	1 (<1)
蕁麻疹	8 (1)	10 (2)	6 (<1)	16 (1)	1 (<1)
全身性そう痒症	3 (<1)	7 (1)	7 (1)	14 (1)	3 (1)
湿疹	2 (<1)	6 (1)	5 (<1)	11 (<1)	1 (<1)
そう痒性皮疹	2 (<1)	6 (1)	4 (<1)	10 (<1)	0
ざ瘡	12 (2)	4 (<1)	5 (<1)	9 (<1)	3 (1)
皮膚炎	1 (<1)	3 (<1)	6 (<1)	9 (<1)	0
皮膚乾燥	2 (<1)	3 (<1)	5 (<1)	8 (<1)	1 (<1)
全身紅斑	0	3 (<1)	4 (<1)	7 (<1)	0
光線過敏性反応	1 (<1)	3 (<1)	4 (<1)	7 (<1)	1 (<1)
斑状皮疹	0	1 (<1)	6 (<1)	7 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚灼熱感	0	5 (<1)	2 (<1)	7 (<1)	0
顔面感覚鈍麻	5 (<1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
全身性皮疹	0	4 (<1)	2 (<1)	6 (<1)	0
紅斑性皮疹	0	2 (<1)	3 (<1)	5 (<1)	0
丘疹性皮疹	0	1 (<1)	3 (<1)	4 (<1)	0
皮膚刺激	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
水疱	0	3 (<1)	0	3 (<1)	0
過角化	0	1 (<1)	2 (<1)	3 (<1)	0
痒疹	0	2 (<1)	1 (<1)	3 (<1)	0
酒さ	2 (<1)	3 (<1)	0	3 (<1)	0
皮膚反応	0	1 (<1)	2 (<1)	3 (<1)	2 (<1)
皮膚嚢腫	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
接触性皮膚炎	3 (<1)	1 (<1)	1 (<1)	2 (<1)	2 (<1)
薬疹	0	1 (<1)	1 (<1)	2 (<1)	0
網状皮斑	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
皮膚疼痛	0	0	2 (<1)	2 (<1)	0
アレルギー性そう痒症	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
乾癬	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
皮膚剥脱	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
皮膚色素過剰	0	1 (<1)	1 (<1)	2 (<1)	2 (<1)
皮膚硬結	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚病変	2 (<1)	2 (<1)	0	2 (<1)	0
皮膚のつっぱり感	0	0	2 (<1)	2 (<1)	0
顔面腫脹	0	1 (<1)	1 (<1)	2 (<1)	3 (1)
日光性角化症	0	0	1 (<1)	1 (<1)	0
冷汗	1 (<1)	0	1 (<1)	1 (<1)	0
皮膚弛緩症	0	1 (<1)	0	1 (<1)	0
ざ瘡様皮膚炎	1 (<1)	1 (<1)	0	1 (<1)	0
アトピー性皮膚炎	0	1 (<1)	0	1 (<1)	0
斑状出血	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
紅色症	0	0	1 (<1)	1 (<1)	0
剥脱性発疹	1 (<1)	1 (<1)	0	1 (<1)	0
特発性蕁麻疹	0	1 (<1)	0	1 (<1)	0
毛孔性角化症	0	0	1 (<1)	1 (<1)	0
睫毛眉毛脱落症	0	1 (<1)	0	1 (<1)	0
爪変色	1 (<1)	1 (<1)	0	1 (<1)	0
爪の障害	0	0	1 (<1)	1 (<1)	0
爪破損	1 (<1)	1 (<1)	0	1 (<1)	0
瘢痕	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
脂漏	0	1 (<1)	0	1 (<1)	0
皮膚色素脱失	0	0	1 (<1)	1 (<1)	0
皮膚変色	1 (<1)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚色素減少	0	1 (<1)	0	1 (<1)	0
皮膚熱感	0	0	1 (<1)	1 (<1)	0
スティーブンス・ジョンソン症候群	0	1 (<1)	0	1 (<1)	0
皮下結節	1 (<1)	1 (<1)	0	1 (<1)	0
一過性棘融解性皮膚症	0	0	1 (<1)	1 (<1)	0
乾皮症	1 (<1)	0	1 (<1)	1 (<1)	0
血管浮腫	0	0	0	0	1 (<1)
発汗障害	1 (<1)	0	0	0	0
多形紅斑	1 (<1)	0	0	0	0
皮膚肉芽腫	1 (<1)	0	0	0	0
毛質異常	1 (<1)	0	0	0	0
紅色汗疹	1 (<1)	0	0	0	0
内出血発生の増加傾向	0	0	0	0	1 (<1)
嵌入爪	1 (<1)	0	0	0	1 (<1)
黒子	1 (<1)	0	0	0	0
脂肪組織萎縮症	0	0	0	0	1 (<1)
後天性リポジストロフィー	0	0	0	0	1 (<1)
爪床の炎症	1 (<1)	0	0	0	0
点状出血	3 (<1)	0	0	0	0
光線性皮膚症	1 (<1)	0	0	0	0
色素沈着障害	3 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ばら色粃糠疹	2 (<1)	0	0	0	0
前癌性皮膚病変	1 (<1)	0	0	0	0
猩紅熱様発疹	1 (<1)	0	0	0	0
小水疱性皮疹	1 (<1)	0	0	0	0
脂漏性皮膚炎	0	0	0	0	1 (<1)
皮膚障害	1 (<1)	0	0	0	0
皮膚小結節	0	0	0	0	1 (<1)
毛細血管拡張症	1 (<1)	0	0	0	0
裂毛	1 (<1)	0	0	0	0
筋骨格系および結合組織障害	206 (33)	186 (31)	193 (32)	379 (32)	54 (20)
背部痛	73 (12)	66 (11)	67 (11)	133 (11)	18 (7)
関節痛	50 (8)	47 (8)	49 (8)	96 (8)	11 (4)
四肢痛	46 (7)	41 (7)	43 (7)	84 (7)	18 (7)
筋痙縮	28 (4)	17 (3)	35 (6)	52 (4)	5 (2)
頚部痛	12 (2)	20 (3)	17 (3)	37 (3)	4 (1)
筋力低下	28 (4)	12 (2)	23 (4)	35 (3)	4 (1)
筋肉痛	18 (3)	13 (2)	11 (2)	24 (2)	2 (<1)
筋骨格痛	19 (3)	7 (1)	16 (3)	23 (2)	6 (2)
関節炎	1 (<1)	3 (<1)	5 (<1)	8 (<1)	2 (<1)
変形性関節症	5 (<1)	4 (<1)	4 (<1)	8 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
骨痛	3 (<1)	3 (<1)	4 (<1)	7 (<1)	0
滑液包炎	1 (<1)	3 (<1)	4 (<1)	7 (<1)	0
筋骨格硬直	9 (1)	3 (<1)	4 (<1)	7 (<1)	5 (2)
関節腫脹	3 (<1)	3 (<1)	3 (<1)	6 (<1)	2 (<1)
筋骨格系胸痛	5 (<1)	2 (<1)	4 (<1)	6 (<1)	1 (<1)
重感	2 (<1)	6 (1)	0	6 (<1)	2 (<1)
椎間板突出	2 (<1)	3 (<1)	1 (<1)	4 (<1)	0
関節硬直	0	1 (<1)	3 (<1)	4 (<1)	0
骨減少症	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
骨粗鬆症	3 (<1)	3 (<1)	1 (<1)	4 (<1)	0
関節周囲炎	2 (<1)	1 (<1)	3 (<1)	4 (<1)	0
腱炎	6 (<1)	2 (<1)	2 (<1)	4 (<1)	0
関節障害	0	1 (<1)	2 (<1)	3 (<1)	0
側腹部痛	1 (<1)	0	3 (<1)	3 (<1)	1 (<1)
筋緊張	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
変形性脊椎症	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
腱鞘炎	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
尾骨痛	1 (<1)	0	2 (<1)	2 (<1)	0
関節滲出液	0	0	2 (<1)	2 (<1)	0
筋拘縮	1 (<1)	0	2 (<1)	2 (<1)	0
ミオキミア	0	1 (<1)	1 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
骨壊死	1 (<1)	2 (<1)	0	2 (<1)	0
膝蓋大腿部痛症候群	0	1 (<1)	1 (<1)	2 (<1)	0
肩回旋筋腱板症候群	0	0	2 (<1)	2 (<1)	0
シェーグレン症候群	0	2 (<1)	0	2 (<1)	0
滑液嚢腫	0	1 (<1)	1 (<1)	2 (<1)	0
腋窩腫瘤	1 (<1)	1 (<1)	0	1 (<1)	0
軟骨炎	0	1 (<1)	0	1 (<1)	0
腱付着部症	0	1 (<1)	0	1 (<1)	0
外骨腫	0	0	1 (<1)	1 (<1)	2 (<1)
四肢拘縮	0	1 (<1)	0	1 (<1)	0
尺径部痛	1 (<1)	1 (<1)	0	1 (<1)	0
椎間板変性症	0	0	1 (<1)	1 (<1)	0
椎間板障害	0	1 (<1)	0	1 (<1)	0
四肢不快感	0	0	1 (<1)	1 (<1)	0
下肢腫瘤	0	0	1 (<1)	1 (<1)	0
中足骨痛	0	1 (<1)	0	1 (<1)	0
筋腫脹	0	1 (<1)	0	1 (<1)	0
筋攣縮	3 (<1)	1 (<1)	0	1 (<1)	0
筋骨格不快感	3 (<1)	0	1 (<1)	1 (<1)	0
筋硬化症	0	1 (<1)	0	1 (<1)	0
筋炎	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
四肢の結節	0	0	1 (<1)	1 (<1)	0
骨端症	0	0	1 (<1)	1 (<1)	0
顎痛	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
乾癬性関節症	0	0	1 (<1)	1 (<1)	0
足根洞症候群	0	1 (<1)	0	1 (<1)	0
脊椎障害	0	1 (<1)	0	1 (<1)	0
滑膜障害	0	1 (<1)	0	1 (<1)	0
腱障害	1 (<1)	1 (<1)	0	1 (<1)	0
斜頚	1 (<1)	0	1 (<1)	1 (<1)	0
弾発指	0	1 (<1)	0	1 (<1)	0
線維筋痛	2 (<1)	0	0	0	0
成長痛	0	0	0	0	1 (<1)
運動性低下	0	0	0	0	1 (<1)
筋固縮	0	0	0	0	1 (<1)
結節性変形性関節症	1 (<1)	0	0	0	0
回帰性リウマチ	1 (<1)	0	0	0	0
多発性関節炎	1 (<1)	0	0	0	0
関節リウマチ	1 (<1)	0	0	0	0
脊柱変形	1 (<1)	0	0	0	0
滑膜炎	1 (<1)	0	0	0	0
腱痛	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腎および尿路障害	123 (20)	110 (18)	140 (23)	250 (21)	43 (16)
蛋白尿	45 (7)	48 (8)	69 (11)	117 (10)	22 (8)
血尿	29 (5)	25 (4)	34 (6)	59 (5)	8 (3)
ミクロアルブミン尿	20 (3)	30 (5)	24 (4)	54 (4)	13 (5)
排尿困難	10 (2)	4 (<1)	12 (2)	16 (1)	1 (<1)
ケトン尿	5 (<1)	4 (<1)	12 (2)	16 (1)	1 (<1)
尿意切迫	10 (2)	7 (1)	9 (1)	16 (1)	4 (1)
腎結石症	8 (1)	5 (<1)	7 (1)	12 (<1)	1 (<1)
尿失禁	5 (<1)	7 (1)	4 (<1)	11 (<1)	1 (<1)
頻尿	10 (2)	5 (<1)	4 (<1)	9 (<1)	3 (1)
尿閉	3 (<1)	4 (<1)	3 (<1)	7 (<1)	1 (<1)
糖尿	9 (1)	2 (<1)	2 (<1)	4 (<1)	2 (<1)
アルブミン尿	0	1 (<1)	2 (<1)	3 (<1)	2 (<1)
膀胱機能障害	0	2 (<1)	1 (<1)	3 (<1)	0
腎仙痛	1 (<1)	1 (<1)	2 (<1)	3 (<1)	0
切迫性尿失禁	0	1 (<1)	2 (<1)	3 (<1)	0
排尿躊躇	5 (<1)	0	3 (<1)	3 (<1)	1 (<1)
緊張性膀胱	0	1 (<1)	1 (<1)	2 (<1)	0
白血球尿	2 (<1)	0	2 (<1)	2 (<1)	1 (<1)
神経因性膀胱	1 (<1)	2 (<1)	0	2 (<1)	0
起立性蛋白尿症	0	1 (<1)	1 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腎嚢胞	1 (<1)	2 (<1)	0	2 (<1)	0
腎臓痛	0	0	2 (<1)	2 (<1)	0
尿臭異常	0	0	2 (<1)	2 (<1)	0
膀胱刺激症状	0	0	1 (<1)	1 (<1)	0
着色尿	0	0	1 (<1)	1 (<1)	0
非感染性膀胱炎	3 (<1)	1 (<1)	0	1 (<1)	0
グロブリン尿	0	1 (<1)	0	1 (<1)	0
失禁	0	0	1 (<1)	1 (<1)	0
排尿異常	0	1 (<1)	0	1 (<1)	0
腎下垂症	1 (<1)	1 (<1)	0	1 (<1)	0
腎障害	0	1 (<1)	0	1 (<1)	0
腎機能障害	0	0	1 (<1)	1 (<1)	0
有痛性排尿困難	0	1 (<1)	0	1 (<1)	0
尿管瘤	0	1 (<1)	0	1 (<1)	0
尿路痛	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
膀胱憩室	1 (<1)	0	0	0	0
肋骨脊柱角圧痛	1 (<1)	0	0	0	0
慢性糸球体腎炎	1 (<1)	0	0	0	0
高血圧性腎症	0	0	0	0	1 (<1)
ネフローゼ症候群	0	0	0	0	1 (<1)
夜間頻尿	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膿尿	0	0	0	0	1 (<1)
腹圧性尿失禁	1 (<1)	0	0	0	0
尿路の炎症	1 (<1)	0	0	0	0
妊娠、産褥および周産期の状態	1 (<1)	1 (<1)	0	1 (<1)	0
妊娠	0	1 (<1)	0	1 (<1)	0
自然流産	1 (<1)	0	0	0	0
生殖系および乳房障害	63 (10)	57 (10)	61 (10)	118 (10)	20 (7)
月経困難症	8 (1)	7 (1)	9 (1)	16 (1)	3 (1)
不規則月経	9 (1)	4 (<1)	7 (1)	11 (<1)	5 (2)
勃起不全	3 (<1)	5 (<1)	5 (<1)	10 (<1)	0
卵巣嚢胞	5 (<1)	6 (1)	4 (<1)	10 (<1)	1 (<1)
月経過多	3 (<1)	4 (<1)	4 (<1)	8 (<1)	3 (1)
不正子宮出血	6 (<1)	4 (<1)	4 (<1)	8 (<1)	4 (1)
乳房痛	1 (<1)	2 (<1)	5 (<1)	7 (<1)	0
無月経	5 (<1)	2 (<1)	4 (<1)	6 (<1)	2 (<1)
腟出血	2 (<1)	3 (<1)	3 (<1)	6 (<1)	0
頻発月経	2 (<1)	2 (<1)	3 (<1)	5 (<1)	0
月経障害	1 (<1)	1 (<1)	3 (<1)	4 (<1)	0
子宮出血	2 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
骨盤痛	3 (<1)	2 (<1)	1 (<1)	3 (<1)	0
性機能不全	2 (<1)	1 (<1)	2 (<1)	3 (<1)	0
萎縮性外陰腟炎	0	0	2 (<1)	2 (<1)	0
乳房嚢胞	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
乳房腫瘤	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
乳房圧痛	0	0	2 (<1)	2 (<1)	0
子宮頚部上皮異形成	1 (<1)	2 (<1)	0	2 (<1)	0
月経遅延	1 (<1)	2 (<1)	0	2 (<1)	0
卵巣嚢胞破裂	0	2 (<1)	0	2 (<1)	0
多嚢胞性卵巣	0	1 (<1)	1 (<1)	2 (<1)	0
外陰腟乾燥	0	1 (<1)	1 (<1)	2 (<1)	0
外陰腟そう痒症	0	1 (<1)	1 (<1)	2 (<1)	0
腺筋症	0	0	1 (<1)	1 (<1)	0
良性前立腺肥大症	1 (<1)	1 (<1)	0	1 (<1)	0
乳房分泌	0	0	1 (<1)	1 (<1)	0
乳房不快感	0	1 (<1)	0	1 (<1)	0
乳房障害	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
乳房出血	0	1 (<1)	0	1 (<1)	0
子宮頚部の炎症	0	1 (<1)	0	1 (<1)	0
性交困難	0	0	1 (<1)	1 (<1)	0
射精障害	0	1 (<1)	0	1 (<1)	0

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
子宮内膜症	0	1 (<1)	0	1 (<1)	0
線維嚢胞性乳腺疾患	2 (<1)	0	1 (<1)	1 (<1)	0
乳汁漏出症	0	1 (<1)	0	1 (<1)	0
閉経期症状	1 (<1)	0	1 (<1)	1 (<1)	0
乳頭障害	0	1 (<1)	0	1 (<1)	0
閉経後出血	1 (<1)	0	1 (<1)	1 (<1)	0
前立腺炎	0	0	1 (<1)	1 (<1)	0
精巣障害	0	0	1 (<1)	1 (<1)	0
精巣痛	2 (<1)	1 (<1)	0	1 (<1)	0
子宮の炎症	0	1 (<1)	0	1 (<1)	0
子宮腟脱	0	1 (<1)	0	1 (<1)	0
腟分泌物	1 (<1)	0	1 (<1)	1 (<1)	0
バルトリン嚢腫	2 (<1)	0	0	0	0
乳房腫大	0	0	0	0	1 (<1)
子宮頚管ポリープ	0	0	0	0	1 (<1)
生殖器病変	1 (<1)	0	0	0	0
機能性子宮出血	1 (<1)	0	0	0	0
希発月経	1 (<1)	0	0	0	0
前立腺腫大	0	0	0	0	1 (<1)
子宮頚部びらん	1 (<1)	0	0	0	0
外陰腟痛	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
先天性、家族性および遺伝性障害	0	2 (<1)	3 (<1)	5 (<1)	1 (<1)
異形成母斑症候群	0	1 (<1)	1 (<1)	2 (<1)	0
先天性心臓疾患	0	1 (<1)	0	1 (<1)	0
陰嚢水瘤	0	0	1 (<1)	1 (<1)	0
ラウン・ギャノン・レバイン症候群	0	0	1 (<1)	1 (<1)	0
過誤腫	0	0	0	0	1 (<1)
一般・全身障害および投与部位の状態	151 (24)	124 (21)	171 (28)	295 (25)	99 (37)
疲労	65 (10)	63 (11)	82 (14)	145 (12)	24 (9)
発熱	31 (5)	17 (3)	36 (6)	53 (4)	11 (4)
無力症	15 (2)	20 (3)	13 (2)	33 (3)	12 (4)
インフルエンザ様疾患	9 (1)	9 (2)	13 (2)	22 (2)	3 (1)
疼痛	10 (2)	9 (2)	13 (2)	22 (2)	4 (1)
熱感	1 (<1)	12 (2)	8 (1)	20 (2)	3 (1)
末梢性浮腫	14 (2)	3 (<1)	9 (1)	12 (<1)	3 (1)
胸痛	9 (1)	2 (<1)	9 (1)	11 (<1)	3 (1)
歩行障害	5 (<1)	5 (<1)	6 (<1)	11 (<1)	5 (2)
悪寒	6 (<1)	4 (<1)	4 (<1)	8 (<1)	2 (<1)
胸部不快感	5 (<1)	4 (<1)	3 (<1)	7 (<1)	0
倦怠感	1 (<1)	1 (<1)	5 (<1)	6 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
非心臓性胸痛	1 (<1)	1 (<1)	5 (<1)	6 (<1)	2 (<1)
嚢胞	1 (<1)	0	3 (<1)	3 (<1)	0
顔面痛	2 (<1)	1 (<1)	2 (<1)	3 (<1)	2 (<1)
易刺激性	4 (<1)	0	3 (<1)	3 (<1)	1 (<1)
冷感	1 (<1)	0	2 (<1)	2 (<1)	0
炎症	0	0	2 (<1)	2 (<1)	0
医療機器による疼痛	0	0	2 (<1)	2 (<1)	0
粘膜乾燥	0	1 (<1)	1 (<1)	2 (<1)	0
腫脹	0	1 (<1)	1 (<1)	2 (<1)	0
脂肪壊死	0	1 (<1)	0	1 (<1)	0
異常感	1 (<1)	0	1 (<1)	1 (<1)	0
びくびく感	0	0	1 (<1)	1 (<1)	0
高熱	1 (<1)	1 (<1)	0	1 (<1)	0
注入部位血腫	0	1 (<1)	0	1 (<1)	0
注射部位硬結	0	0	1 (<1)	1 (<1)	7 (3)
局所腫脹	0	1 (<1)	0	1 (<1)	0
足のもつれ	1 (<1)	1 (<1)	0	1 (<1)	0
粘膜の炎症	0	0	1 (<1)	1 (<1)	0
浮腫	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
不活発	0	0	1 (<1)	1 (<1)	0
軟部組織の炎症	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
温度変化不耐症	0	1 (<1)	0	1 (<1)	0
圧痛	0	0	1 (<1)	1 (<1)	0
口渇	1 (<1)	0	1 (<1)	1 (<1)	0
血管穿刺部位血腫	0	0	1 (<1)	1 (<1)	0
血管穿刺部位出血	0	1 (<1)	0	1 (<1)	0
血管穿刺部位疼痛	0	1 (<1)	0	1 (<1)	0
血管穿刺部位反応	0	1 (<1)	0	1 (<1)	0
嚢胞破裂	0	0	0	0	1 (<1)
体温変動感	1 (<1)	0	0	0	0
全身症状	1 (<1)	0	0	0	0
ヘルニア痛	1 (<1)	0	0	0	0
空腹	1 (<1)	0	0	0	0
注射直後反応	0	0	0	0	3 (1)
注射部位乾燥	0	0	0	0	1 (<1)
注射部位紅斑	0	0	0	0	24 (9)
注射部位血管外漏出	0	0	0	0	1 (<1)
注射部位血腫	0	0	0	0	5 (2)
注射部位出血	0	0	0	0	2 (<1)
注射部位過敏反応	0	0	0	0	1 (<1)
注射部位肥厚	0	0	0	0	3 (1)
注射部位炎症	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
注射部位腫瘤	0	0	0	0	7 (3)
注射部位浮腫	0	0	0	0	2 (<1)
注射部位疼痛	0	0	0	0	20 (7)
注射部位そう痒感	0	0	0	0	9 (3)
注射部位発疹	0	0	0	0	2 (<1)
注射部位反応	0	0	0	0	4 (1)
注射部位瘢痕	0	0	0	0	1 (<1)
注射部位腫脹	0	0	0	0	8 (3)
注射部位蕁麻疹	0	0	0	0	1 (<1)
注射部位熱感	0	0	0	0	2 (<1)
壊死	0	0	0	0	1 (<1)
骨盤腔内腫瘤	1 (<1)	0	0	0	0
ワクチン接種部位疼痛	1 (<1)	0	0	0	0
臨床検査	159 (25)	160 (27)	164 (27)	324 (27)	76 (28)
アラニン・アミノトランスフェラーゼ増加	36 (6)	31 (5)	41 (7)	72 (6)	15 (6)
尿中アルブミン陽性	19 (3)	32 (5)	29 (5)	61 (5)	11 (4)
アスパラギン酸アミノトランスフェラーゼ増加	18 (3)	20 (3)	24 (4)	44 (4)	10 (4)
尿中蛋白陽性	17 (3)	22 (4)	13 (2)	35 (3)	13 (5)
尿中血陽性	6 (<1)	13 (2)	12 (2)	25 (2)	4 (1)
γ－グルタミルトランスフェラーゼ増加	17 (3)	13 (2)	9 (1)	22 (2)	6 (2)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白血球数減少	1 (<1)	12 (2)	10 (2)	22 (2)	1 (<1)
尿中白血球陽性	8 (1)	10 (2)	12 (2)	22 (2)	7 (3)
血中副甲状腺ホルモン増加	4 (<1)	9 (2)	12 (2)	21 (2)	1 (<1)
尿中β２ミクログロブリン増加	11 (2)	8 (1)	11 (2)	19 (2)	5 (2)
体重減少	3 (<1)	11 (2)	8 (1)	19 (2)	1 (<1)
血中ブドウ糖増加	4 (<1)	5 (<1)	11 (2)	16 (1)	6 (2)
体重増加	10 (2)	5 (<1)	10 (2)	15 (1)	2 (<1)
リンパ球数減少	1 (<1)	8 (1)	6 (<1)	14 (1)	1 (<1)
尿中ケトン体陽性	2 (<1)	5 (<1)	9 (1)	14 (1)	1 (<1)
尿中赤血球陽性	5 (<1)	8 (1)	4 (<1)	12 (<1)	1 (<1)
肝酵素上昇	8 (1)	4 (<1)	7 (1)	11 (<1)	4 (1)
好中球数増加	11 (2)	6 (1)	5 (<1)	11 (<1)	2 (<1)
血中クレアチニン増加	5 (<1)	4 (<1)	5 (<1)	9 (<1)	6 (2)
β２ミクログロブリン増加	2 (<1)	2 (<1)	6 (<1)	8 (<1)	0
ヘモグロビン減少	4 (<1)	6 (1)	2 (<1)	8 (<1)	1 (<1)
白血球数増加	12 (2)	5 (<1)	3 (<1)	8 (<1)	5 (2)
血中トリグリセリド増加	3 (<1)	3 (<1)	3 (<1)	6 (<1)	3 (1)
血中ビリルビン増加	7 (1)	2 (<1)	3 (<1)	5 (<1)	0
血中コレステロール増加	1 (<1)	2 (<1)	3 (<1)	5 (<1)	1 (<1)
血中カリウム増加	0	3 (<1)	2 (<1)	5 (<1)	1 (<1)
ヘマトクリット減少	2 (<1)	4 (<1)	1 (<1)	5 (<1)	1 (<1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
好中球数減少	2 (<1)	5 (<1)	0	5 (<1)	1 (<1)
血中アルカリホスファターゼ増加	7 (1)	3 (<1)	1 (<1)	4 (<1)	1 (<1)
血圧上昇	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
血中尿素増加	2 (<1)	0	4 (<1)	4 (<1)	1 (<1)
体温上昇	1 (<1)	2 (<1)	2 (<1)	4 (<1)	1 (<1)
好酸球数増加	1 (<1)	2 (<1)	2 (<1)	4 (<1)	0
尿中ブドウ糖陽性	3 (<1)	2 (<1)	2 (<1)	4 (<1)	2 (<1)
肝機能検査異常	2 (<1)	2 (<1)	2 (<1)	4 (<1)	0
低比重リポ蛋白増加	0	1 (<1)	3 (<1)	4 (<1)	1 (<1)
血小板数減少	2 (<1)	4 (<1)	0	4 (<1)	0
赤血球数減少	2 (<1)	3 (<1)	1 (<1)	4 (<1)	0
血中クレアチン増加	0	2 (<1)	1 (<1)	3 (<1)	0
血中乳酸脱水素酵素増加	4 (<1)	3 (<1)	0	3 (<1)	0
心電図ＱＴ延長	2 (<1)	0	3 (<1)	3 (<1)	4 (1)
血液学的検査異常	0	1 (<1)	2 (<1)	3 (<1)	0
リンパ球数増加	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
リンパ球形態異常	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
ビタミンＤ減少	1 (<1)	3 (<1)	0	3 (<1)	1 (<1)
血中クロール増加	0	0	2 (<1)	2 (<1)	0
血中ナトリウム増加	0	0	2 (<1)	2 (<1)	1 (<1)
心電図異常	3 (<1)	0	2 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心電図ＳＴ部分下降	1 (<1)	2 (<1)	0	2 (<1)	1 (<1)
高比重リポ蛋白増加	1 (<1)	0	2 (<1)	2 (<1)	0
ビタミンD増加	1 (<1)	0	2 (<1)	2 (<1)	0
アラニン・アミノトランスフェラーゼ異常	0	0	1 (<1)	1 (<1)	2 (<1)
アレルギー検査	0	0	1 (<1)	1 (<1)	0
抗ＳＳＡ抗体陽性	0	1 (<1)	0	1 (<1)	0
抗痙攣剤濃度減少	0	0	1 (<1)	1 (<1)	0
細菌検査陽性	1 (<1)	0	1 (<1)	1 (<1)	2 (<1)
血中重炭酸塩減少	0	1 (<1)	0	1 (<1)	0
血中重炭酸塩増加	0	1 (<1)	0	1 (<1)	0
血中カルシウム減少	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
血中カルシウム増加	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
血中クレアチニン異常	0	1 (<1)	0	1 (<1)	0
血中葉酸減少	0	0	1 (<1)	1 (<1)	0
血中ブドウ糖減少	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
血中免疫グロブリンM増加	0	0	1 (<1)	1 (<1)	0
血中ケトン体増加	0	0	1 (<1)	1 (<1)	1 (<1)
血中副甲状腺ホルモン異常	0	0	1 (<1)	1 (<1)	0
血圧低下	1 (<1)	1 (<1)	0	1 (<1)	0
血中ナトリウム減少	0	0	1 (<1)	1 (<1)	0
血中尿酸増加	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
体温低下	0	1 (<1)	0	1 (<1)	0
呼吸音異常	0	1 (<1)	0	1 (<1)	0
心雑音	2 (<1)	1 (<1)	0	1 (<1)	0
尿中結晶陽性	4 (<1)	0	1 (<1)	1 (<1)	0
白血球百分率数異常	0	0	1 (<1)	1 (<1)	0
心筋虚血の心電図所見	0	1 (<1)	0	1 (<1)	0
心電図Ｔ波振幅減少	1 (<1)	0	1 (<1)	1 (<1)	0
好酸球百分率増加	0	1 (<1)	0	1 (<1)	0
エプスタイン・バーウイルス抗体陽性	0	0	1 (<1)	1 (<1)	0
γ－グルタミルトランスフェラーゼ異常	1 (<1)	0	1 (<1)	1 (<1)	0
γ－グルタミルトランスフェラーゼ減少	0	1 (<1)	0	1 (<1)	0
胃内ｐＨ上昇	0	0	1 (<1)	1 (<1)	0
心拍数減少	0	0	1 (<1)	1 (<1)	0
心拍数増加	2 (<1)	1 (<1)	0	1 (<1)	0
ヒト乳頭腫ウイルス検査陽性	0	1 (<1)	0	1 (<1)	0
ヒステロスコピー	0	1 (<1)	0	1 (<1)	0
眼圧上昇	0	1 (<1)	0	1 (<1)	0
検査	0	0	1 (<1)	1 (<1)	0
リンパ節触知	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
リンパ球百分率減少	1 (<1)	1 (<1)	0	1 (<1)	0
医学的観察	0	0	1 (<1)	1 (<1)	0
単球数増加	0	0	1 (<1)	1 (<1)	0
神経学的検査異常	0	1 (<1)	0	1 (<1)	0
好中球百分率増加	1 (<1)	1 (<1)	0	1 (<1)	0
血小板数	0	1 (<1)	0	1 (<1)	0
血小板数増加	3 (<1)	0	1 (<1)	1 (<1)	1 (<1)
ロンベルグ徴候陽性	0	1 (<1)	0	1 (<1)	0
赤血球数増加	1 (<1)	0	1 (<1)	1 (<1)	0
腎機能検査異常	0	1 (<1)	0	1 (<1)	0
残尿量増加	0	1 (<1)	0	1 (<1)	0
呼吸数増加	0	0	1 (<1)	1 (<1)	0
血清フェリチン減少	0	0	1 (<1)	1 (<1)	0
子宮頚部スミア異常	1 (<1)	0	1 (<1)	1 (<1)	0
つぎ足歩行検査異常	0	1 (<1)	0	1 (<1)	0
尿円柱	0	0	1 (<1)	1 (<1)	0
ビタミンＢ１２減少	1 (<1)	1 (<1)	0	1 (<1)	0
抗甲状腺抗体陽性	1 (<1)	0	0	0	0
抗核抗体増加	1 (<1)	0	0	0	0
動脈雑音	1 (<1)	0	0	0	0
アスパラギン酸アミノトランスフェラーゼ異常	0	0	0	0	1 (<1)

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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
細菌検査	2 (<1)	0	0	0	0
血中アルカリホスファターゼ異常	0	0	0	0	1 (<1)
血中ビリルビン異常	0	0	0	0	1 (<1)
血中ビリルビン減少	1 (<1)	0	0	0	0
血中クロール減少	1 (<1)	0	0	0	0
血中クレアチン異常	1 (<1)	0	0	0	0
血中鉄減少	1 (<1)	0	0	0	0
血中乳酸脱水素酵素異常	0	0	0	0	1 (<1)
血中マグネシウム減少	1 (<1)	0	0	0	0
血中副甲状腺ホルモン減少	1 (<1)	0	0	0	0
血中リン減少	1 (<1)	0	0	0	0
血中リン増加	1 (<1)	0	0	0	0
血中カリウム減少	2 (<1)	0	0	0	0
収縮期血圧上昇	1 (<1)	0	0	0	0
心電図異常ＱＲＳ群	1 (<1)	0	0	0	0
心電図ＱＲＳ群延長	1 (<1)	0	0	0	0
心電図２相性Ｔ波	0	0	0	0	1 (<1)
心電図Ｔ波逆転	1 (<1)	0	0	0	2 (<1)
好酸球数異常	1 (<1)	0	0	0	0
握力低下	0	0	0	0	1 (<1)
心音異常	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
A型インフルエンザウイルス検査陽性	1 (<1)	0	0	0	0
リンパ球数異常	0	0	0	0	1 (<1)
後骨髄球百分率増加	1 (<1)	0	0	0	0
単球数減少	0	0	0	0	1 (<1)
骨髄球数増加	1 (<1)	0	0	0	0
骨髄球百分率増加	1 (<1)	0	0	0	0
好中球数異常	0	0	0	0	1 (<1)
好中球百分率異常	1 (<1)	0	0	0	0
便潜血陽性	0	0	0	0	1 (<1)
ＱＲＳ軸異常	2 (<1)	0	0	0	0
トランスアミナーゼ上昇	1 (<1)	0	0	0	1 (<1)
膀胱超音波検査異常	1 (<1)	0	0	0	0
白血球数異常	0	0	0	0	1 (<1)
傷害、中毒および処置合併症	113 (18)	64 (11)	96 (16)	160 (13)	31 (11)
挫傷	16 (3)	13 (2)	19 (3)	32 (3)	5 (2)
転倒	13 (2)	14 (2)	16 (3)	30 (2)	14 (5)
関節捻挫	15 (2)	9 (2)	12 (2)	21 (2)	3 (1)
四肢損傷	5 (<1)	5 (<1)	6 (<1)	11 (<1)	3 (1)
足骨折	3 (<1)	4 (<1)	5 (<1)	9 (<1)	2 (<1)
処置による疼痛	2 (<1)	4 (<1)	5 (<1)	9 (<1)	2 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
節足動物咬傷	8 (1)	2 (<1)	6 (<1)	8 (<1)	1 (<1)
肉離れ	4 (<1)	3 (<1)	4 (<1)	7 (<1)	1 (<1)
交通事故	4 (<1)	3 (<1)	3 (<1)	6 (<1)	1 (<1)
擦過傷	2 (<1)	1 (<1)	4 (<1)	5 (<1)	2 (<1)
足関節部骨折	0	1 (<1)	3 (<1)	4 (<1)	1 (<1)
節足動物刺傷	3 (<1)	2 (<1)	2 (<1)	4 (<1)	0
靭帯断裂	3 (<1)	1 (<1)	3 (<1)	4 (<1)	0
サンバーン	3 (<1)	1 (<1)	3 (<1)	4 (<1)	1 (<1)
歯牙破折	2 (<1)	3 (<1)	1 (<1)	4 (<1)	0
上顆炎	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
関節脱臼	0	3 (<1)	0	3 (<1)	0
橈骨骨折	1 (<1)	1 (<1)	2 (<1)	3 (<1)	1 (<1)
骨格損傷	4 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
皮膚裂傷	6 (<1)	3 (<1)	0	3 (<1)	1 (<1)
外傷性血腫	0	2 (<1)	1 (<1)	3 (<1)	0
創傷	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
鎖骨骨折	0	1 (<1)	1 (<1)	2 (<1)	0
脳振盪	1 (<1)	2 (<1)	0	2 (<1)	1 (<1)
顔面損傷	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
損傷	0	0	2 (<1)	2 (<1)	1 (<1)
関節損傷	3 (<1)	0	2 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
半月板障害	3 (<1)	0	2 (<1)	2 (<1)	1 (<1)
頚部損傷	0	1 (<1)	1 (<1)	2 (<1)	0
術後発熱	0	2 (<1)	0	2 (<1)	0
脊椎圧迫骨折	0	2 (<1)	0	2 (<1)	0
熱傷	7 (1)	0	2 (<1)	2 (<1)	0
手首関節骨折	1 (<1)	0	2 (<1)	2 (<1)	0
偶発的過量投与	0	1 (<1)	0	1 (<1)	0
アルコール中毒	0	0	1 (<1)	1 (<1)	0
動物咬傷	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
凍瘡	1 (<1)	1 (<1)	0	1 (<1)	0
眼外傷	2 (<1)	1 (<1)	0	1 (<1)	1 (<1)
頭部損傷	0	1 (<1)	0	1 (<1)	0
腸脛靭帯症候群	0	0	1 (<1)	1 (<1)	0
切開部位痛	0	1 (<1)	0	1 (<1)	0
閉塞性瘢痕ヘルニア	0	0	1 (<1)	1 (<1)	0
靭帯捻挫	0	0	1 (<1)	1 (<1)	0
筋断裂	0	1 (<1)	0	1 (<1)	0
神経損傷	0	0	1 (<1)	1 (<1)	0
過量投与	0	1 (<1)	0	1 (<1)	0
処置による低血圧	0	1 (<1)	0	1 (<1)	0
処置による悪心	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
処置による嘔吐	0	1 (<1)	0	1 (<1)	0
放射線皮膚損傷	0	0	1 (<1)	1 (<1)	0
反復性挫傷	1 (<1)	1 (<1)	0	1 (<1)	0
肋骨骨折	0	0	1 (<1)	1 (<1)	0
引っかき傷	0	0	1 (<1)	1 (<1)	0
軟部組織損傷	0	1 (<1)	0	1 (<1)	0
滑膜断裂	0	0	1 (<1)	1 (<1)	0
舌損傷	0	1 (<1)	0	1 (<1)	0
外傷性脳損傷	0	1 (<1)	0	1 (<1)	0
外傷性骨折	0	0	1 (<1)	1 (<1)	0
上肢骨折	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
むち打ち損傷	2 (<1)	1 (<1)	0	1 (<1)	2 (<1)
労働災害	1 (<1)	0	0	0	0
動物による引っかき傷	0	0	0	0	1 (<1)
気圧性中耳炎	0	0	0	0	1 (<1)
第２度熱傷	1 (<1)	0	0	0	0
眼部化学的損傷	1 (<1)	0	0	0	0
角膜擦過傷	1 (<1)	0	0	0	0
大腿骨頚部骨折	1 (<1)	0	0	0	0
大腿骨骨折	0	0	0	0	1 (<1)
腓骨骨折	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尾骨骨折	1 (<1)	0	0	0	0
手骨折	2 (<1)	0	0	0	2 (<1)
瘢痕ヘルニア	1 (<1)	0	0	0	0
靭帯損傷	1 (<1)	0	0	0	0
口唇損傷	0	0	0	0	1 (<1)
筋損傷	2 (<1)	0	0	0	0
処置後合併症	2 (<1)	0	0	0	1 (<1)
処置後出血	1 (<1)	0	0	0	0
外傷後疼痛	2 (<1)	0	0	0	2 (<1)
術後創合併症	0	0	0	0	1 (<1)
網膜損傷	1 (<1)	0	0	0	0
ストレス骨折	0	0	0	0	1 (<1)
腱損傷	1 (<1)	0	0	0	0
腱断裂	3 (<1)	0	0	0	1 (<1)
治療薬毒性	1 (<1)	0	0	0	0
脛骨骨折	2 (<1)	0	0	0	0
歯の完全脱臼	1 (<1)	0	0	0	0
ワクチン接種合併症	1 (<1)	0	0	0	0
有毒性刺傷	1 (<1)	0	0	0	0
第７神経損傷	0	0	0	0	1 (<1)
創傷出血	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
外科および内科処置	5 (<1)	6 (1)	4 (<1)	10 (<1)	4 (1)
抜歯	3 (<1)	3 (<1)	0	3 (<1)	2 (<1)
子宮摘出	0	1 (<1)	1 (<1)	2 (<1)	0
乳房腫瘤摘除	0	1 (<1)	0	1 (<1)	0
デンタルケア	0	0	1 (<1)	1 (<1)	0
椎間板手術	0	0	1 (<1)	1 (<1)	0
治療食	0	1 (<1)	0	1 (<1)	0
静脈ステント挿入	0	0	1 (<1)	1 (<1)	0
子宮頚部円錐切除	1 (<1)	0	0	0	0
入院	0	0	0	0	1 (<1)
色素性母斑切除	1 (<1)	0	0	0	0
不妊手術	0	0	0	0	1 (<1)
社会環境	3 (<1)	0	0	0	0
元タバコ使用者	1 (<1)	0	0	0	0
社会問題	1 (<1)	0	0	0	0
職場でのストレス	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	63 (100)	79 (100)	76 (100)	155 (100)	39 (100)
Number of subjects with an event	60 (95)	76 (96)	75 (99)	151 (97)	36 (92)
感染症および寄生虫症	46 (73)	49 (62)	51 (67)	100 (65)	20 (51)
鼻咽頭炎	17 (27)	24 (30)	15 (20)	39 (25)	6 (15)
上気道感染	11 (17)	12 (15)	13 (17)	25 (16)	5 (13)
インフルエンザ	4 (6)	9 (11)	14 (18)	23 (15)	3 (8)
尿路感染	6 (10)	11 (14)	9 (12)	20 (13)	6 (15)
気管支炎	8 (13)	6 (8)	2 (3)	8 (5)	2 (5)
副鼻腔炎	7 (11)	2 (3)	6 (8)	8 (5)	3 (8)
胃腸炎	4 (6)	4 (5)	3 (4)	7 (5)	0
鼻炎	3 (5)	3 (4)	3 (4)	6 (4)	1 (3)
耳感染	1 (2)	1 (1)	4 (5)	5 (3)	0
ウイルス性胃腸炎	2 (3)	2 (3)	2 (3)	4 (3)	1 (3)
喉頭炎	0	3 (4)	1 (1)	4 (3)	0
ウイルス感染	1 (2)	1 (1)	3 (4)	4 (3)	1 (3)
感染性結膜炎	0	3 (4)	0	3 (2)	0
膀胱炎	2 (3)	0	3 (4)	3 (2)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ウイルス性消化管感染	0	3 (4)	0	3 (2)	0
帯状疱疹	1 (2)	0	3 (4)	3 (2)	0
麦粒腫	0	2 (3)	1 (1)	3 (2)	0
咽頭炎	4 (6)	2 (3)	1 (1)	3 (2)	1 (3)
蜂巣炎	1 (2)	0	2 (3)	2 (1)	0
真菌感染	0	2 (3)	0	2 (1)	0
消化管感染	1 (2)	1 (1)	1 (1)	2 (1)	0
口腔カンジダ症	0	0	2 (3)	2 (1)	0
口腔ヘルペス	2 (3)	2 (3)	0	2 (1)	0
外耳炎	0	1 (1)	1 (1)	2 (1)	0
中耳炎	0	2 (3)	0	2 (1)	0
レンサ球菌性咽頭炎	1 (2)	0	2 (3)	2 (1)	0
ウイルス性気道感染	0	1 (1)	1 (1)	2 (1)	0
ブドウ球菌感染	0	0	2 (3)	2 (1)	0
扁桃炎	1 (2)	1 (1)	1 (1)	2 (1)	0
ウイルス性上気道感染	4 (6)	1 (1)	1 (1)	2 (1)	2 (5)
外陰腟真菌感染	0	0	2 (3)	2 (1)	1 (3)
腹壁膿瘍	0	0	1 (1)	1 (<1)	0
急性副鼻腔炎	0	0	1 (1)	1 (<1)	1 (3)
急性扁桃炎	1 (2)	1 (1)	0	1 (<1)	0
乳房蜂巣炎	0	0	1 (1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
細菌性結膜炎	0	0	1 (1)	1 (<1)	0
憩室炎	0	0	1 (1)	1 (<1)	0
毛包炎	0	1 (1)	0	1 (<1)	0
せつ	0	0	1 (1)	1 (<1)	0
性器カンジダ症	0	1 (1)	0	1 (<1)	0
Ｈ１Ｎ１インフルエンザ	0	0	1 (1)	1 (<1)	0
カンジダ性間擦疹	0	0	1 (1)	1 (<1)	0
下気道感染	2 (3)	0	1 (1)	1 (<1)	0
ライム病	0	0	1 (1)	1 (<1)	0
乳腺炎	0	1 (1)	0	1 (<1)	0
爪感染	0	0	1 (1)	1 (<1)	0
精巣炎	0	0	1 (1)	1 (<1)	0
急性中耳炎	0	0	1 (1)	1 (<1)	0
肺炎	0	0	1 (1)	1 (<1)	0
歯髄炎	0	0	1 (1)	1 (<1)	0
気道感染	1 (2)	0	1 (1)	1 (<1)	0
細菌性副鼻腔炎	0	1 (1)	0	1 (<1)	0
足部白癬	0	0	1 (1)	1 (<1)	0
歯膿瘍	2 (3)	1 (1)	0	1 (<1)	0
歯感染	0	0	1 (1)	1 (<1)	2 (5)
気管炎	0	1 (1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
気管気管支炎	0	1 (1)	0	1 (<1)	0
細菌性尿路感染	2 (3)	0	1 (1)	1 (<1)	0
腟感染	0	1 (1)	0	1 (<1)	0
外陰部腟カンジダ症	2 (3)	0	1 (1)	1 (<1)	0
ボレリア感染	1 (2)	0	0	0	0
皮膚真菌感染	1 (2)	0	0	0	0
細菌性性器感染	1 (2)	0	0	0	0
迷路炎	0	0	0	0	1 (3)
限局性感染	1 (2)	0	0	0	0
毛巣嚢胞	1 (2)	0	0	0	0
術後膿瘍	1 (2)	0	0	0	0
外陰部膿瘍	1 (2)	0	0	0	0
創傷感染	1 (2)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	2 (3)	1 (1)	2 (3)	3 (2)	2 (5)
腎新生物	0	1 (1)	0	1 (<1)	0
皮膚乳頭腫	0	0	1 (1)	1 (<1)	0
移行上皮癌	0	1 (1)	0	1 (<1)	0
子宮平滑筋腫	0	0	1 (1)	1 (<1)	0
基底細胞癌	0	0	0	0	1 (3)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
甲状腺の良性新生物	1 (2)	0	0	0	0
メラノサイト性母斑	0	0	0	0	1 (3)
モートン神経腫	1 (2)	0	0	0	0
血液およびリンパ系障害	5 (8)	4 (5)	5 (7)	9 (6)	0
貧血	0	0	3 (4)	3 (2)	0
好酸球増加症	1 (2)	2 (3)	0	2 (1)	0
リンパ球減少症	0	2 (3)	0	2 (1)	0
白血球増加症	0	1 (1)	0	1 (<1)	0
白血球減少症	0	0	1 (1)	1 (<1)	0
好中球増加症	0	0	1 (1)	1 (<1)	0
脾腫	0	0	1 (1)	1 (<1)	0
低色素性貧血	1 (2)	0	0	0	0
リンパ節症	3 (5)	0	0	0	0
免疫系障害	2 (3)	4 (5)	4 (5)	8 (5)	0
過敏症	0	0	3 (4)	3 (2)	0
季節性アレルギー	1 (2)	3 (4)	0	3 (2)	0
薬物過敏症	0	1 (1)	1 (1)	2 (1)	0
アナフィラキシー様反応	0	0	1 (1)	1 (<1)	0
造影剤アレルギー	0	0	1 (1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
食物アレルギー	0	1 (1)	0	1 (<1)	0
化学物質アレルギー	1 (2)	0	0	0	0
内分泌障害	0	1 (1)	0	1 (<1)	0
続発性副甲状腺機能亢進症	0	1 (1)	0	1 (<1)	0
代謝および栄養障害	10 (16)	4 (5)	6 (8)	10 (6)	5 (13)
食欲減退	1 (2)	1 (1)	2 (3)	3 (2)	0
高脂血症	1 (2)	0	2 (3)	2 (1)	0
ビタミンD欠乏	3 (5)	1 (1)	1 (1)	2 (1)	2 (5)
脱水	0	0	1 (1)	1 (<1)	0
耐糖能障害	0	0	1 (1)	1 (<1)	1 (3)
高コレステロール血症	1 (2)	0	1 (1)	1 (<1)	0
食欲亢進	0	1 (1)	0	1 (<1)	0
ケトーシス	0	0	1 (1)	1 (<1)	0
１型糖尿病	0	1 (1)	0	1 (<1)	0
糖尿病	0	0	0	0	2 (5)
電解質失調	1 (2)	0	0	0	0
高トリグリセリド血症	1 (2)	0	0	0	0
ビタミン欠乏症	1 (2)	0	0	0	0
肥満	0	0	0	0	1 (3)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
多飲症	1 (2)	0	0	0	0
精神障害	17 (27)	13 (16)	16 (21)	29 (19)	14 (36)
うつ病	10 (16)	5 (6)	5 (7)	10 (6)	10 (26)
不眠症	3 (5)	5 (6)	5 (7)	10 (6)	3 (8)
不安	3 (5)	2 (3)	2 (3)	4 (3)	1 (3)
抑うつ気分	3 (5)	1 (1)	1 (1)	2 (1)	0
睡眠障害	2 (3)	2 (3)	0	2 (1)	0
性的興奮障害	0	0	1 (1)	1 (<1)	0
リビドー減退	0	1 (1)	0	1 (<1)	0
気分動揺	1 (2)	0	1 (1)	1 (<1)	0
パニック発作	0	0	1 (1)	1 (<1)	0
人格障害	0	1 (1)	0	1 (<1)	0
落ち着きのなさ	0	1 (1)	0	1 (<1)	0
睡眠発作	0	0	1 (1)	1 (<1)	0
ストレス	0	0	1 (1)	1 (<1)	1 (3)
感情不安定	1 (2)	0	0	0	0
閉所恐怖症	0	0	0	0	1 (3)
自殺念慮	0	0	0	0	1 (3)
神経系障害	42 (67)	47 (59)	38 (50)	85 (55)	21 (54)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
多発性硬化症再発	21 (33)	17 (22)	26 (34)	43 (28)	12 (31)
頭痛	14 (22)	14 (18)	13 (17)	27 (17)	4 (10)
錯感覚	7 (11)	7 (9)	7 (9)	14 (9)	3 (8)
感覚鈍麻	5 (8)	5 (6)	4 (5)	9 (6)	3 (8)
浮動性めまい	6 (10)	6 (8)	2 (3)	8 (5)	1 (3)
灼熱感	2 (3)	3 (4)	1 (1)	4 (3)	0
片頭痛	0	1 (1)	3 (4)	4 (3)	2 (5)
坐骨神経痛	2 (3)	2 (3)	2 (3)	4 (3)	0
平衡障害	1 (2)	1 (1)	2 (3)	3 (2)	1 (3)
手根管症候群	1 (2)	2 (3)	1 (1)	3 (2)	0
多発性硬化症	0	2 (3)	1 (1)	3 (2)	0
筋痙直	1 (2)	1 (1)	2 (3)	3 (2)	0
感覚異常性大腿神経痛	0	1 (1)	1 (1)	2 (1)	0
後頭神経痛	0	0	2 (3)	2 (1)	0
振戦	2 (3)	2 (3)	0	2 (1)	2 (5)
ウートホフ現象	0	2 (3)	0	2 (1)	0
良性頭蓋内圧亢進	0	0	1 (1)	1 (<1)	0
不器用	1 (2)	1 (1)	0	1 (<1)	0
注意力障害	0	1 (1)	0	1 (<1)	1 (3)
異常感覚	2 (3)	0	1 (1)	1 (<1)	0
ジスキネジー	0	1 (1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ジストニー	0	1 (1)	0	1 (<1)	0
反射亢進	1 (2)	0	1 (1)	1 (<1)	0
レルミット徴候	1 (2)	0	1 (1)	1 (<1)	0
前兆を伴う片頭痛	0	1 (1)	0	1 (<1)	0
神経圧迫	0	0	1 (1)	1 (<1)	0
神経痛	1 (2)	0	1 (1)	1 (<1)	0
眼振	1 (2)	1 (1)	0	1 (<1)	0
視神経炎	0	1 (1)	0	1 (<1)	0
失神寸前の状態	1 (2)	0	1 (1)	1 (<1)	0
神経根痛	0	1 (1)	0	1 (<1)	0
傾眠	0	1 (1)	0	1 (<1)	0
会話障害	0	1 (1)	0	1 (<1)	0
失神	0	1 (1)	0	1 (<1)	0
緊張性頭痛	0	0	1 (1)	1 (<1)	0
尺骨神経管症候群	0	1 (1)	0	1 (<1)	0
健忘	1 (2)	0	0	0	0
失語症	0	0	0	0	1 (3)
中枢神経系病変	1 (2)	0	0	0	0
頚腕症候群	1 (2)	0	0	0	0
複雑部分発作	1 (2)	0	0	0	0
痙攣	1 (2)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
協調運動異常	1 (2)	0	0	0	0
味覚異常	0	0	0	0	1 (3)
てんかん	1 (2)	0	0	0	0
顔面痙攣	0	0	0	0	1 (3)
大発作痙攣	0	0	0	0	1 (3)
片側頭痛	1 (2)	0	0	0	0
不全片麻痺	0	0	0	0	1 (3)
知覚過敏	0	0	0	0	1 (3)
仮面状顔貌	0	0	0	0	1 (3)
記憶障害	1 (2)	0	0	0	2 (5)
末梢性ニューロパチー	1 (2)	0	0	0	0
部分発作	0	0	0	0	1 (3)
下肢静止不能症候群	2 (3)	0	0	0	0
感覚障害	1 (2)	0	0	0	0
感覚消失	0	0	0	0	1 (3)
副鼻腔炎に伴う頭痛	1 (2)	0	0	0	0
第６脳神経麻痺	0	0	0	0	1 (3)
眼障害	11 (17)	7 (9)	11 (14)	18 (12)	6 (15)
霧視	3 (5)	4 (5)	5 (7)	9 (6)	1 (3)
眼痛	3 (5)	2 (3)	1 (1)	3 (2)	3 (8)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
結膜炎	0	1 (1)	1 (1)	2 (1)	1 (3)
眼瞼炎	0	0	1 (1)	1 (<1)	0
眼瞼痙攣	1 (2)	0	1 (1)	1 (<1)	0
失明	0	1 (1)	0	1 (<1)	0
霰粒腫	0	0	1 (1)	1 (<1)	0
複視	2 (3)	0	1 (1)	1 (<1)	1 (3)
眼乾燥	0	0	1 (1)	1 (<1)	0
眼出血	0	0	1 (1)	1 (<1)	0
眼瞼下垂	0	1 (1)	0	1 (<1)	0
眼充血	0	1 (1)	0	1 (<1)	1 (3)
眼筋麻痺	0	1 (1)	0	1 (<1)	0
光視症	0	1 (1)	0	1 (<1)	0
視力低下	1 (2)	0	1 (1)	1 (<1)	1 (3)
ホームズ・アディー瞳孔	1 (2)	0	0	0	0
羞明	1 (2)	0	0	0	0
耳および迷路障害	8 (13)	7 (9)	3 (4)	10 (6)	6 (15)
耳鳴	0	2 (3)	0	2 (1)	0
回転性めまい	5 (8)	1 (1)	1 (1)	2 (1)	4 (10)
耳垢栓塞	0	1 (1)	0	1 (<1)	0
耳閉	0	0	1 (1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
耳痛	2 (3)	1 (1)	0	1 (<1)	0
耳そう痒症	0	1 (1)	0	1 (<1)	0
乗物酔い	0	1 (1)	0	1 (<1)	0
頭位性回転性めまい	1 (2)	0	1 (1)	1 (<1)	0
難聴	1 (2)	0	0	0	0
耳不快感	1 (2)	0	0	0	0
耳管機能障害	0	0	0	0	1 (3)
聴力低下	1 (2)	0	0	0	1 (3)
心臓障害	7 (11)	0	6 (8)	6 (4)	2 (5)
徐脈	0	0	2 (3)	2 (1)	0
うっ血性心不全	0	0	1 (1)	1 (<1)	0
心筋症	0	0	1 (1)	1 (<1)	0
洞性頻脈	0	0	1 (1)	1 (<1)	0
上室性期外収縮	0	0	1 (1)	1 (<1)	0
頻脈	2 (3)	0	1 (1)	1 (<1)	1 (3)
心室性期外収縮	1 (2)	0	1 (1)	1 (<1)	0
心筋虚血	1 (2)	0	0	0	0
動悸	3 (5)	0	0	0	1 (3)
血管障害	10 (16)	43 (54)	37 (49)	80 (52)	4 (10)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
潮紅	4 (6)	33 (42)	28 (37)	61 (39)	1 (3)
ほてり	2 (3)	8 (10)	4 (5)	12 (8)	0
高血圧	3 (5)	3 (4)	6 (8)	9 (6)	3 (8)
静脈瘤	0	1 (1)	1 (1)	2 (1)	0
動脈障害	0	1 (1)	0	1 (<1)	0
深部静脈血栓症	0	0	1 (1)	1 (<1)	0
充血	0	0	1 (1)	1 (<1)	0
低血圧	0	1 (1)	0	1 (<1)	0
末梢冷感	0	1 (1)	0	1 (<1)	0
静脈不全	0	1 (1)	0	1 (<1)	0
血腫	1 (2)	0	0	0	0
呼吸器、胸郭および縦隔障害	11 (17)	16 (20)	14 (18)	30 (19)	4 (10)
咳嗽	4 (6)	5 (6)	7 (9)	12 (8)	1 (3)
口腔咽頭痛	1 (2)	4 (5)	3 (4)	7 (5)	1 (3)
鼻閉	1 (2)	3 (4)	0	3 (2)	0
鼻漏	0	3 (4)	0	3 (2)	0
気道うっ血	2 (3)	1 (1)	1 (1)	2 (1)	1 (3)
副鼻腔うっ血	1 (2)	0	2 (3)	2 (1)	0
喘息	1 (2)	0	1 (1)	1 (<1)	0
呼吸困難	0	0	1 (1)	1 (<1)	1 (3)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
鼻出血	1 (2)	1 (1)	0	1 (<1)	0
副鼻腔嚢胞	0	0	1 (1)	1 (<1)	0
ラ音	0	0	1 (1)	1 (<1)	0
咽喉刺激感	2 (3)	1 (1)	0	1 (<1)	0
喘鳴	0	1 (1)	0	1 (<1)	0
息詰まり	0	0	0	0	1 (3)
過換気	1 (2)	0	0	0	0
鼻茸	1 (2)	0	0	0	0
アレルギー性鼻炎	2 (3)	0	0	0	0
低音性連続性ラ音	1 (2)	0	0	0	0
睡眠時無呼吸症候群	0	0	0	0	1 (3)
扁桃障害	1 (2)	0	0	0	0
上気道咳症候群	2 (3)	0	0	0	0
声帯の炎症	1 (2)	0	0	0	0
胃腸障害	23 (37)	39 (49)	41 (54)	80 (52)	10 (26)
下痢	12 (19)	16 (20)	11 (14)	27 (17)	4 (10)
悪心	6 (10)	9 (11)	17 (22)	26 (17)	1 (3)
上腹部痛	2 (3)	10 (13)	8 (11)	18 (12)	0
嘔吐	5 (8)	7 (9)	8 (11)	15 (10)	1 (3)
消化不良	4 (6)	2 (3)	9 (12)	11 (7)	1 (3)

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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腹痛	2 (3)	6 (8)	4 (5)	10 (6)	1 (3)
腹部不快感	1 (2)	3 (4)	4 (5)	7 (5)	0
歯痛	1 (2)	2 (3)	5 (7)	7 (5)	1 (3)
胃腸障害	1 (2)	2 (3)	4 (5)	6 (4)	1 (3)
腹部膨満	4 (6)	1 (1)	3 (4)	4 (3)	0
便秘	2 (3)	1 (1)	3 (4)	4 (3)	2 (5)
胃炎	0	2 (3)	2 (3)	4 (3)	0
鼓腸	1 (2)	3 (4)	0	3 (2)	0
胃食道逆流性疾患	3 (5)	2 (3)	1 (1)	3 (2)	1 (3)
齲歯	0	2 (3)	0	2 (1)	1 (3)
便失禁	0	1 (1)	1 (1)	2 (1)	0
口の感覚鈍麻	0	1 (1)	1 (1)	2 (1)	0
腹部硬直	0	1 (1)	0	1 (<1)	0
腹部圧痛	0	1 (1)	0	1 (<1)	1 (3)
便通不規則	0	0	1 (1)	1 (<1)	0
口内乾燥	0	1 (1)	0	1 (<1)	0
変色便	0	0	1 (1)	1 (<1)	0
食中毒	0	0	1 (1)	1 (<1)	0
排便回数増加	0	0	1 (1)	1 (<1)	0
舌痛	0	1 (1)	0	1 (<1)	0
痔核	0	1 (1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
裂孔ヘルニア	1 (2)	0	1 (1)	1 (<1)	0
膵脂肪腫症	0	1 (1)	0	1 (<1)	0
膵機能不全	0	0	1 (1)	1 (<1)	0
歯周炎	1 (2)	0	1 (1)	1 (<1)	0
流涎過多	0	1 (1)	0	1 (<1)	0
口内炎	0	0	1 (1)	1 (<1)	0
地図状舌	0	1 (1)	0	1 (<1)	0
臍ヘルニア	0	0	1 (1)	1 (<1)	0
下腹部痛	1 (2)	0	0	0	0
歯肉紅斑	0	0	0	0	1 (3)
歯肉炎	1 (2)	0	0	0	0
肝胆道系障害	1 (2)	2 (3)	2 (3)	4 (3)	0
肝障害	0	1 (1)	1 (1)	2 (1)	0
脂肪肝	0	1 (1)	0	1 (<1)	0
高ビリルビン血症	0	0	1 (1)	1 (<1)	0
胆石症	1 (2)	0	0	0	0
皮膚および皮下組織障害	20 (32)	24 (30)	26 (34)	50 (32)	6 (15)
そう痒症	4 (6)	10 (13)	7 (9)	17 (11)	0
発疹	7 (11)	5 (6)	5 (7)	10 (6)	1 (3)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
紅斑	2 (3)	0	5 (7)	5 (3)	1 (3)
全身性そう痒症	0	3 (4)	2 (3)	5 (3)	0
皮膚乾燥	3 (5)	2 (3)	2 (3)	4 (3)	0
皮膚灼熱感	0	1 (1)	3 (4)	4 (3)	0
蕁麻疹	0	1 (1)	3 (4)	4 (3)	1 (3)
ざ瘡	1 (2)	2 (3)	1 (1)	3 (2)	0
そう痒性皮疹	0	2 (3)	1 (1)	3 (2)	0
アレルギー性皮膚炎	1 (2)	1 (1)	1 (1)	2 (1)	0
多汗症	1 (2)	1 (1)	1 (1)	2 (1)	1 (3)
酒さ	0	2 (3)	0	2 (1)	0
脱毛症	3 (5)	0	1 (1)	1 (<1)	1 (3)
皮膚炎	0	1 (1)	0	1 (<1)	0
ざ瘡様皮膚炎	0	1 (1)	0	1 (<1)	0
接触性皮膚炎	0	1 (1)	0	1 (<1)	0
薬疹	0	0	1 (1)	1 (<1)	0
斑状出血	0	0	1 (1)	1 (<1)	0
湿疹	1 (2)	1 (1)	0	1 (<1)	1 (3)
全身紅斑	0	1 (1)	0	1 (<1)	0
紅色汗疹	0	1 (1)	0	1 (<1)	0
嵌入爪	0	0	1 (1)	1 (<1)	0
爪破損	0	1 (1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
色素沈着障害	0	1 (1)	0	1 (<1)	0
アレルギー性そう痒症	0	1 (1)	0	1 (<1)	0
乾癬	1 (2)	0	1 (1)	1 (<1)	0
紅斑性皮疹	0	0	1 (1)	1 (<1)	0
全身性皮疹	0	0	1 (1)	1 (<1)	0
斑状皮疹	1 (2)	0	1 (1)	1 (<1)	0
脂腺障害	0	0	1 (1)	1 (<1)	0
皮膚剥脱	0	1 (1)	0	1 (<1)	0
皮膚色素過剰	2 (3)	1 (1)	0	1 (<1)	0
皮膚潰瘍	0	0	1 (1)	1 (<1)	0
皮膚熱感	0	1 (1)	0	1 (<1)	0
毛細血管拡張症	0	1 (1)	0	1 (<1)	0
水疱	1 (2)	0	0	0	0
冷汗	1 (2)	0	0	0	0
皮膚嚢腫	1 (2)	0	0	0	0
アトピー性皮膚炎	1 (2)	0	0	0	0
顔面感覚鈍麻	1 (2)	0	0	0	0
爪床障害	1 (2)	0	0	0	0
寝汗	1 (2)	0	0	0	1 (3)
皮膚硬結	1 (2)	0	0	0	1 (3)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋骨格系および結合組織障害	32 (51)	32 (41)	33 (43)	65 (42)	19 (49)
関節痛	10 (16)	11 (14)	9 (12)	20 (13)	5 (13)
背部痛	10 (16)	12 (15)	8 (11)	20 (13)	9 (23)
四肢痛	7 (11)	8 (10)	8 (11)	16 (10)	2 (5)
筋痙縮	5 (8)	5 (6)	8 (11)	13 (8)	3 (8)
筋骨格痛	6 (10)	6 (8)	4 (5)	10 (6)	1 (3)
頚部痛	6 (10)	4 (5)	1 (1)	5 (3)	0
筋力低下	4 (6)	4 (5)	0	4 (3)	1 (3)
滑液包炎	1 (2)	1 (1)	2 (3)	3 (2)	0
椎間板障害	0	1 (1)	1 (1)	2 (1)	0
筋緊張	0	1 (1)	1 (1)	2 (1)	0
筋骨格硬直	1 (2)	2 (3)	0	2 (1)	2 (5)
滑液嚢腫	2 (3)	1 (1)	1 (1)	2 (1)	0
関節炎	0	0	1 (1)	1 (<1)	0
側腹部痛	0	0	1 (1)	1 (<1)	0
鼡径部痛	0	1 (1)	0	1 (<1)	0
成長痛	0	0	1 (1)	1 (<1)	0
椎間板圧迫	0	1 (1)	0	1 (<1)	0
関節硬直	0	1 (1)	0	1 (<1)	1 (3)
筋肉内出血	0	0	1 (1)	1 (<1)	0
筋攣縮	1 (2)	1 (1)	0	1 (<1)	1 (3)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋骨格系胸痛	0	1 (1)	0	1 (<1)	0
筋骨格不快感	0	1 (1)	0	1 (<1)	0
筋肉痛	3 (5)	0	1 (1)	1 (<1)	1 (3)
四肢の結節	0	0	1 (1)	1 (<1)	0
骨壊死	0	0	1 (1)	1 (<1)	0
重感	1 (2)	0	1 (1)	1 (<1)	0
変形性脊椎症	1 (2)	0	1 (1)	1 (<1)	0
脊椎分離	0	1 (1)	0	1 (<1)	0
腱炎	1 (2)	1 (1)	0	1 (<1)	0
腱鞘炎	0	0	1 (1)	1 (<1)	0
尾骨痛	1 (2)	0	0	0	0
四肢不快感	1 (2)	0	0	0	0
運動性低下	1 (2)	0	0	0	0
筋拘縮	0	0	0	0	1 (3)
筋肉疲労	1 (2)	0	0	0	0
筋硬化症	1 (2)	0	0	0	0
筋炎	1 (2)	0	0	0	0
顎痛	1 (2)	0	0	0	0
関節周囲炎	1 (2)	0	0	0	0
足底筋膜炎	1 (2)	0	0	0	0
肩回旋筋腱板症候群	1 (2)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腎および尿路障害	14 (22)	18 (23)	18 (24)	36 (23)	8 (21)
蛋白尿	7 (11)	8 (10)	9 (12)	17 (11)	3 (8)
ミクロアルブミン尿	1 (2)	2 (3)	5 (7)	7 (5)	0
血尿	2 (3)	2 (3)	4 (5)	6 (4)	0
排尿困難	0	2 (3)	1 (1)	3 (2)	0
頻尿	0	1 (1)	2 (3)	3 (2)	0
糖尿	0	1 (1)	1 (1)	2 (1)	0
ケトン尿	1 (2)	0	2 (3)	2 (1)	0
尿意切迫	0	2 (3)	0	2 (1)	1 (3)
腎臓痛	1 (2)	2 (3)	0	2 (1)	0
排尿躊躇	0	1 (1)	1 (1)	2 (1)	0
アルブミン尿	0	1 (1)	0	1 (<1)	0
非感染性膀胱炎	0	0	1 (1)	1 (<1)	0
グロブリン尿	0	1 (1)	0	1 (<1)	0
腎結石症	0	0	1 (1)	1 (<1)	0
神経因性膀胱	1 (2)	0	1 (1)	1 (<1)	0
慢性腎不全	0	0	1 (1)	1 (<1)	0
切迫性尿失禁	0	0	1 (1)	1 (<1)	0
尿路結石	1 (2)	0	0	0	0
失禁	0	0	0	0	1 (3)
夜間頻尿	0	0	0	0	1 (3)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尿失禁	2 (3)	0	0	0	2 (5)
尿臭異常	1 (2)	0	0	0	0
妊娠、産褥および周産期の状態	1 (2)	0	0	0	0
自然流産	1 (2)	0	0	0	0
生殖系および乳房障害	6 (10)	7 (9)	5 (7)	12 (8)	2 (5)
月経困難症	0	2 (3)	1 (1)	3 (2)	0
不正子宮出血	0	3 (4)	0	3 (2)	1 (3)
乳房痛	0	0	1 (1)	1 (<1)	0
子宮内膜増殖症	0	1 (1)	0	1 (<1)	0
閉経期症状	0	1 (1)	0	1 (<1)	0
月経過多	1 (2)	0	1 (1)	1 (<1)	0
不規則月経	0	0	1 (1)	1 (<1)	0
卵巣嚢胞	0	1 (1)	0	1 (<1)	1 (3)
骨盤痛	0	0	1 (1)	1 (<1)	0
前立腺炎	0	1 (1)	0	1 (<1)	0
前立腺腫大	0	0	1 (1)	1 (<1)	0
子宮ポリープ	1 (2)	1 (1)	0	1 (<1)	0
無月経	0	0	0	0	1 (3)
乳房硬結	1 (2)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
勃起不全	1 (2)	0	0	0	0
卵巣嚢胞破裂	1 (2)	0	0	0	0
閉経後出血	1 (2)	0	0	0	0
精巣痛	1 (2)	0	0	0	0
腟出血	1 (2)	0	0	0	0
一般・全身障害および投与部位の状態	22 (35)	27 (34)	29 (38)	56 (36)	14 (36)
疲労	10 (16)	16 (20)	9 (12)	25 (16)	3 (8)
末梢性浮腫	3 (5)	4 (5)	5 (7)	9 (6)	1 (3)
胸痛	1 (2)	4 (5)	4 (5)	8 (5)	0
熱感	1 (2)	2 (3)	4 (5)	6 (4)	1 (3)
歩行障害	2 (3)	2 (3)	2 (3)	4 (3)	0
易刺激性	0	4 (5)	0	4 (3)	1 (3)
疼痛	1 (2)	3 (4)	1 (1)	4 (3)	1 (3)
発熱	2 (3)	1 (1)	3 (4)	4 (3)	3 (8)
インフルエンザ様疾患	1 (2)	1 (1)	2 (3)	3 (2)	0
非心臓性胸痛	1 (2)	1 (1)	2 (3)	3 (2)	0
顔面痛	1 (2)	1 (1)	1 (1)	2 (1)	0
高熱	0	1 (1)	1 (1)	2 (1)	0
無力症	2 (3)	0	1 (1)	1 (<1)	1 (3)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
医療機器不具合	0	1 (1)	0	1 (<1)	0
不快感	0	0	1 (1)	1 (<1)	0
全身性浮腫	0	1 (1)	0	1 (<1)	0
重力性浮腫	0	0	1 (1)	1 (<1)	0
閉塞性ヘルニア	0	0	1 (1)	1 (<1)	0
腫瘤	0	1 (1)	0	1 (<1)	0
浮腫	0	1 (1)	0	1 (<1)	0
圧痛	0	0	1 (1)	1 (<1)	0
胸部不快感	0	0	0	0	1 (3)
悪寒	1 (2)	0	0	0	2 (5)
異常感	0	0	0	0	1 (3)
注射直後反応	0	0	0	0	1 (3)
注射部位紅斑	0	0	0	0	4 (10)
注射部位結節	0	0	0	0	1 (3)
注射部位疼痛	0	0	0	0	4 (10)
注射部位そう痒感	0	0	0	0	3 (8)
注射部位発疹	0	0	0	0	1 (3)
注射部位反応	0	0	0	0	1 (3)
注射部位腫脹	0	0	0	0	1 (3)
注射部位蕁麻疹	0	0	0	0	2 (5)
注射部位熱感	0	0	0	0	1 (3)

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Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
倦怠感	0	0	0	0	1 (3)
臨床検査	21 (33)	27 (34)	27 (36)	54 (35)	17 (44)
アラニン・アミノトランスフェラーゼ増加	1 (2)	8 (10)	3 (4)	11 (7)	2 (5)
尿中アルブミン陽性	3 (5)	5 (6)	5 (7)	10 (6)	5 (13)
アスパラギン酸アミノトランスフェラーゼ増加	0	6 (8)	2 (3)	8 (5)	1 (3)
血中ブドウ糖増加	3 (5)	4 (5)	3 (4)	7 (5)	1 (3)
尿中蛋白陽性	1 (2)	4 (5)	3 (4)	7 (5)	2 (5)
γ－グルタミルトランスフェラーゼ増加	1 (2)	4 (5)	2 (3)	6 (4)	1 (3)
尿中血陽性	0	3 (4)	2 (3)	5 (3)	0
尿中β２ミクログロブリン増加	0	1 (1)	3 (4)	4 (3)	0
血中副甲状腺ホルモン増加	0	2 (3)	1 (1)	3 (2)	0
血中トリグリセリド増加	1 (2)	3 (4)	0	3 (2)	2 (5)
肝酵素上昇	2 (3)	3 (4)	0	3 (2)	2 (5)
尿中白血球陽性	1 (2)	3 (4)	0	3 (2)	1 (3)
心電図ＱＴ延長	3 (5)	0	2 (3)	2 (1)	1 (3)
尿中ブドウ糖陽性	0	1 (1)	1 (1)	2 (1)	0
肝機能検査異常	0	1 (1)	1 (1)	2 (1)	0
尿中ケトン体陽性	0	1 (1)	1 (1)	2 (1)	1 (3)
ビタミンＤ減少	1 (2)	0	2 (3)	2 (1)	0
体重減少	0	0	2 (3)	2 (1)	1 (3)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
β２ミクログロブリン増加	0	1 (1)	0	1 (<1)	0
血中アルカリホスファターゼ増加	0	1 (1)	0	1 (<1)	0
血中葉酸減少	0	1 (1)	0	1 (<1)	0
血中ケトン体増加	0	1 (1)	0	1 (<1)	0
血中乳酸脱水素酵素増加	0	1 (1)	0	1 (<1)	0
血中カリウム減少	0	0	1 (1)	1 (<1)	0
血中カリウム増加	0	1 (1)	0	1 (<1)	0
拡張期血圧上昇	0	0	1 (1)	1 (<1)	0
血中ナトリウム増加	0	1 (1)	0	1 (<1)	0
血中甲状腺刺激ホルモン増加	0	0	1 (1)	1 (<1)	0
血中尿酸増加	1 (2)	0	1 (1)	1 (<1)	0
体温上昇	0	0	1 (1)	1 (<1)	0
尿中結晶陽性	1 (2)	1 (1)	0	1 (<1)	0
心電図異常	0	0	1 (1)	1 (<1)	0
心電図Ｔ波逆転	0	1 (1)	0	1 (<1)	0
好酸球数異常	0	0	1 (1)	1 (<1)	0
ヘモグロビン減少	0	0	1 (1)	1 (<1)	0
リンパ球数減少	0	1 (1)	0	1 (<1)	0
好中球数増加	0	1 (1)	0	1 (<1)	0
ビタミンＢ１２減少	1 (2)	1 (1)	0	1 (<1)	0
体重増加	1 (2)	0	1 (1)	1 (<1)	2 (5)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白血球数増加	0	1 (1)	0	1 (<1)	0
血中ビリルビン増加	1 (2)	0	0	0	0
中枢神経系機能検査異常	1 (2)	0	0	0	0
心電図ＰＲ延長	1 (2)	0	0	0	0
心電図Ｔ波振幅減少	0	0	0	0	1 (3)
好酸球数増加	1 (2)	0	0	0	0
全血球数異常	1 (2)	0	0	0	0
握力低下	0	0	0	0	1 (3)
尿中赤血球陽性	1 (2)	0	0	0	0
トランスアミナーゼ上昇	1 (2)	0	0	0	0
尿細胞診異常	1 (2)	0	0	0	0
傷害、中毒および処置合併症	16 (25)	21 (27)	15 (20)	36 (23)	7 (18)
挫傷	2 (3)	7 (9)	5 (7)	12 (8)	0
転倒	3 (5)	4 (5)	3 (4)	7 (5)	0
肉離れ	1 (2)	1 (1)	4 (5)	5 (3)	0
皮膚裂傷	1 (2)	1 (1)	3 (4)	4 (3)	0
擦過傷	1 (2)	1 (1)	2 (3)	3 (2)	0
半月板障害	0	3 (4)	0	3 (2)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
熱傷	0	1 (1)	2 (3)	3 (2)	0
節足動物咬傷	1 (2)	2 (3)	0	2 (1)	1 (3)
関節捻挫	1 (2)	2 (3)	0	2 (1)	0
むち打ち損傷	0	2 (3)	0	2 (1)	1 (3)
眼瞼損傷	0	1 (1)	0	1 (<1)	0
顔面骨骨折	0	1 (1)	0	1 (<1)	0
足骨折	1 (2)	0	1 (1)	1 (<1)	0
瘢痕ヘルニア	0	1 (1)	0	1 (<1)	0
靭帯損傷	0	0	1 (1)	1 (<1)	0
下肢骨折	0	0	1 (1)	1 (<1)	0
処置後出血	0	1 (1)	0	1 (<1)	0
サンバーン	1 (2)	1 (1)	0	1 (<1)	0
歯牙破折	0	0	1 (1)	1 (<1)	0
ワクチン接種合併症	0	0	1 (1)	1 (<1)	0
動物咬傷	1 (2)	0	0	0	0
脳振盪	0	0	0	0	1 (3)
上顆炎	1 (2)	0	0	0	0
眼外傷	1 (2)	0	0	0	0
前腕骨折	0	0	0	0	1 (3)
眼内異物	1 (2)	0	0	0	0
手骨折	0	0	0	0	1 (3)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight: Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
頭部損傷	1 (2)	0	0	0	0
関節損傷	2 (3)	0	0	0	0
処置による悪心	1 (2)	0	0	0	0
処置による疼痛	1 (2)	0	0	0	0
橈骨骨折	0	0	0	0	1 (3)
交通事故	1 (2)	0	0	0	2 (5)
骨格損傷	1 (2)	0	0	0	0
外傷性血腫	0	0	0	0	1 (3)
創傷	1 (2)	0	0	0	0
手首関節骨折	1 (2)	0	0	0	0
外科および内科処置	2 (3)	2 (3)	0	2 (1)	0
ヘルニア修復	0	1 (1)	0	1 (<1)	0
抜歯	0	1 (1)	0	1 (<1)	0
嚢胞ドレナージ	1 (2)	0	0	0	0
鼻甲介切除	1 (2)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGT-A.SAS DATE: 02DEC2015

Table 280: Incidence of Serious Adverse Events by System Organ Class and Preferred Term - by Body Weight: Studies 109MS301 and 109MS302

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
Page 1 of 19
(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	73 (100)	90 (100)	75 (100)	165 (100)	42 (100)
Number of subjects with an event	20 (27)	22 (24)	11 (15)	33 (20)	6 (14)
感染症および寄生虫症	2 (3)	4 (4)	2 (3)	6 (4)	0
胃腸炎	0	2 (2)	0	2 (1)	0
蜂巣炎	0	1 (1)	0	1 (<1)	0
ダグラス窩膿瘍	0	0	1 (1)	1 (<1)	0
ウイルス性胃腸炎	0	0	1 (1)	1 (<1)	0
ウイルス感染後疲労症候群	0	1 (1)	0	1 (<1)	0
急性腎盂腎炎	0	0	1 (1)	1 (<1)	0
Ｈ１Ｎ１インフルエンザ	1 (1)	0	0	0	0
鼻咽頭炎	1 (1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	1 (1)	0	0	0	0
子宮平滑筋腫	1 (1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血液およびリンパ系障害	1 (1)	0	0	0	0
貧血	1 (1)	0	0	0	0
内分泌障害	0	1 (1)	1 (1)	2 (1)	0
甲状腺腫	0	1 (1)	1 (1)	2 (1)	0
代謝および栄養障害	0	0	1 (1)	1 (<1)	0
脱水	0	0	1 (1)	1 (<1)	0
精神障害	0	0	1 (1)	1 (<1)	0
うつ病	0	0	1 (1)	1 (<1)	0
神経系障害	17 (23)	11 (12)	6 (8)	17 (10)	5 (12)
多発性硬化症再発	17 (23)	11 (12)	6 (8)	17 (10)	5 (12)
神経学的症状	0	0	1 (1)	1 (<1)	0
心臓障害	0	0	0	0	1 (2)
心筋炎	0	0	0	0	1 (2)
胃腸障害	1 (1)	2 (2)	1 (1)	3 (2)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

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Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
Page 3 of 19
(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
嘔吐	0	2 (2)	0	2 (1)	0
腹痛	0	1 (1)	0	1 (<1)	0
胃炎	0	0	1 (1)	1 (<1)	0
悪心	0	1 (1)	0	1 (<1)	0
腹膜出血	1 (1)	0	0	0	0
筋骨格系および結合組織障害	0	1 (1)	0	1 (<1)	0
背部痛	0	1 (1)	0	1 (<1)	0
腎および尿路障害	0	0	2 (3)	2 (1)	0
膀胱穿孔	0	0	1 (1)	1 (<1)	0
尿失禁	0	0	1 (1)	1 (<1)	0
妊娠、産褥および周産期の状態	1 (1)	0	0	0	0
妊娠浮腫	1 (1)	0	0	0	0
生殖系および乳房障害	1 (1)	2 (2)	0	2 (1)	0
月経過多	0	1 (1)	0	1 (<1)	0
卵巣嚢胞	0	1 (1)	0	1 (<1)	0
月経障害	1 (1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(lightest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
一般・全身障害および投与部位の状態	0	1 (1)	1 (1)	2 (1)	0
発熱	0	1 (1)	1 (1)	2 (1)	0
臨床検査	0	1 (1)	1 (1)	2 (1)	0
尿中β２ミクログロブリン増加	0	0	1 (1)	1 (<1)	0
結腸内視鏡検査	0	1 (1)	0	1 (<1)	0
傷害、中毒および処置合併症	0	3 (3)	1 (1)	4 (2)	0
大腿骨骨折	0	1 (1)	1 (1)	2 (1)	0
転倒	0	1 (1)	0	1 (<1)	0
足骨折	0	1 (1)	0	1 (<1)	0
半月板障害	0	1 (1)	0	1 (<1)	0
交通事故	0	0	1 (1)	1 (<1)	0
外科および内科処置	0	1 (1)	0	1 (<1)	0
女性不妊手術	0	1 (1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	628 (100)	597 (100)	606 (100)	1203 (100)	270 (100)
Number of subjects with an event	137 (22)	107 (18)	89 (15)	196 (16)	49 (18)
感染症および寄生虫症	10 (2)	13 (2)	11 (2)	24 (2)	4 (1)
胃腸炎	0	4 (<1)	3 (<1)	7 (<1)	0
ウイルス感染	0	2 (<1)	1 (<1)	3 (<1)	1 (<1)
蜂巣炎	0	1 (<1)	1 (<1)	2 (<1)	0
Ｈ１Ｎ１インフルエンザ	0	1 (<1)	1 (<1)	2 (<1)	0
肺炎	2 (<1)	2 (<1)	0	2 (<1)	2 (<1)
副鼻腔炎	0	1 (<1)	1 (<1)	2 (<1)	0
尿路感染	0	1 (<1)	1 (<1)	2 (<1)	0
虫垂炎	0	1 (<1)	0	1 (<1)	1 (<1)
インフルエンザ	1 (<1)	0	1 (<1)	1 (<1)	0
骨盤内炎症性疾患	1 (<1)	0	1 (<1)	1 (<1)	0
扁桃周囲膿瘍	0	0	1 (<1)	1 (<1)	0
外陰部膿瘍	0	0	1 (<1)	1 (<1)	0
肛門膿瘍	1 (<1)	0	0	0	0

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2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
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5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ボレリア感染	1 (<1)	0	0	0	0
感染性下痢	1 (<1)	0	0	0	0
細菌性心内膜炎	1 (<1)	0	0	0	0
膿胸	0	0	0	0	1 (<1)
ライター症候群	1 (<1)	0	0	0	0
敗血症	2 (<1)	0	0	0	0
気管炎	1 (<1)	0	0	0	0
消化器結核	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	4 (<1)	3 (<1)	3 (<1)	6 (<1)	4 (1)
子宮平滑筋腫	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
肺の良性新生物	0	1 (<1)	0	1 (<1)	0
乳癌	1 (<1)	0	1 (<1)	1 (<1)	0
子宮頚部癌	0	0	1 (<1)	1 (<1)	1 (<1)
神経鞘腫	0	1 (<1)	0	1 (<1)	0
乳房新生物	1 (<1)	0	0	0	0
子宮内膜癌	0	0	0	0	1 (<1)
線維腫	1 (<1)	0	0	0	0
血管腫	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
転移性甲状腺癌	0	0	0	0	1 (<1)
血液およびリンパ系障害	1 (<1)	0	0	0	0
小球性貧血	1 (<1)	0	0	0	0
免疫系障害	0	1 (<1)	0	1 (<1)	3 (1)
過敏症	0	1 (<1)	0	1 (<1)	1 (<1)
アナフィラキシー反応	0	0	0	0	2 (<1)
内分泌障害	0	0	1 (<1)	1 (<1)	0
間脳性内分泌障害	0	0	1 (<1)	1 (<1)	0
代謝および栄養障害	1 (<1)	0	1 (<1)	1 (<1)	0
低血糖症	0	0	1 (<1)	1 (<1)	0
糖尿病性ケトアシドーシス	1 (<1)	0	0	0	0
精神障害	4 (<1)	5 (<1)	1 (<1)	6 (<1)	4 (1)
抑うつ気分を伴う適応障害	0	1 (<1)	0	1 (<1)	0
双極 1 型障害	0	1 (<1)	0	1 (<1)	0
うつ病	2 (<1)	1 (<1)	0	1 (<1)	2 (<1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
全般性不安障害	0	1 (<1)	0	1 (<1)	0
躁病	0	1 (<1)	0	1 (<1)	0
自己愛性人格障害	0	1 (<1)	0	1 (<1)	0
自殺念慮	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
自殺企図	0	0	1 (<1)	1 (<1)	1 (<1)
不安	1 (<1)	0	0	0	0
自殺既遂	0	0	0	0	1 (<1)
神経系障害	99 (16)	68 (11)	54 (9)	122 (10)	31 (11)
多発性硬化症再発	92 (15)	65 (11)	48 (8)	113 (9)	29 (11)
頭痛	0	0	2 (<1)	2 (<1)	0
意識変容状態	0	0	1 (<1)	1 (<1)	0
構語障害	0	0	1 (<1)	1 (<1)	0
てんかん	1 (<1)	1 (<1)	0	1 (<1)	0
舌咽神経痛	0	1 (<1)	0	1 (<1)	0
大発作痙攣	2 (<1)	0	1 (<1)	1 (<1)	0
虚血性脳卒中	0	0	1 (<1)	1 (<1)	0
片頭痛	2 (<1)	0	1 (<1)	1 (<1)	0
多発性硬化症	1 (<1)	0	1 (<1)	1 (<1)	0
神経学的症状	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
部分発作	0	1 (<1)	0	1 (<1)	0
下肢静止不能症候群	1 (<1)	0	1 (<1)	1 (<1)	0
一過性全健忘	0	0	1 (<1)	1 (<1)	0
一過性脳虚血発作	0	1 (<1)	0	1 (<1)	0
横静脈洞血栓症	0	0	1 (<1)	1 (<1)	0
第７脳神経麻痺	0	1 (<1)	0	1 (<1)	0
失語症	0	0	0	0	1 (<1)
脳血管発作	1 (<1)	0	0	0	0
脳血管障害	0	0	0	0	1 (<1)
痙攣	3 (<1)	0	0	0	0
脳症	1 (<1)	0	0	0	0
意識消失	1 (<1)	0	0	0	1 (<1)
眼障害	2 (<1)	0	0	0	0
眼痛	1 (<1)	0	0	0	0
視力低下	1 (<1)	0	0	0	0
耳および迷路障害	0	0	1 (<1)	1 (<1)	1 (<1)
頭位性回転性めまい	0	0	1 (<1)	1 (<1)	0
前庭性運動失調	0	0	0	0	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心臓障害	0	0	2 (<1)	2 (<1)	0
急性冠動脈症候群	0	0	1 (<1)	1 (<1)	0
心不全	0	0	1 (<1)	1 (<1)	0
血管障害	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
潮紅	0	1 (<1)	1 (<1)	2 (<1)	0
深部静脈血栓症	0	0	0	0	1 (<1)
末梢性虚血	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	0	3 (<1)	0	3 (<1)	0
喘息	0	1 (<1)	0	1 (<1)	0
胸水	0	1 (<1)	0	1 (<1)	0
誤嚥性肺炎	0	1 (<1)	0	1 (<1)	0
胃腸障害	4 (<1)	6 (1)	7 (1)	13 (1)	0
胃炎	0	0	2 (<1)	2 (<1)	0
腹部ヘルニア	0	1 (<1)	0	1 (<1)	0
腹痛	0	1 (<1)	0	1 (<1)	0
下腹部痛	0	0	1 (<1)	1 (<1)	0
便秘	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
憩室穿孔	0	1 (<1)	0	1 (<1)	0
十二指腸炎	0	0	1 (<1)	1 (<1)	0
胃腸障害	0	1 (<1)	0	1 (<1)	0
胃腸出血	1 (<1)	0	1 (<1)	1 (<1)	0
裂孔ヘルニア	0	1 (<1)	0	1 (<1)	0
腸閉塞	0	0	1 (<1)	1 (<1)	0
嘔吐	1 (<1)	0	1 (<1)	1 (<1)	0
大腸炎	1 (<1)	0	0	0	0
潰瘍性大腸炎	1 (<1)	0	0	0	0
悪心	1 (<1)	0	0	0	0
急性膵炎	1 (<1)	0	0	0	0
肝胆道系障害	0	2 (<1)	1 (<1)	3 (<1)	1 (<1)
胆石症	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
胆管結石	0	0	1 (<1)	1 (<1)	0
胆汁うっ滞性肝炎	0	1 (<1)	0	1 (<1)	0
皮膚および皮下組織障害	0	1 (<1)	1 (<1)	2 (<1)	0
そう痒症	0	0	1 (<1)	1 (<1)	0
スティーブンス・ジョンソン症候群	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋骨格系および結合組織障害	2 (<1)	3 (<1)	2 (<1)	5 (<1)	0
関節痛	0	1 (<1)	0	1 (<1)	0
背部痛	0	1 (<1)	0	1 (<1)	0
変形性関節症	1 (<1)	0	1 (<1)	1 (<1)	0
シェーグレン症候群	0	1 (<1)	0	1 (<1)	0
変形性脊椎症	0	0	1 (<1)	1 (<1)	0
多発性関節炎	1 (<1)	0	0	0	0
腎および尿路障害	2 (<1)	2 (<1)	1 (<1)	3 (<1)	0
膀胱機能障害	0	1 (<1)	0	1 (<1)	0
腎仙痛	0	0	1 (<1)	1 (<1)	0
尿管瘤	0	1 (<1)	0	1 (<1)	0
膀胱憩室	1 (<1)	0	0	0	0
腎下垂症	1 (<1)	0	0	0	0
妊娠、産褥および周産期の状態	1 (<1)	0	0	0	0
自然流産	1 (<1)	0	0	0	0
生殖系および乳房障害	5 (<1)	2 (<1)	3 (<1)	5 (<1)	2 (<1)
卵巣嚢胞	1 (<1)	0	2 (<1)	2 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腺筋症	0	0	1 (<1)	1 (<1)	0
子宮内膜症	0	1 (<1)	0	1 (<1)	0
不正子宮出血	0	0	1 (<1)	1 (<1)	1 (<1)
卵巣嚢胞破裂	0	1 (<1)	0	1 (<1)	0
バルトリン嚢腫	1 (<1)	0	0	0	0
骨盤痛	1 (<1)	0	0	0	0
子宮出血	2 (<1)	0	0	0	1 (<1)
先天性、家族性および遺伝性障害	0	0	1 (<1)	1 (<1)	0
陰嚢水瘤	0	0	1 (<1)	1 (<1)	0
一般・全身障害および投与部位の状態	3 (<1)	0	2 (<1)	2 (<1)	1 (<1)
無力症	1 (<1)	0	1 (<1)	1 (<1)	0
発熱	0	0	1 (<1)	1 (<1)	0
インフルエンザ様疾患	1 (<1)	0	0	0	0
末梢性浮腫	0	0	0	0	1 (<1)
骨盤腔内腫瘤	1 (<1)	0	0	0	0
臨床検査	2 (<1)	0	3 (<1)	3 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
アレルギー検査	0	0	1 (<1)	1 (<1)	0
検査	0	0	1 (<1)	1 (<1)	0
医学的観察	0	0	1 (<1)	1 (<1)	0
肝酵素上昇	2 (<1)	0	0	0	0
傷害、中毒および処置合併症	9 (1)	6 (1)	6 (<1)	12 (<1)	3 (1)
交通事故	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
手首関節骨折	0	0	2 (<1)	2 (<1)	0
アルコール中毒	0	0	1 (<1)	1 (<1)	0
足関節部骨折	0	0	1 (<1)	1 (<1)	0
脳振盪	0	1 (<1)	0	1 (<1)	0
靭帯断裂	0	1 (<1)	0	1 (<1)	0
過量投与	0	1 (<1)	0	1 (<1)	0
術後発熱	0	1 (<1)	0	1 (<1)	0
処置による低血圧	0	1 (<1)	0	1 (<1)	0
橈骨骨折	0	0	1 (<1)	1 (<1)	1 (<1)
外傷性脳損傷	0	1 (<1)	0	1 (<1)	0
外傷性血腫	0	1 (<1)	0	1 (<1)	0
眼外傷	1 (<1)	0	0	0	0
大腿骨頚部骨折	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(middle 80%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
大腿骨骨折	0	0	0	0	1 (<1)
手骨折	1 (<1)	0	0	0	0
靭帯損傷	1 (<1)	0	0	0	0
半月板障害	1 (<1)	0	0	0	0
腱断裂	3 (<1)	0	0	0	0
治療薬毒性	1 (<1)	0	0	0	0
脛骨骨折	1 (<1)	0	0	0	0
むち打ち損傷	0	0	0	0	1 (<1)
外科および内科処置	1 (<1)	3 (<1)	2 (<1)	5 (<1)	1 (<1)
乳房腫瘤摘除	0	1 (<1)	0	1 (<1)	0
子宮摘出	0	1 (<1)	0	1 (<1)	0
椎間板手術	0	0	1 (<1)	1 (<1)	0
治療食	0	1 (<1)	0	1 (<1)	0
静脈ステント挿入	0	0	1 (<1)	1 (<1)	0
子宮頚部円錐切除	1 (<1)	0	0	0	0
不妊手術	0	0	0	0	1 (<1)
社会環境	1 (<1)	0	0	0	0
社会問題	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	63 (100)	79 (100)	76 (100)	155 (100)	39 (100)
Number of subjects with an event	6 (10)	6 (8)	18 (24)	24 (15)	5 (13)
感染症および寄生虫症	0	0	2 (3)	2 (1)	0
蜂巣炎	0	0	1 (1)	1 (<1)	0
尿路感染	0	0	1 (1)	1 (<1)	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	0	1 (1)	0	1 (<1)	1 (3)
移行上皮癌	0	1 (1)	0	1 (<1)	0
基底細胞癌	0	0	0	0	1 (3)
免疫系障害	0	0	2 (3)	2 (1)	0
アナフィラキシー様反応	0	0	1 (1)	1 (<1)	0
過敏症	0	0	1 (1)	1 (<1)	0
神経系障害	1 (2)	2 (3)	9 (12)	11 (7)	4 (10)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
多発性硬化症再発	1 (2)	2 (3)	8 (11)	10 (6)	2 (5)
良性頭蓋内圧亢進	0	0	1 (1)	1 (<1)	0
頭痛	0	0	1 (1)	1 (<1)	0
後頭神経痛	0	0	1 (1)	1 (<1)	0
大発作痙攣	0	0	0	0	1 (3)
部分発作	0	0	0	0	1 (3)
眼障害	1 (2)	0	0	0	0
ホームズ・アディー瞳孔	1 (2)	0	0	0	0
心臓障害	0	0	2 (3)	2 (1)	0
徐脈	0	0	1 (1)	1 (<1)	0
うっ血性心不全	0	0	1 (1)	1 (<1)	0
血管障害	0	1 (1)	2 (3)	3 (2)	0
静脈瘤	0	1 (1)	1 (1)	2 (1)	0
深部静脈血栓症	0	0	1 (1)	1 (<1)	0
呼吸器、胸郭および縦隔障害	1 (2)	0	0	0	0
鼻茸	1 (2)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
胃腸障害	0	0	2 (3)	2 (1)	0
臍ヘルニア	0	0	1 (1)	1 (<1)	0
嘔吐	0	0	1 (1)	1 (<1)	0
皮膚および皮下組織障害	1 (2)	0	0	0	0
アレルギー性皮膚炎	1 (2)	0	0	0	0
筋骨格系および結合組織障害	1 (2)	1 (1)	0	1 (<1)	0
滑液包炎	0	1 (1)	0	1 (<1)	0
滑液嚢腫	1 (2)	0	0	0	0
妊娠、産褥および周産期の状態	1 (2)	0	0	0	0
自然流産	1 (2)	0	0	0	0
一般・全身障害および投与部位の状態	0	0	3 (4)	3 (2)	0
閉塞性ヘルニア	0	0	1 (1)	1 (<1)	0
非心臓性胸痛	0	0	1 (1)	1 (<1)	0
末梢性浮腫	0	0	1 (1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight:
Studies 109MS301 and 109MS302
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(heaviest 10%)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
臨床検査	0	0	1 (1)	1 (<1)	0
血中ブドウ糖増加	0	0	1 (1)	1 (<1)	0
傷害、中毒および処置合併症	0	1 (1)	2 (3)	3 (2)	0
肉離れ	0	0	2 (3)	2 (1)	0
顔面骨骨折	0	1 (1)	0	1 (<1)	0
外科および内科処置	1 (2)	0	0	0	0
鼻甲介切除	1 (2)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight categories are <=52 kg (lightest 10%), > 52 kg - <= 95 kg (middle 80%), and > 95 kg (heaviest 10%).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGT-A.SAS DATE: 02DEC2015

Table 281: Incidence of Adverse Events by System Organ Class and Preferred Term - by Body Weight Quartiles: Studies 109MS301 and 109MS302

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	176 (100)	216 (100)	193 (100)	409 (100)	106 (100)
Number of subjects with an event	165 (94)	208 (96)	180 (93)	388 (95)	88 (83)
感染症および寄生虫症	99 (56)	133 (62)	115 (60)	248 (61)	46 (43)
鼻咽頭炎	33 (19)	43 (20)	39 (20)	82 (20)	9 (8)
尿路感染	28 (16)	31 (14)	22 (11)	53 (13)	14 (13)
上気道感染	17 (10)	30 (14)	22 (11)	52 (13)	9 (8)
インフルエンザ	9 (5)	14 (6)	14 (7)	28 (7)	5 (5)
副鼻腔炎	3 (2)	11 (5)	11 (6)	22 (5)	2 (2)
気管支炎	10 (6)	9 (4)	12 (6)	21 (5)	4 (4)
咽頭炎	8 (5)	11 (5)	9 (5)	20 (5)	5 (5)
胃腸炎	10 (6)	10 (5)	8 (4)	18 (4)	3 (3)
鼻炎	7 (4)	11 (5)	4 (2)	15 (4)	3 (3)
気道感染	2 (1)	10 (5)	3 (2)	13 (3)	4 (4)
ウイルス感染	2 (1)	11 (5)	1 (<1)	12 (3)	1 (<1)
口腔ヘルペス	5 (3)	4 (2)	6 (3)	10 (2)	1 (<1)
膀胱炎	3 (2)	4 (2)	3 (2)	7 (2)	3 (3)

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ウイルス性胃腸炎	3 (2)	1 (<1)	6 (3)	7 (2)	1 (<1)
膣感染	0	3 (1)	4 (2)	7 (2)	1 (<1)
帯状疱疹	3 (2)	3 (1)	2 (1)	5 (1)	1 (<1)
喉頭炎	1 (<1)	2 (<1)	3 (2)	5 (1)	1 (<1)
ウイルス性上気道感染	4 (2)	3 (1)	2 (1)	5 (1)	0
外陰部膣カンジダ症	1 (<1)	3 (1)	2 (1)	5 (1)	0
外陰膣真菌感染	3 (2)	4 (2)	1 (<1)	5 (1)	1 (<1)
感染性結膜炎	1 (<1)	3 (1)	1 (<1)	4 (<1)	0
耳感染	3 (2)	0	4 (2)	4 (<1)	0
ウイルス性消化管感染	1 (<1)	3 (1)	1 (<1)	4 (<1)	1 (<1)
蜂巣炎	0	2 (<1)	1 (<1)	3 (<1)	0
せつ	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
単純ヘルペス	0	2 (<1)	1 (<1)	3 (<1)	1 (<1)
下気道感染	0	0	3 (2)	3 (<1)	0
中耳炎	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
扁桃炎	1 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
細菌尿	0	0	2 (1)	2 (<1)	0
陰部ヘルペス	1 (<1)	2 (<1)	0	2 (<1)	1 (<1)
咬傷感染	0	2 (<1)	0	2 (<1)	0
シラミ寄生	0	2 (<1)	0	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
限局性感染	0	2 (<1)	0	2 (<1)	0
爪囲炎	0	2 (<1)	0	2 (<1)	0
肺炎	0	1 (<1)	1 (<1)	2 (<1)	0
ウイルス性気道感染	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
歯膿瘍	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
気管炎	0	2 (<1)	0	2 (<1)	0
細菌性膣炎	0	2 (<1)	0	2 (<1)	1 (<1)
急性副鼻腔炎	0	0	1 (<1)	1 (<1)	0
急性扁桃炎	0	1 (<1)	0	1 (<1)	1 (<1)
無症候性細菌尿	0	1 (<1)	0	1 (<1)	0
細菌感染	0	1 (<1)	0	1 (<1)	0
ウイルス性気管支炎	0	0	1 (<1)	1 (<1)	0
カンジダ症	0	1 (<1)	0	1 (<1)	1 (<1)
子宮頚管炎	0	1 (<1)	0	1 (<1)	1 (<1)
ウイルス性結膜炎	0	0	1 (<1)	1 (<1)	0
デング熱	0	1 (<1)	0	1 (<1)	0
ダグラス窩膿瘍	0	0	1 (<1)	1 (<1)	0
毛包炎	1 (<1)	1 (<1)	0	1 (<1)	0
ノロウイルス性胃腸炎	0	1 (<1)	0	1 (<1)	0
消化管感染	2 (1)	1 (<1)	0	1 (<1)	2 (2)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ジアルジア症	0	1 (<1)	0	1 (<1)	0
Ｈ１Ｎ１インフルエンザ	1 (<1)	0	1 (<1)	1 (<1)	0
ヘリコバクター性胃炎	0	0	1 (<1)	1 (<1)	0
神経合併症を伴う帯状疱疹感染	0	1 (<1)	0	1 (<1)	0
麦粒腫	1 (<1)	0	1 (<1)	1 (<1)	0
膿痂疹	0	0	1 (<1)	1 (<1)	0
感染	0	0	1 (<1)	1 (<1)	0
迷路炎	1 (<1)	1 (<1)	0	1 (<1)	0
爪真菌症	1 (<1)	1 (<1)	0	1 (<1)	0
口腔カンジダ症	0	1 (<1)	0	1 (<1)	0
口腔真菌感染	0	1 (<1)	0	1 (<1)	0
咽頭扁桃炎	0	1 (<1)	0	1 (<1)	0
ウイルス感染後疲労症候群	1 (<1)	1 (<1)	0	1 (<1)	0
術後創感染	0	0	1 (<1)	1 (<1)	0
急性腎盂腎炎	0	0	1 (<1)	1 (<1)	0
膿皮症	0	1 (<1)	0	1 (<1)	0
細菌性副鼻腔炎	0	0	1 (<1)	1 (<1)	0
皮膚感染	0	1 (<1)	0	1 (<1)	0
軟部組織感染	0	1 (<1)	0	1 (<1)	0
癜風	2 (1)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
歯感染	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
腸チフス熱	0	0	1 (<1)	1 (<1)	0
細菌性上気道感染	0	1 (<1)	0	1 (<1)	0
ウイルス性咽頭炎	0	1 (<1)	0	1 (<1)	0
外陰部炎	0	1 (<1)	0	1 (<1)	0
虫垂炎	0	0	0	0	1 (<1)
ボレリア感染	1 (<1)	0	0	0	0
熱傷部感染	1 (<1)	0	0	0	0
眼感染	2 (1)	0	0	0	0
泌尿生殖器感染	1 (<1)	0	0	0	0
感染性皮脂嚢腫	1 (<1)	0	0	0	0
外耳炎	1 (<1)	0	0	0	0
子宮傍組織炎	0	0	0	0	1 (<1)
レンサ球菌性咽頭炎	3 (2)	0	0	0	0
腎盂腎炎	1 (<1)	0	0	0	0
膿疱性皮疹	0	0	0	0	1 (<1)
卵管卵巣炎	2 (1)	0	0	0	0
敗血症	1 (<1)	0	0	0	0
足部白癬	1 (<1)	0	0	0	0
消化器結核	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尿路性敗血症	1 (<1)	0	0	0	0
水痘	0	0	0	0	1 (<1)
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	2 (1)	4 (2)	6 (3)	10 (2)	1 (<1)
皮膚乳頭腫	0	2 (<1)	2 (1)	4 (<1)	0
メラノサイト性母斑	0	1 (<1)	1 (<1)	2 (<1)	0
乳腺線維腺腫	0	1 (<1)	0	1 (<1)	0
線維腫	0	0	1 (<1)	1 (<1)	0
血管腫	0	0	1 (<1)	1 (<1)	0
乳頭腫	0	0	1 (<1)	1 (<1)	0
脂漏性角化症	0	0	1 (<1)	1 (<1)	0
乳癌	1 (<1)	0	0	0	0
子宮内膜癌	0	0	0	0	1 (<1)
良性副甲状腺腫瘍	1 (<1)	0	0	0	0
子宮平滑筋腫	1 (<1)	0	0	0	0
血液およびリンパ系障害	12 (7)	18 (8)	10 (5)	28 (7)	4 (4)
貧血	5 (3)	7 (3)	7 (4)	14 (3)	0
リンパ球減少症	1 (<1)	6 (3)	2 (1)	8 (2)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白血球増加症	1 (<1)	3 (1)	1 (<1)	4 (<1)	0
白血球減少症	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
好中球増加症	3 (2)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
リンパ節症	2 (1)	1 (<1)	0	1 (<1)	2 (2)
好中球減少症	1 (<1)	1 (<1)	0	1 (<1)	0
妊娠貧血	1 (<1)	0	0	0	0
血小板減少症	0	0	0	0	1 (<1)
血小板増加症	1 (<1)	0	0	0	0
免疫系障害	4 (2)	5 (2)	4 (2)	9 (2)	3 (3)
過敏症	0	3 (1)	2 (1)	5 (1)	0
季節性アレルギー	3 (2)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
薬物過敏症	0	0	1 (<1)	1 (<1)	1 (<1)
アナフィラキシー反応	0	0	0	0	1 (<1)
食物アレルギー	0	0	0	0	1 (<1)
家塵アレルギー	1 (<1)	0	0	0	0
内分泌障害	2 (1)	1 (<1)	2 (1)	3 (<1)	0
甲状腺腫	0	1 (<1)	1 (<1)	2 (<1)	0
甲状腺機能亢進症	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
副甲状腺機能亢進症	1 (<1)	0	0	0	0
甲状腺機能低下症	1 (<1)	0	0	0	0
代謝および栄養障害	16 (9)	13 (6)	15 (8)	28 (7)	3 (3)
食欲減退	6 (3)	9 (4)	5 (3)	14 (3)	2 (2)
高コレステロール血症	1 (<1)	3 (1)	2 (1)	5 (1)	1 (<1)
高血糖	3 (2)	0	3 (2)	3 (<1)	0
脱水	0	1 (<1)	1 (<1)	2 (<1)	0
脂質異常症	0	0	2 (1)	2 (<1)	0
異常体重減少	0	0	1 (<1)	1 (<1)	0
耐糖能障害	0	0	1 (<1)	1 (<1)	0
高ナトリウム血症	0	0	1 (<1)	1 (<1)	0
ビタミンＢ１２欠乏	0	0	1 (<1)	1 (<1)	0
ビタミンＤ欠乏	2 (1)	0	1 (<1)	1 (<1)	0
高カルシウム血症	1 (<1)	0	0	0	0
高トリグリセリド血症	1 (<1)	0	0	0	0
ビタミンＤ過剰症	1 (<1)	0	0	0	0
低カリウム血症	1 (<1)	0	0	0	0
鉄欠乏	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
精神障害	43 (24)	35 (16)	29 (15)	64 (16)	12 (11)
うつ病	19 (11)	14 (6)	14 (7)	28 (7)	7 (7)
不安	6 (3)	10 (5)	6 (3)	16 (4)	1 (<1)
不眠症	10 (6)	9 (4)	5 (3)	14 (3)	5 (5)
抑うつ気分	4 (2)	3 (1)	2 (1)	5 (1)	1 (<1)
気分動揺	0	1 (<1)	2 (1)	3 (<1)	1 (<1)
睡眠障害	3 (2)	1 (<1)	2 (1)	3 (<1)	0
リビドー減退	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
自殺念慮	0	1 (<1)	1 (<1)	2 (<1)	0
抑うつ気分を伴う適応障害	0	1 (<1)	0	1 (<1)	0
感情不安定	1 (<1)	0	1 (<1)	1 (<1)	0
双極１型障害	0	1 (<1)	0	1 (<1)	0
転換性障害	0	0	1 (<1)	1 (<1)	0
抑うつ症状	0	1 (<1)	0	1 (<1)	0
多幸気分	0	1 (<1)	0	1 (<1)	0
初期不眠症	0	0	1 (<1)	1 (<1)	0
リビド消失	0	1 (<1)	0	1 (<1)	0
大うつ病	0	0	1 (<1)	1 (<1)	0
神経過敏	1 (<1)	0	1 (<1)	1 (<1)	1 (<1)
パニック発作	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
人格変化	0	1 (<1)	0	1 (<1)	0
精神症状	0	1 (<1)	0	1 (<1)	0
身体表現性障害	1 (<1)	1 (<1)	0	1 (<1)	0
ストレス	2 (1)	0	1 (<1)	1 (<1)	1 (<1)
感情障害	0	0	0	0	1 (<1)
歯ぎしり	1 (<1)	0	0	0	0
不快気分	1 (<1)	0	0	0	0
躁病	1 (<1)	0	0	0	0
緊張	1 (<1)	0	0	0	0
神経系障害	123 (70)	115 (53)	91 (47)	206 (50)	56 (53)
多発性硬化症再発	92 (52)	63 (29)	48 (25)	111 (27)	42 (40)
頭痛	27 (15)	40 (19)	27 (14)	67 (16)	11 (10)
錯感覚	13 (7)	16 (7)	9 (5)	25 (6)	4 (4)
感覚鈍麻	9 (5)	11 (5)	8 (4)	19 (5)	3 (3)
灼熱感	6 (3)	8 (4)	5 (3)	13 (3)	0
浮動性めまい	5 (3)	7 (3)	4 (2)	11 (3)	3 (3)
片頭痛	6 (3)	8 (4)	2 (1)	10 (2)	2 (2)
筋痙直	7 (4)	6 (3)	4 (2)	10 (2)	6 (6)
味覚異常	1 (<1)	3 (1)	4 (2)	7 (2)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
振戦	2 (1)	6 (3)	0	6 (1)	1 (<1)
平衡障害	1 (<1)	1 (<1)	4 (2)	5 (1)	0
感覚障害	3 (2)	3 (1)	1 (<1)	4 (<1)	0
傾眠	1 (<1)	2 (<1)	2 (1)	4 (<1)	1 (<1)
構語障害	0	1 (<1)	2 (1)	3 (<1)	0
坐骨神経痛	2 (1)	1 (<1)	2 (1)	3 (<1)	0
三叉神経痛	1 (<1)	3 (1)	0	3 (<1)	1 (<1)
健忘	1 (<1)	2 (<1)	0	2 (<1)	0
帯状感	0	1 (<1)	1 (<1)	2 (<1)	0
頚髄神経根痛	0	0	2 (1)	2 (<1)	0
痙攣	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
振動覚低下	1 (<1)	2 (<1)	0	2 (<1)	0
注意力障害	0	1 (<1)	1 (<1)	2 (<1)	0
反射亢進	0	2 (<1)	0	2 (<1)	1 (<1)
過眠症	0	2 (<1)	0	2 (<1)	0
前兆を伴う片頭痛	0	1 (<1)	1 (<1)	2 (<1)	0
多発性硬化症	2 (1)	1 (<1)	1 (<1)	2 (<1)	5 (5)
不随意性筋収縮	0	2 (<1)	0	2 (<1)	0
神経圧迫	0	0	2 (1)	2 (<1)	0
失神寸前の状態	2 (1)	1 (<1)	1 (<1)	2 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
失神	2 (1)	0	2 (1)	2 (<1)	1 (<1)
緊張性頭痛	3 (2)	0	2 (1)	2 (<1)	0
失認症	0	1 (<1)	0	1 (<1)	0
運動失調	0	0	1 (<1)	1 (<1)	0
認知障害	0	0	1 (<1)	1 (<1)	0
協調運動異常	0	1 (<1)	0	1 (<1)	0
異常感覚	0	0	1 (<1)	1 (<1)	0
てんかん	0	0	1 (<1)	1 (<1)	1 (<1)
頭部動揺	0	1 (<1)	0	1 (<1)	0
片側頭痛	1 (<1)	1 (<1)	0	1 (<1)	0
知覚過敏	1 (<1)	0	1 (<1)	1 (<1)	0
レルミット徴候	2 (1)	0	1 (<1)	1 (<1)	0
腰髄神経根障害	1 (<1)	1 (<1)	0	1 (<1)	0
記憶障害	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
運動機能障害	0	1 (<1)	0	1 (<1)	0
神経痛	0	1 (<1)	0	1 (<1)	0
神経学的症状	0	0	1 (<1)	1 (<1)	0
眼振	0	0	1 (<1)	1 (<1)	0
視神経炎	0	1 (<1)	0	1 (<1)	0
下肢静止不能症候群	0	0	1 (<1)	1 (<1)	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
一過性脳虚血発作	0	1 (<1)	0	1 (<1)	0
ウートホフ現象	1 (<1)	1 (<1)	0	1 (<1)	0
血管性頭痛	0	0	1 (<1)	1 (<1)	0
失語症	0	0	0	0	1 (<1)
中枢神経系病変	1 (<1)	0	0	0	0
頚腕症候群	1 (<1)	0	0	0	0
顔面痙攣	2 (1)	0	0	0	0
大発作痙攣	1 (<1)	0	0	0	0
意識消失	1 (<1)	0	0	0	1 (<1)
不全単麻痺	1 (<1)	0	0	0	0
単麻痺	1 (<1)	0	0	0	0
副鼻腔炎に伴う頭痛	0	0	0	0	2 (2)
温度覚鈍麻	1 (<1)	0	0	0	0
振動覚亢進	1 (<1)	0	0	0	1 (<1)
眼障害	21 (12)	20 (9)	15 (8)	35 (9)	5 (5)
眼痛	3 (2)	4 (2)	5 (3)	9 (2)	0
霧視	5 (3)	2 (<1)	3 (2)	5 (1)	2 (2)
視力障害	1 (<1)	3 (1)	1 (<1)	4 (<1)	0
眼瞼痙攣	3 (2)	2 (<1)	1 (<1)	3 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
結膜炎	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
眼乾燥	1 (<1)	3 (1)	0	3 (<1)	0
流涙増加	2 (1)	1 (<1)	2 (1)	3 (<1)	0
黒内障	0	1 (<1)	0	1 (<1)	0
両眼球運動障害	0	0	1 (<1)	1 (<1)	0
眼瞼炎	0	0	1 (<1)	1 (<1)	0
失明	0	0	1 (<1)	1 (<1)	0
白内障	0	1 (<1)	0	1 (<1)	0
霰粒腫	0	1 (<1)	0	1 (<1)	0
アレルギー性結膜炎	1 (<1)	0	1 (<1)	1 (<1)	0
眼運動障害	0	0	1 (<1)	1 (<1)	0
眼瞼嚢胞	0	1 (<1)	0	1 (<1)	0
眼瞼下垂	0	0	1 (<1)	1 (<1)	0
眼筋麻痺	0	0	1 (<1)	1 (<1)	0
視神経萎縮	0	0	1 (<1)	1 (<1)	0
羞明	0	1 (<1)	0	1 (<1)	0
光視症	0	1 (<1)	0	1 (<1)	0
屈折障害	1 (<1)	1 (<1)	0	1 (<1)	0
強膜炎	0	1 (<1)	0	1 (<1)	0
ブドウ膜炎	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
一過性失明	0	0	0	0	1 (<1)
結膜刺激	1 (<1)	0	0	0	0
複視	1 (<1)	0	0	0	0
遠視	1 (<1)	0	0	0	0
閃輝暗点	1 (<1)	0	0	0	0
視力低下	2 (1)	0	0	0	2 (2)
耳および迷路障害	13 (7)	11 (5)	18 (9)	29 (7)	7 (7)
回転性めまい	10 (6)	6 (3)	13 (7)	19 (5)	6 (6)
耳痛	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
耳鳴	0	1 (<1)	1 (<1)	2 (<1)	0
頭位性回転性めまい	1 (<1)	0	2 (1)	2 (<1)	0
感音性難聴	0	1 (<1)	0	1 (<1)	0
耳閉	0	0	1 (<1)	1 (<1)	0
耳不快感	0	0	1 (<1)	1 (<1)	0
聴覚過敏	0	1 (<1)	0	1 (<1)	0
聴力低下	0	0	1 (<1)	1 (<1)	0
乗物酔い	0	1 (<1)	0	1 (<1)	0
耳垢栓塞	1 (<1)	0	0	0	0
前庭性運動失調	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心臓障害	8 (5)	10 (5)	14 (7)	24 (6)	4 (4)
動悸	4 (2)	2 (<1)	3 (2)	5 (1)	0
上室性期外収縮	1 (<1)	3 (1)	1 (<1)	4 (<1)	0
洞性頻脈	1 (<1)	0	3 (2)	3 (<1)	0
第一度房室ブロック	0	0	2 (1)	2 (<1)	0
徐脈	0	0	2 (1)	2 (<1)	0
頻脈	1 (<1)	0	2 (1)	2 (<1)	1 (<1)
ウォルフ・パーキンソン・ホワイト症候群	0	2 (<1)	0	2 (<1)	0
狭心症	0	0	1 (<1)	1 (<1)	0
右脚ブロック	0	1 (<1)	0	1 (<1)	0
心臓瘤	0	1 (<1)	0	1 (<1)	0
期外収縮	0	1 (<1)	0	1 (<1)	0
僧帽弁逸脱	0	1 (<1)	0	1 (<1)	0
洞性徐脈	0	1 (<1)	0	1 (<1)	0
心室性期外収縮	0	0	1 (<1)	1 (<1)	0
上室性不整脈	1 (<1)	0	0	0	0
心房細動	0	0	0	0	1 (<1)
伝導障害	1 (<1)	0	0	0	1 (<1)
心筋炎	0	0	0	0	1 (<1)
上室性頻脈	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
発作性頻脈	0	0	0	0	1 (<1)
血管障害	14 (8)	80 (37)	57 (30)	137 (33)	3 (3)
潮紅	3 (2)	66 (31)	46 (24)	112 (27)	2 (2)
ほてり	2 (1)	14 (6)	12 (6)	26 (6)	1 (<1)
高血圧	2 (1)	2 (<1)	2 (1)	4 (<1)	0
低血圧	3 (2)	3 (1)	1 (<1)	4 (<1)	0
血腫	2 (1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
充血	0	1 (<1)	1 (<1)	2 (<1)	0
レイノー現象	0	1 (<1)	1 (<1)	2 (<1)	0
血管障害	0	0	1 (<1)	1 (<1)	0
動脈硬化症	0	0	1 (<1)	1 (<1)	0
微小血管症	0	1 (<1)	0	1 (<1)	0
起立性低血圧	0	0	1 (<1)	1 (<1)	0
末梢性虚血	1 (<1)	1 (<1)	0	1 (<1)	0
静脈炎	0	0	1 (<1)	1 (<1)	0
静脈瘤	0	1 (<1)	0	1 (<1)	0
静脈痛	0	1 (<1)	0	1 (<1)	0
毛細血管脆弱	1 (<1)	0	0	0	0
腹腔内血腫	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
蒼白	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	26 (15)	39 (18)	26 (13)	65 (16)	10 (9)
咳嗽	10 (6)	13 (6)	7 (4)	20 (5)	1 (<1)
口腔咽頭痛	7 (4)	15 (7)	5 (3)	20 (5)	7 (7)
鼻漏	3 (2)	3 (1)	4 (2)	7 (2)	0
喘息	0	3 (1)	0	3 (<1)	0
呼吸困難	3 (2)	2 (<1)	1 (<1)	3 (<1)	2 (2)
鼻出血	0	1 (<1)	2 (1)	3 (<1)	1 (<1)
鼻閉	0	2 (<1)	1 (<1)	3 (<1)	0
アレルギー性鼻炎	0	2 (<1)	1 (<1)	3 (<1)	1 (<1)
咽喉乾燥	0	2 (<1)	0	2 (<1)	0
上気道咳症候群	0	1 (<1)	1 (<1)	2 (<1)	0
アレルギー性咽頭炎	1 (<1)	0	1 (<1)	1 (<1)	0
発声障害	0	0	1 (<1)	1 (<1)	1 (<1)
労作性呼吸困難	0	1 (<1)	0	1 (<1)	0
過換気	0	0	1 (<1)	1 (<1)	0
鼻中隔弯曲	0	1 (<1)	0	1 (<1)	0
咽頭嚢腫	0	1 (<1)	0	1 (<1)	0
咽頭腫瘤	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
胸水	0	1 (<1)	0	1 (<1)	0
胸膜炎	0	0	1 (<1)	1 (<1)	0
気胸	0	0	1 (<1)	1 (<1)	0
低音性連続性ラ音	1 (<1)	1 (<1)	0	1 (<1)	0
副鼻腔うっ血	0	0	1 (<1)	1 (<1)	0
上気道うっ血	0	0	1 (<1)	1 (<1)	0
喘鳴	0	0	1 (<1)	1 (<1)	0
アレルギー性咳嗽	1 (<1)	0	0	0	0
アレルギー性呼吸器疾患	1 (<1)	0	0	0	0
アレルギー性副鼻腔炎	1 (<1)	0	0	0	0
上気道分泌増加	1 (<1)	0	0	0	0
口腔咽頭不快感	0	0	0	0	1 (<1)
口腔咽頭プラーク	1 (<1)	0	0	0	0
気道うっ血	1 (<1)	0	0	0	0
くしゃみ	1 (<1)	0	0	0	0
上気道の炎症	1 (<1)	0	0	0	0
胃腸障害	65 (37)	103 (48)	103 (53)	206 (50)	18 (17)
下痢	15 (9)	30 (14)	26 (13)	56 (14)	3 (3)
悪心	17 (10)	24 (11)	28 (15)	52 (13)	6 (6)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腹痛	6 (3)	24 (11)	17 (9)	41 (10)	1 (<1)
上腹部痛	6 (3)	13 (6)	25 (13)	38 (9)	3 (3)
嘔吐	8 (5)	22 (10)	10 (5)	32 (8)	2 (2)
胃腸障害	2 (1)	8 (4)	10 (5)	18 (4)	0
便秘	9 (5)	7 (3)	10 (5)	17 (4)	4 (4)
消化不良	2 (1)	12 (6)	4 (2)	16 (4)	2 (2)
胃炎	5 (3)	9 (4)	5 (3)	14 (3)	3 (3)
歯痛	7 (4)	8 (4)	3 (2)	11 (3)	0
腹部不快感	1 (<1)	6 (3)	4 (2)	10 (2)	0
口内乾燥	1 (<1)	6 (3)	3 (2)	9 (2)	0
鼓腸	2 (1)	5 (2)	3 (2)	8 (2)	1 (<1)
腹部膨満	2 (1)	1 (<1)	4 (2)	5 (1)	0
胃食道逆流性疾患	2 (1)	4 (2)	0	4 (<1)	0
心窩部不快感	0	1 (<1)	2 (1)	3 (<1)	0
食中毒	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
痔核	2 (1)	1 (<1)	2 (1)	3 (<1)	0
胃酸過多	0	3 (1)	0	3 (<1)	0
歯周炎	0	0	3 (2)	3 (<1)	0
下腹部痛	0	1 (<1)	1 (<1)	2 (<1)	0
結腸ポリープ	0	1 (<1)	1 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
嚥下障害	1 (<1)	0	2 (1)	2 (<1)	1 (<1)
おくび	0	1 (<1)	1 (<1)	2 (<1)	0
過敏性腸症候群	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
口腔内潰瘍形成	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
口内炎	0	2 (<1)	0	2 (<1)	0
アフタ性口内炎	0	0	1 (<1)	1 (<1)	0
口腔灼熱感症候群	0	0	1 (<1)	1 (<1)	0
便意切迫	0	1 (<1)	0	1 (<1)	0
齲歯	1 (<1)	0	1 (<1)	1 (<1)	0
腸憩室	0	0	1 (<1)	1 (<1)	0
十二指腸潰瘍	0	0	1 (<1)	1 (<1)	0
十二指腸炎	0	0	1 (<1)	1 (<1)	0
小腸炎	0	0	1 (<1)	1 (<1)	0
便失禁	0	1 (<1)	0	1 (<1)	0
胃十二指腸炎	0	0	1 (<1)	1 (<1)	0
歯肉出血	0	1 (<1)	0	1 (<1)	0
歯肉腫脹	1 (<1)	1 (<1)	0	1 (<1)	0
裂孔ヘルニア	0	1 (<1)	0	1 (<1)	0
炎症性腸疾患	0	0	1 (<1)	1 (<1)	0
腸管ポリープ	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
弛緩歯	0	1 (<1)	0	1 (<1)	0
嚥下痛	0	1 (<1)	0	1 (<1)	0
口の錯感覚	1 (<1)	1 (<1)	0	1 (<1)	0
消化性潰瘍	0	0	1 (<1)	1 (<1)	0
肛門周囲痛	0	1 (<1)	0	1 (<1)	0
直腸出血	0	1 (<1)	0	1 (<1)	0
逆流性食道炎	0	1 (<1)	0	1 (<1)	0
埋伏歯	0	0	1 (<1)	1 (<1)	0
歯の脱落	0	1 (<1)	0	1 (<1)	0
腹部硬直	1 (<1)	0	0	0	0
腸炎	1 (<1)	0	0	0	0
胃障害	1 (<1)	0	0	0	0
消化器痛	0	0	0	0	1 (<1)
腹膜出血	1 (<1)	0	0	0	0
逆流性胃炎	1 (<1)	0	0	0	0
歯の発育障害	1 (<1)	0	0	0	0
肝胆道系障害	2 (1)	3 (1)	2 (1)	5 (1)	1 (<1)
胆道ジスキネジー	0	1 (<1)	0	1 (<1)	0
胆石症	0	0	1 (<1)	1 (<1)	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
肝細胞融解性肝炎	0	0	1 (<1)	1 (<1)	0
高トランスアミナーゼ血症	0	1 (<1)	0	1 (<1)	0
肝障害	0	1 (<1)	0	1 (<1)	0
肝炎	1 (<1)	0	0	0	0
高ビリルビン血症	1 (<1)	0	0	0	0
皮膚および皮下組織障害	29 (16)	64 (30)	57 (30)	121 (30)	21 (20)
そう痒症	3 (2)	16 (7)	12 (6)	28 (7)	2 (2)
発疹	1 (<1)	14 (6)	12 (6)	26 (6)	4 (4)
紅斑	2 (1)	7 (3)	10 (5)	17 (4)	3 (3)
寝汗	1 (<1)	7 (3)	7 (4)	14 (3)	1 (<1)
脱毛症	5 (3)	10 (5)	2 (1)	12 (3)	4 (4)
多汗症	2 (1)	3 (1)	6 (3)	9 (2)	1 (<1)
蕁麻疹	0	2 (<1)	6 (3)	8 (2)	0
アレルギー性皮膚炎	0	3 (1)	3 (2)	6 (1)	0
斑状皮疹	0	0	5 (3)	5 (1)	0
皮膚炎	3 (2)	1 (<1)	3 (2)	4 (<1)	1 (<1)
ざ瘡	3 (2)	1 (<1)	2 (1)	3 (<1)	2 (2)
薬疹	0	1 (<1)	1 (<1)	2 (<1)	0
皮膚乾燥	0	2 (<1)	0	2 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
斑状出血	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
湿疹	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
過角化	0	2 (<1)	0	2 (<1)	0
痒疹	0	2 (<1)	0	2 (<1)	0
全身性そう痒症	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
そう痒性皮疹	0	1 (<1)	1 (<1)	2 (<1)	0
皮膚灼熱感	0	0	2 (1)	2 (<1)	0
皮膚病変	1 (<1)	2 (<1)	0	2 (<1)	0
皮膚のつっぱり感	0	1 (<1)	1 (<1)	2 (<1)	0
掌蹠角化症	0	1 (<1)	0	1 (<1)	0
顔面感覚鈍麻	1 (<1)	1 (<1)	0	1 (<1)	0
内出血発生の増加傾向	0	0	1 (<1)	1 (<1)	0
睫毛眉毛脱落症	0	1 (<1)	0	1 (<1)	0
爪変色	0	1 (<1)	0	1 (<1)	0
爪破損	0	1 (<1)	0	1 (<1)	0
皮膚疼痛	0	0	1 (<1)	1 (<1)	0
光線過敏性反応	0	1 (<1)	0	1 (<1)	0
乾癬	1 (<1)	0	1 (<1)	1 (<1)	0
全身性皮疹	0	0	1 (<1)	1 (<1)	0
酒さ	2 (1)	1 (<1)	0	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
瘢痕	0	1 (<1)	0	1 (<1)	1 (<1)
皮膚剥脱	0	0	1 (<1)	1 (<1)	0
皮膚色素過剰	0	1 (<1)	0	1 (<1)	1 (<1)
皮膚色素減少	0	1 (<1)	0	1 (<1)	0
スティーブンス・ジョンソン症候群	0	1 (<1)	0	1 (<1)	0
顔面腫脹	0	0	1 (<1)	1 (<1)	2 (2)
乾皮症	0	0	1 (<1)	1 (<1)	0
冷汗	1 (<1)	0	0	0	0
頭部粃糠疹	0	0	0	0	1 (<1)
皮膚嚢腫	1 (<1)	0	0	0	0
ざ瘡様皮膚炎	1 (<1)	0	0	0	0
接触性皮膚炎	0	0	0	0	2 (2)
皮下出血	0	0	0	0	1 (<1)
黒子	1 (<1)	0	0	0	0
脂肪組織萎縮症	0	0	0	0	1 (<1)
神経皮膚炎	0	0	0	0	1 (<1)
色素沈着障害	1 (<1)	0	0	0	0
前癌性皮膚病変	1 (<1)	0	0	0	0
皮膚障害	1 (<1)	0	0	0	0
皮下結節	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋骨格系および結合組織障害	50 (28)	62 (29)	49 (25)	111 (27)	20 (19)
背部痛	19 (11)	29 (13)	15 (8)	44 (11)	8 (8)
関節痛	11 (6)	22 (10)	13 (7)	35 (9)	2 (2)
四肢痛	13 (7)	19 (9)	12 (6)	31 (8)	5 (5)
筋痙縮	5 (3)	8 (4)	12 (6)	20 (5)	1 (<1)
筋力低下	7 (4)	3 (1)	6 (3)	9 (2)	2 (2)
頚部痛	6 (3)	5 (2)	4 (2)	9 (2)	2 (2)
筋肉痛	5 (3)	3 (1)	4 (2)	7 (2)	1 (<1)
筋骨格痛	4 (2)	2 (<1)	3 (2)	5 (1)	1 (<1)
関節硬直	0	1 (<1)	3 (2)	4 (<1)	0
関節腫脹	0	3 (1)	1 (<1)	4 (<1)	0
筋骨格硬直	4 (2)	2 (<1)	1 (<1)	3 (<1)	3 (3)
重感	1 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
椎間板突出	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
筋骨格系胸痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
変形性関節症	0	1 (<1)	1 (<1)	2 (<1)	0
骨減少症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
骨粗鬆症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
関節炎	0	1 (<1)	0	1 (<1)	0
関節障害	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腋窩腫瘤	1 (<1)	1 (<1)	0	1 (<1)	0
骨痛	2 (1)	1 (<1)	0	1 (<1)	0
滑液包炎	0	1 (<1)	0	1 (<1)	0
軟骨炎	0	1 (<1)	0	1 (<1)	0
尾骨痛	0	0	1 (<1)	1 (<1)	0
腱付着部症	0	1 (<1)	0	1 (<1)	0
側腹部痛	0	0	1 (<1)	1 (<1)	1 (<1)
椎間板障害	0	1 (<1)	0	1 (<1)	0
関節滲出液	0	0	1 (<1)	1 (<1)	0
筋骨格不快感	1 (<1)	0	1 (<1)	1 (<1)	0
四肢の結節	0	0	1 (<1)	1 (<1)	0
骨壊死	0	1 (<1)	0	1 (<1)	1 (<1)
膝蓋大腿部痛症候群	0	1 (<1)	0	1 (<1)	0
肩回旋筋腱板症候群	0	0	1 (<1)	1 (<1)	0
滑液嚢腫	0	1 (<1)	0	1 (<1)	0
滑膜障害	0	1 (<1)	0	1 (<1)	0
腱炎	2 (1)	0	1 (<1)	1 (<1)	0
弾発指	0	0	1 (<1)	1 (<1)	0
線維筋痛	1 (<1)	0	0	0	0
肌径部痛	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
運動性低下	0	0	0	0	1 (<1)
顎痛	1 (<1)	0	0	0	0
関節リウマチ	1 (<1)	0	0	0	0
腱痛	1 (<1)	0	0	0	0
腎および尿路障害	32 (18)	33 (15)	47 (24)	80 (20)	21 (20)
蛋白尿	18 (10)	20 (9)	21 (11)	41 (10)	11 (10)
ミクロアルブミン尿	8 (5)	8 (4)	14 (7)	22 (5)	7 (7)
血尿	7 (4)	9 (4)	8 (4)	17 (4)	3 (3)
ケトン尿	1 (<1)	3 (1)	1 (<1)	4 (<1)	0
尿意切迫	2 (1)	1 (<1)	3 (2)	4 (<1)	1 (<1)
アルブミン尿	0	1 (<1)	2 (1)	3 (<1)	0
排尿困難	2 (1)	2 (<1)	1 (<1)	3 (<1)	0
頻尿	4 (2)	1 (<1)	2 (1)	3 (<1)	2 (2)
尿失禁	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
尿臭異常	0	1 (<1)	2 (1)	3 (<1)	0
白血球尿	0	0	2 (1)	2 (<1)	0
切迫性尿失禁	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
尿閉	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
膀胱刺激症状	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膀胱痛	0	1 (<1)	0	1 (<1)	0
膀胱穿孔	0	0	1 (<1)	1 (<1)	0
出血性膀胱炎	0	1 (<1)	0	1 (<1)	0
非感染性膀胱炎	1 (<1)	1 (<1)	0	1 (<1)	0
糖尿	0	1 (<1)	0	1 (<1)	1 (<1)
緊張性膀胱	0	0	1 (<1)	1 (<1)	0
腎結石症	1 (<1)	1 (<1)	0	1 (<1)	0
腎下垂症	0	1 (<1)	0	1 (<1)	0
起立性蛋白尿症	0	0	1 (<1)	1 (<1)	0
腎障害	0	1 (<1)	0	1 (<1)	0
腎機能障害	0	0	1 (<1)	1 (<1)	0
腎尿細管性アシドーシス	0	0	1 (<1)	1 (<1)	0
排尿躊躇	1 (<1)	0	1 (<1)	1 (<1)	0
膀胱機能障害	1 (<1)	0	0	0	0
ネフローゼ症候群	0	0	0	0	1 (<1)
腎嚢胞	1 (<1)	0	0	0	0
妊娠、産褥および周産期の状態	2 (1)	0	0	0	0
自然流産	1 (<1)	0	0	0	0
妊娠浮腫	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
生殖系および乳房障害	19 (11)	27 (13)	21 (11)	48 (12)	13 (12)
月経困難症	4 (2)	4 (2)	4 (2)	8 (2)	2 (2)
不規則月経	0	2 (<1)	4 (2)	6 (1)	3 (3)
月経過多	2 (1)	2 (<1)	2 (1)	4 (<1)	2 (2)
不正子宮出血	1 (<1)	2 (<1)	2 (1)	4 (<1)	0
卵巣嚢胞	3 (2)	4 (2)	0	4 (<1)	2 (2)
無月経	1 (<1)	1 (<1)	2 (1)	3 (<1)	1 (<1)
乳房嚢胞	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
骨盤痛	2 (1)	2 (<1)	1 (<1)	3 (<1)	0
乳房痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
月経遅延	3 (2)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
頻発月経	0	0	2 (1)	2 (<1)	1 (<1)
腟出血	1 (<1)	2 (<1)	0	2 (<1)	0
バルトリン腺炎	0	0	1 (<1)	1 (<1)	0
良性前立腺肥大症	0	1 (<1)	0	1 (<1)	0
子宮頚部上皮異形成	0	1 (<1)	0	1 (<1)	0
子宮頚部の炎症	0	1 (<1)	0	1 (<1)	0
勃起不全	0	1 (<1)	0	1 (<1)	0
乳頭障害	0	1 (<1)	0	1 (<1)	0
希発月経	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
卵巣嚢胞破裂	0	1 (<1)	0	1 (<1)	0
多嚢胞性卵巣	0	1 (<1)	0	1 (<1)	0
早発閉経	0	1 (<1)	0	1 (<1)	0
前立腺炎	0	0	1 (<1)	1 (<1)	0
腟分泌物	0	0	1 (<1)	1 (<1)	0
乳房障害	1 (<1)	0	0	0	0
乳房腫大	0	0	0	0	1 (<1)
線維嚢胞性乳腺疾患	2 (1)	0	0	0	0
機能性子宮出血	1 (<1)	0	0	0	1 (<1)
月経障害	1 (<1)	0	0	0	1 (<1)
子宮出血	0	0	0	0	1 (<1)
先天性、家族性および遺伝性障害	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
角膜ジストロフィー	0	0	1 (<1)	1 (<1)	0
先天性心臓疾患	0	1 (<1)	0	1 (<1)	0
ジルベール症候群	1 (<1)	0	0	0	0
一般・全身障害および投与部位の状態	44 (25)	49 (23)	47 (24)	96 (23)	44 (42)
疲労	25 (14)	24 (11)	18 (9)	42 (10)	7 (7)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
発熱	11 (6)	13 (6)	12 (6)	25 (6)	6 (6)
無力症	3 (2)	8 (4)	8 (4)	16 (4)	5 (5)
疼痛	2 (1)	3 (1)	7 (4)	10 (2)	1 (<1)
歩行障害	3 (2)	1 (<1)	5 (3)	6 (1)	3 (3)
熱感	0	4 (2)	1 (<1)	5 (1)	0
インフルエンザ様疾患	3 (2)	3 (1)	2 (1)	5 (1)	1 (<1)
末梢性浮腫	1 (<1)	0	5 (3)	5 (1)	1 (<1)
胸痛	1 (<1)	3 (1)	1 (<1)	4 (<1)	1 (<1)
悪寒	1 (<1)	2 (<1)	1 (<1)	3 (<1)	1 (<1)
倦怠感	0	1 (<1)	1 (<1)	2 (<1)	0
腋窩痛	0	0	1 (<1)	1 (<1)	0
胸部不快感	1 (<1)	0	1 (<1)	1 (<1)	0
嚢胞	0	0	1 (<1)	1 (<1)	0
医療機器関連眼合併症	1 (<1)	1 (<1)	0	1 (<1)	0
顔面痛	0	0	1 (<1)	1 (<1)	0
注射部位血腫	0	0	1 (<1)	1 (<1)	1 (<1)
粘膜乾燥	0	0	1 (<1)	1 (<1)	0
粘膜の炎症	0	0	1 (<1)	1 (<1)	0
非心臓性胸痛	0	1 (<1)	0	1 (<1)	1 (<1)
浮腫	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
不活発	0	0	1 (<1)	1 (<1)	0
軟部組織の炎症	0	1 (<1)	0	1 (<1)	0
腫脹	0	1 (<1)	0	1 (<1)	0
圧痛	0	0	1 (<1)	1 (<1)	0
口渇	0	0	1 (<1)	1 (<1)	0
適用部位浮腫	0	0	0	0	1 (<1)
注射部位変色	0	0	0	0	1 (<1)
注射部位知覚不全	0	0	0	0	1 (<1)
注射部位紅斑	0	0	0	0	11 (10)
注射部位肥厚	0	0	0	0	1 (<1)
注射部位硬結	0	0	0	0	2 (2)
注射部位腫瘤	0	0	0	0	1 (<1)
注射部位浮腫	0	0	0	0	2 (2)
注射部位疼痛	0	0	0	0	10 (9)
注射部位そう痒感	0	0	0	0	2 (2)
注射部位発疹	0	0	0	0	1 (<1)
注射部位反応	0	0	0	0	2 (2)
注射部位瘢痕	0	0	0	0	1 (<1)
注射部位腫脹	0	0	0	0	2 (2)
易刺激性	1 (<1)	0	0	0	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
微石症	0	0	0	0	1 (<1)
ワクチン接種部位疼痛	1 (<1)	0	0	0	0
臨床検査	45 (26)	60 (28)	56 (29)	116 (28)	31 (29)
尿中アルブミン陽性	7 (4)	17 (8)	11 (6)	28 (7)	4 (4)
アラニン・アミノトランスフェラーゼ増加	7 (4)	14 (6)	11 (6)	25 (6)	4 (4)
アスパラギン酸アミノトランスフェラーゼ増加	1 (<1)	14 (6)	7 (4)	21 (5)	6 (6)
血中副甲状腺ホルモン増加	3 (2)	5 (2)	7 (4)	12 (3)	1 (<1)
γ－グルタミルトランスフェラーゼ増加	4 (2)	7 (3)	4 (2)	11 (3)	2 (2)
尿中蛋白陽性	4 (2)	4 (2)	7 (4)	11 (3)	6 (6)
尿中血陽性	1 (<1)	3 (1)	6 (3)	9 (2)	2 (2)
尿中白血球陽性	6 (3)	2 (<1)	7 (4)	9 (2)	2 (2)
血中ブドウ糖増加	1 (<1)	2 (<1)	6 (3)	8 (2)	2 (2)
白血球数減少	0	4 (2)	4 (2)	8 (2)	0
尿中β２ミクログロブリン増加	5 (3)	3 (1)	4 (2)	7 (2)	2 (2)
ヘモグロビン減少	2 (1)	4 (2)	3 (2)	7 (2)	0
リンパ球数減少	0	1 (<1)	6 (3)	7 (2)	0
ヘマトクリット減少	2 (1)	4 (2)	2 (1)	6 (1)	0
尿中ケトン体陽性	0	4 (2)	2 (1)	6 (1)	0
白血球数増加	5 (3)	3 (1)	3 (2)	6 (1)	3 (3)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血中クレアチニン増加	0	2 (<1)	2 (1)	4 (<1)	0
好中球数減少	0	3 (1)	1 (<1)	4 (<1)	0
体重減少	2 (1)	3 (1)	1 (<1)	4 (<1)	2 (2)
血中カリウム増加	0	0	3 (2)	3 (<1)	1 (<1)
心電図ＳＴ部分下降	0	2 (<1)	1 (<1)	3 (<1)	1 (<1)
ビタミンＤ減少	0	3 (1)	0	3 (<1)	0
β２ミクログロブリン増加	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
血中アルカリホスファターゼ増加	3 (2)	1 (<1)	1 (<1)	2 (<1)	0
血中コレステロール増加	1 (<1)	0	2 (1)	2 (<1)	1 (<1)
血中クレアチン増加	0	1 (<1)	1 (<1)	2 (<1)	0
血中乳酸脱水素酵素増加	0	2 (<1)	0	2 (<1)	0
心拍数増加	0	2 (<1)	0	2 (<1)	0
好中球数増加	2 (1)	0	2 (1)	2 (<1)	2 (2)
赤血球数減少	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
尿中赤血球陽性	0	0	2 (1)	2 (<1)	1 (<1)
ビタミンＤ増加	1 (<1)	0	2 (1)	2 (<1)	0
体重増加	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
アラニン・アミノトランスフェラーゼ異常	0	1 (<1)	0	1 (<1)	1 (<1)
抗痙攣剤濃度減少	0	0	1 (<1)	1 (<1)	0
アスパラギン酸アミノトランスフェラーゼ異常	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
細菌検査陽性	2 (1)	0	1 (<1)	1 (<1)	2 (2)
血中アルカリホスファターゼ異常	0	1 (<1)	0	1 (<1)	1 (<1)
血中ビリルビン増加	3 (2)	1 (<1)	0	1 (<1)	1 (<1)
血中クロール増加	0	0	1 (<1)	1 (<1)	0
血中葉酸減少	0	0	1 (<1)	1 (<1)	0
血中鉄減少	0	1 (<1)	0	1 (<1)	0
血中ナトリウム減少	0	0	1 (<1)	1 (<1)	0
血中ナトリウム増加	0	0	1 (<1)	1 (<1)	1 (<1)
血中尿素増加	0	0	1 (<1)	1 (<1)	0
体温上昇	0	0	1 (<1)	1 (<1)	0
呼吸音異常	0	1 (<1)	0	1 (<1)	0
結腸内視鏡検査	0	1 (<1)	0	1 (<1)	0
心電図ＱＴ延長	3 (2)	1 (<1)	0	1 (<1)	1 (<1)
好酸球数増加	0	0	1 (<1)	1 (<1)	0
大腸菌検査陽性	0	1 (<1)	0	1 (<1)	0
γ－グルタミルトランスフェラーゼ異常	1 (<1)	1 (<1)	0	1 (<1)	0
γ－グルタミルトランスフェラーゼ減少	0	1 (<1)	0	1 (<1)	0
血液学的検査異常	1 (<1)	1 (<1)	0	1 (<1)	0
高比重リポ蛋白増加	0	0	1 (<1)	1 (<1)	0
ヒト乳頭腫ウイルス検査陽性	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
ヒステロスコピー	0	1 (<1)	0	1 (<1)	0
眼圧上昇	0	1 (<1)	0	1 (<1)	0
低比重リポ蛋白増加	0	0	1 (<1)	1 (<1)	1 (<1)
リンパ節触知	0	0	1 (<1)	1 (<1)	0
リンパ球形態異常	0	0	1 (<1)	1 (<1)	0
単球数減少	0	0	1 (<1)	1 (<1)	1 (<1)
神経学的検査異常	0	1 (<1)	0	1 (<1)	0
脳核磁気共鳴画像異常	1 (<1)	1 (<1)	0	1 (<1)	0
血小板数減少	0	1 (<1)	0	1 (<1)	3 (3)
血小板数増加	1 (<1)	1 (<1)	0	1 (<1)	1 (<1)
ロンベルグ徴候陽性	0	1 (<1)	0	1 (<1)	0
赤血球数増加	0	1 (<1)	0	1 (<1)	0
つぎ足歩行検査異常	0	1 (<1)	0	1 (<1)	0
ビタミンＢ１２減少	0	1 (<1)	0	1 (<1)	0
血中重炭酸塩減少	1 (<1)	0	0	0	0
血中カルシウム減少	1 (<1)	0	0	0	0
血中カルシウム増加	1 (<1)	0	0	0	0
血中ブドウ糖減少	0	0	0	0	1 (<1)
血中乳酸脱水素酵素異常	0	0	0	0	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血中トリグリセリド増加	1 (<1)	0	0	0	3 (3)
尿中結晶陽性	1 (<1)	0	0	0	0
心電図異常	2 (1)	0	0	0	0
尿中ブドウ糖陽性	0	0	0	0	1 (<1)
握力低下	0	0	0	0	1 (<1)
肝酵素上昇	2 (1)	0	0	0	2 (2)
トランスアミナーゼ上昇	0	0	0	0	1 (<1)
前庭機能検査異常	0	0	0	0	1 (<1)
傷害、中毒および処置合併症	24 (14)	30 (14)	18 (9)	48 (12)	9 (8)
転倒	6 (3)	6 (3)	5 (3)	11 (3)	2 (2)
挫傷	3 (2)	4 (2)	6 (3)	10 (2)	2 (2)
関節捻挫	2 (1)	2 (<1)	4 (2)	6 (1)	1 (<1)
足骨折	0	3 (1)	0	3 (<1)	0
動物咬傷	0	2 (<1)	0	2 (<1)	0
足関節部骨折	0	1 (<1)	1 (<1)	2 (<1)	0
節足動物咬傷	2 (1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
大腿骨骨折	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
関節脱臼	1 (<1)	2 (<1)	0	2 (<1)	0
半月板障害	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
肉離れ	0	1 (<1)	1 (<1)	2 (<1)	0
術後発熱	0	2 (<1)	0	2 (<1)	0
交通事故	2 (1)	0	2 (1)	2 (<1)	0
骨格損傷	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (<1)
造影剤反応	0	0	1 (<1)	1 (<1)	0
上顆炎	0	1 (<1)	0	1 (<1)	0
擦過傷	1 (<1)	0	1 (<1)	1 (<1)	0
眼外傷	0	0	1 (<1)	1 (<1)	0
尾骨骨折	0	0	1 (<1)	1 (<1)	0
切開部位痛	0	1 (<1)	0	1 (<1)	0
関節損傷	2 (1)	1 (<1)	0	1 (<1)	0
靭帯断裂	0	0	1 (<1)	1 (<1)	0
四肢損傷	1 (<1)	1 (<1)	0	1 (<1)	2 (2)
筋断裂	0	1 (<1)	0	1 (<1)	0
処置後浮腫	0	0	1 (<1)	1 (<1)	0
処置による低血圧	0	1 (<1)	0	1 (<1)	0
処置による疼痛	1 (<1)	0	1 (<1)	1 (<1)	0
橈骨骨折	0	1 (<1)	0	1 (<1)	0
網膜損傷	0	1 (<1)	0	1 (<1)	0
皮膚裂傷	1 (<1)	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
脊椎圧迫骨折	0	1 (<1)	0	1 (<1)	0
熱傷	2 (1)	1 (<1)	0	1 (<1)	1 (<1)
外傷性血腫	0	1 (<1)	0	1 (<1)	0
むち打ち損傷	0	1 (<1)	0	1 (<1)	0
創傷	0	1 (<1)	0	1 (<1)	0
創し開	0	0	1 (<1)	1 (<1)	0
角膜擦過傷	1 (<1)	0	0	0	0
顔面損傷	0	0	0	0	1 (<1)
手骨折	0	0	0	0	1 (<1)
頭部損傷	2 (1)	0	0	0	1 (<1)
瘢痕ヘルニア	1 (<1)	0	0	0	0
頚部損傷	0	0	0	0	1 (<1)
外傷後疼痛	0	0	0	0	1 (<1)
術後創合併症	0	0	0	0	1 (<1)
サンバーン	1 (<1)	0	0	0	0
有毒性刺傷	1 (<1)	0	0	0	0
外科および内科処置	0	4 (2)	0	4 (<1)	1 (<1)
抜歯	0	2 (<1)	0	2 (<1)	0
女性不妊手術	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
治療食	0	1 (<1)	0	1 (<1)	0
入院	0	0	0	0	1 (<1)
社会環境	0	1 (<1)	0	1 (<1)	0
閉経	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	194 (100)	192 (100)	191 (100)	383 (100)	84 (100)
Number of subjects with an event	182 (94)	183 (95)	180 (94)	363 (95)	71 (85)
感染症および寄生虫症	107 (55)	112 (58)	122 (64)	234 (61)	47 (56)
鼻咽頭炎	39 (20)	39 (20)	35 (18)	74 (19)	12 (14)
尿路感染	31 (16)	35 (18)	30 (16)	65 (17)	15 (18)
上気道感染	18 (9)	17 (9)	24 (13)	41 (11)	7 (8)
インフルエンザ	12 (6)	10 (5)	19 (10)	29 (8)	3 (4)
副鼻腔炎	6 (3)	10 (5)	15 (8)	25 (7)	0
胃腸炎	8 (4)	12 (6)	9 (5)	21 (5)	2 (2)
気管支炎	6 (3)	8 (4)	12 (6)	20 (5)	4 (5)
咽頭炎	6 (3)	8 (4)	8 (4)	16 (4)	2 (2)
口腔ヘルペス	8 (4)	7 (4)	6 (3)	13 (3)	2 (2)
鼻炎	5 (3)	3 (2)	7 (4)	10 (3)	1 (1)
膀胱炎	6 (3)	3 (2)	6 (3)	9 (2)	1 (1)
ウイルス性胃腸炎	4 (2)	4 (2)	5 (3)	9 (2)	1 (1)
気道感染	4 (2)	4 (2)	5 (3)	9 (2)	2 (2)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腟感染	1 (<1)	6 (3)	1 (<1)	7 (2)	2 (2)
中耳炎	0	1 (<1)	5 (3)	6 (2)	0
扁桃炎	1 (<1)	3 (2)	3 (2)	6 (2)	1 (1)
ウイルス感染	5 (3)	3 (2)	3 (2)	6 (2)	0
消化管感染	0	1 (<1)	4 (2)	5 (1)	0
喉頭炎	2 (1)	2 (1)	3 (2)	5 (1)	0
外陰腟真菌感染	4 (2)	3 (2)	2 (1)	5 (1)	1 (1)
耳感染	3 (2)	1 (<1)	3 (2)	4 (1)	1 (1)
帯状疱疹	1 (<1)	2 (1)	2 (1)	4 (1)	0
爪真菌症	1 (<1)	4 (2)	0	4 (1)	0
歯膿瘍	4 (2)	1 (<1)	3 (2)	4 (1)	0
歯感染	1 (<1)	2 (1)	2 (1)	4 (1)	1 (1)
感染性結膜炎	0	1 (<1)	2 (1)	3 (<1)	0
下気道感染	0	1 (<1)	2 (1)	3 (<1)	0
ウイルス性気道感染	0	3 (2)	0	3 (<1)	0
皮下組織膿瘍	0	1 (<1)	2 (1)	3 (<1)	0
ウイルス性上気道感染	1 (<1)	2 (1)	1 (<1)	3 (<1)	2 (2)
細菌性結膜炎	0	1 (<1)	1 (<1)	2 (<1)	0
伝染性単核症	0	1 (<1)	1 (<1)	2 (<1)	0
骨盤内炎症性疾患	1 (<1)	0	2 (1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
レンサ球菌性咽頭炎	3 (2)	1 (<1)	1 (<1)	2 (<1)	0
咽頭扁桃炎	1 (<1)	2 (1)	0	2 (<1)	0
肺炎	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
癪風	0	1 (<1)	1 (<1)	2 (<1)	0
気管炎	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
ダニ症	0	0	1 (<1)	1 (<1)	0
急性扁桃炎	2 (1)	0	1 (<1)	1 (<1)	1 (1)
虫垂炎	0	1 (<1)	0	1 (<1)	0
細菌尿	0	1 (<1)	0	1 (<1)	1 (1)
気管支肺炎	0	1 (<1)	0	1 (<1)	0
蜂巣炎	0	1 (<1)	0	1 (<1)	1 (1)
感染性皮膚炎	0	0	1 (<1)	1 (<1)	0
眼感染	1 (<1)	1 (<1)	0	1 (<1)	0
せつ	0	1 (<1)	0	1 (<1)	0
性器カンジダ症	0	1 (<1)	0	1 (<1)	0
陰部ヘルペス	1 (<1)	1 (<1)	0	1 (<1)	0
細菌性性器感染	0	1 (<1)	0	1 (<1)	1 (1)
泌尿生殖器感染	0	1 (<1)	0	1 (<1)	0
Ｈ１Ｎ１インフルエンザ	0	1 (<1)	0	1 (<1)	0
ヘリコバクター感染	0	1 (<1)	0	1 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
単純ヘルペス	1 (<1)	0	1 (<1)	1 (<1)	0
麦粒腫	2 (1)	1 (<1)	0	1 (<1)	0
感染性嚢腫	0	1 (<1)	0	1 (<1)	0
シラミ寄生	0	0	1 (<1)	1 (<1)	0
口腔カンジダ症	2 (1)	0	1 (<1)	1 (<1)	0
口腔真菌感染	0	0	1 (<1)	1 (<1)	0
歯周感染	1 (<1)	0	1 (<1)	1 (<1)	0
歯髄炎	0	1 (<1)	0	1 (<1)	0
陰嚢膿瘍	0	0	1 (<1)	1 (<1)	0
気管気管支炎	0	0	1 (<1)	1 (<1)	1 (1)
腸チフス熱	0	0	1 (<1)	1 (<1)	0
細菌性膣炎	1 (<1)	1 (<1)	0	1 (<1)	0
ガードネレラ菌性膣炎	0	1 (<1)	0	1 (<1)	0
ウイルス性鼻炎	0	0	1 (<1)	1 (<1)	0
外陰部炎	0	1 (<1)	0	1 (<1)	0
外陰部膣カンジダ症	2 (1)	1 (<1)	0	1 (<1)	1 (1)
顎膿瘍	1 (<1)	0	0	0	0
慢性副鼻腔炎	0	0	0	0	1 (1)
ウイルス性結膜炎	1 (<1)	0	0	0	0
感染性下痢	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
細菌性心内膜炎	1 (<1)	0	0	0	0
真菌感染	2 (1)	0	0	0	0
皮膚真菌感染	0	0	0	0	1 (1)
真菌性消化管感染	1 (<1)	0	0	0	0
ウイルス性消化管感染	1 (<1)	0	0	0	0
歯肉感染	1 (<1)	0	0	0	0
ヘルペスウイルス感染	1 (<1)	0	0	0	0
咬傷感染	1 (<1)	0	0	0	0
乳様突起炎	0	0	0	0	1 (1)
腎盂腎炎	1 (<1)	0	0	0	0
ライター症候群	1 (<1)	0	0	0	0
足部白癬	1 (<1)	0	0	0	0
細菌性尿路感染	1 (<1)	0	0	0	0
尿路性敗血症	1 (<1)	0	0	0	0
膣膿瘍	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	1 (<1)	8 (4)	7 (4)	15 (4)	3 (4)
皮膚乳頭腫	0	2 (1)	1 (<1)	3 (<1)	0
子宮平滑筋腫	0	1 (<1)	2 (1)	3 (<1)	2 (2)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
メラノサイト性母斑	0	0	2 (1)	2 (<1)	0
甲状腺新生物	0	2 (1)	0	2 (<1)	0
基底細胞癌	0	1 (<1)	0	1 (<1)	0
肺の良性新生物	0	1 (<1)	0	1 (<1)	0
乳腺線維腺腫	0	0	1 (<1)	1 (<1)	0
線維腫	0	1 (<1)	0	1 (<1)	0
脂肪腫	0	0	1 (<1)	1 (<1)	0
肺新生物	0	1 (<1)	0	1 (<1)	0
外陰腟ヒト乳頭腫ウイルス感染	0	1 (<1)	0	1 (<1)	0
子宮頚部癌	0	0	0	0	1 (1)
線維性組織球腫	0	0	0	0	1 (1)
口腔新生物	1 (<1	0	0	0	0
血液およびリンパ系障害	12 (6)	10 (5)	13 (7)	23 (6)	5 (6)
リンパ球減少症	1 (<1)	5 (3)	4 (2)	9 (2)	0
貧血	4 (2)	1 (<1)	6 (3)	7 (2)	4 (5)
白血球減少症	0	3 (2)	3 (2)	6 (2)	0
好酸球増加症	0	1 (<1)	2 (1)	3 (<1)	0
鉄欠乏性貧血	3 (2	2 (1)	1 (<1)	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
好中球増加症	1 (<1)	0	2 (1)	2 (<1)	0
リンパ節症	1 (<1)	1 (<1)	0	1 (<1)	0
好中球減少症	0	0	1 (<1)	1 (<1)	0
低色素性貧血	0	0	0	0	1 (1)
白血球増加症	2 (1)	0	0	0	0
小球性貧血	1 (<1)	0	0	0	0
免疫系障害	2 (1)	7 (4)	10 (5)	17 (4)	2 (2)
過敏症	0	4 (2)	3 (2)	7 (2)	0
季節性アレルギー	1 (<1)	1 (<1)	4 (2)	5 (1)	1 (1)
食物アレルギー	0	2 (1)	1 (<1)	3 (<1)	0
薬物過敏症	0	0	1 (<1)	1 (<1)	0
家塵アレルギー	1 (<1)	0	1 (<1)	1 (<1)	0
免疫不全症	0	0	1 (<1)	1 (<1)	0
続発性免疫不全症	0	0	1 (<1)	1 (<1)	0
アナフィラキシー反応	0	0	0	0	1 (1)
内分泌障害	4 (2)	3 (2)	3 (2)	6 (2)	1 (1)
甲状腺機能低下症	3 (2)	1 (<1)	2 (1)	3 (<1)	1 (1)
自己免疫性甲状腺炎	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
甲状腺腫	0	1 (<1)	0	1 (<1)	0
副甲状腺機能亢進症	0	0	1 (<1)	1 (<1)	0
甲状腺機能亢進症	1 (<1)	0	0	0	0
代謝および栄養障害	7 (4)	8 (4)	10 (5)	18 (5)	3 (4)
食欲減退	3 (2)	1 (<1)	3 (2)	4 (1)	1 (1)
ビタミンD欠乏	0	2 (1)	2 (1)	4 (1)	0
高コレステロール血症	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
高脂血症	0	1 (<1)	1 (<1)	2 (<1)	0
糖尿病	0	0	1 (<1)	1 (<1)	0
高血糖	1 (<1)	1 (<1)	0	1 (<1)	1 (1)
過小食	0	0	1 (<1)	1 (<1)	0
ビタミン欠乏症	0	1 (<1)	0	1 (<1)	0
鉄欠乏	0	1 (<1)	0	1 (<1)	0
脱水	1 (<1)	0	0	0	0
糖尿病性ケトアシドーシス	2 (1)	0	0	0	0
高尿酸血症	0	0	0	0	1 (1)
精神障害	43 (22)	28 (15)	40 (21)	68 (18)	11 (13)
うつ病	13 (7)	12 (6)	15 (8)	27 (7)	7 (8)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
不安	9 (5)	6 (3)	8 (4)	14 (4)	2 (2)
不眠症	10 (5)	6 (3)	7 (4)	13 (3)	1 (1)
睡眠障害	3 (2)	3 (2)	2 (1)	5 (1)	0
抑うつ気分	5 (3)	3 (2)	1 (<1)	4 (1)	1 (1)
感情障害	1 (<1)	2 (1)	0	2 (<1)	0
気分変化	0	1 (<1)	1 (<1)	2 (<1)	0
パニック発作	1 (<1)	0	2 (1)	2 (<1)	0
異常行動	0	1 (<1)	0	1 (<1)	0
感情不安定	1 (<1)	0	1 (<1)	1 (<1)	0
燃え尽き症候群	0	1 (<1)	0	1 (<1)	0
抑うつ症状	2 (1)	0	1 (<1)	1 (<1)	0
初期不眠症	0	0	1 (<1)	1 (<1)	0
リビドー減退	0	1 (<1)	0	1 (<1)	0
大うつ病	0	0	1 (<1)	1 (<1)	0
躁病	0	1 (<1)	0	1 (<1)	0
気分動揺	1 (<1)	0	1 (<1)	1 (<1)	0
神経過敏	0	1 (<1)	0	1 (<1)	0
精神病性障害	0	0	1 (<1)	1 (<1)	0
身体表現性障害	2 (1)	0	1 (<1)	1 (<1)	0
ストレス	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
自殺念慮	0	1 (<1)	0	1 (<1)	0
自殺企図	0	0	1 (<1)	1 (<1)	0
攻撃性	1 (<1)	0	0	0	0
怒り	1 (<1)	0	0	0	0
不安障害	2 (1)	0	0	0	0
精神緩慢	1 (<1)	0	0	0	0
錯乱状態	1 (<1)	0	0	0	0
性的興奮障害	1 (<1)	0	0	0	0
多幸気分	1 (<1)	0	0	0	0
幻覚	1 (<1)	0	0	0	0
悪夢	1 (<1)	0	0	0	0
神経系障害	127 (65)	108 (56)	99 (52)	207 (54)	41 (49)
多発性硬化症再発	86 (44)	63 (33)	46 (24)	109 (28)	27 (32)
頭痛	28 (14)	37 (19)	37 (19)	74 (19)	13 (15)
錯感覚	18 (9)	13 (7)	13 (7)	26 (7)	3 (4)
浮動性めまい	11 (6)	12 (6)	12 (6)	24 (6)	2 (2)
感覚鈍麻	9 (5)	3 (2)	15 (8)	18 (5)	4 (5)
筋痙直	9 (5)	4 (2)	6 (3)	10 (3)	0
灼熱感	3 (2)	2 (1)	7 (4)	9 (2)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
異常感覚	0	7 (4)	1 (<1)	8 (2)	0
片頭痛	10 (5)	4 (2)	4 (2)	8 (2)	0
感覚障害	2 (1)	3 (2)	3 (2)	6 (2)	1 (1)
緊張性頭痛	3 (2)	2 (1)	4 (2)	6 (2)	0
多発性硬化症	5 (3)	3 (2)	2 (1)	5 (1)	0
振戦	3 (2)	2 (1)	3 (2)	5 (1)	0
神経痛	1 (<1)	3 (2)	1 (<1)	4 (1)	0
坐骨神経痛	2 (1)	3 (2)	1 (<1)	4 (1)	0
健忘	3 (2)	1 (<1)	2 (1)	3 (<1)	0
運動失調	0	1 (<1)	2 (1)	3 (<1)	0
レルミット徴候	2 (1)	2 (1)	1 (<1)	3 (<1)	0
下肢静止不能症候群	2 (1)	1 (<1)	2 (1)	3 (<1)	1 (1)
副鼻腔炎に伴う頭痛	0	2 (1)	1 (<1)	3 (<1)	0
傾眠	5 (3)	0	3 (2)	3 (<1)	1 (1)
味覚消失	0	1 (<1)	1 (<1)	2 (<1)	0
平衡障害	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
知覚過敏	0	1 (<1)	1 (<1)	2 (<1)	0
肋間神経痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
ウートホフ現象	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
意識変容状態	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
手根管症候群	2 (1)	1 (<1)	0	1 (<1)	0
小脳症候群	0	0	1 (<1)	1 (<1)	0
頚原性頭痛	0	0	1 (<1)	1 (<1)	0
概日リズム睡眠障害	0	1 (<1)	0	1 (<1)	0
認知障害	0	1 (<1)	0	1 (<1)	0
てんかん	0	1 (<1)	0	1 (<1)	0
顔面神経障害	0	0	1 (<1)	1 (<1)	0
顔面部神経痛	0	1 (<1)	0	1 (<1)	0
舌咽神経痛	0	1 (<1)	0	1 (<1)	0
不全片麻痺	1 (<1)	0	1 (<1)	1 (<1)	0
過眠症	1 (<1)	0	1 (<1)	1 (<1)	0
虚血性脳卒中	0	0	1 (<1)	1 (<1)	0
嗜眠	0	0	1 (<1)	1 (<1)	0
意識消失	1 (<1)	0	1 (<1)	1 (<1)	0
記憶障害	1 (<1)	1 (<1)	0	1 (<1)	0
前兆を伴う片頭痛	1 (<1)	1 (<1)	0	1 (<1)	1 (1)
神経圧迫	0	0	1 (<1)	1 (<1)	0
神経学的症状	0	1 (<1)	0	1 (<1)	0
眼振	0	0	1 (<1)	1 (<1)	0
視神経炎	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
部分発作	0	1 (<1)	0	1 (<1)	0
失神寸前の状態	1 (<1)	1 (<1)	0	1 (<1)	0
頚髄神経根炎	0	1 (<1)	0	1 (<1)	0
逆行性健忘	0	1 (<1)	0	1 (<1)	0
二次性進行型多発性硬化症	0	0	1 (<1)	1 (<1)	0
失神	1 (<1)	1 (<1)	0	1 (<1)	0
一過性全健忘	0	0	1 (<1)	1 (<1)	0
第７脳神経麻痺	0	1 (<1)	0	1 (<1)	0
失語症	1 (<1)	0	0	0	0
頚髄神経根痛	0	0	0	0	2 (2)
不器用	0	0	0	0	1 (1)
痙攣	1 (<1)	0	0	0	0
よだれ	1 (<1)	0	0	0	0
ジストニー	0	0	0	0	1 (1)
脳症	1 (<1)	0	0	0	0
顔面不全麻痺	1 (<1)	0	0	0	0
蟻走感	0	0	0	0	1 (1)
大発作痙攣	1 (<1)	0	0	0	0
片側頭痛	1 (<1)	0	0	0	1 (1)
筋緊張低下	1 (<1)	0	0	0	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
不全単麻痺	0	0	0	0	1 (1)
末梢性ニューロパチー	1 (<1)	0	0	0	0
錐体路症候群	1 (<1)	0	0	0	0
三叉神経痛	3 (2)	0	0	0	1 (1)
眼障害	21 (11)	23 (12)	18 (9)	41 (11)	7 (8)
眼痛	2 (1)	3 (2)	4 (2)	7 (2)	1 (1)
霧視	4 (2)	4 (2)	2 (1)	6 (2)	0
視力障害	1 (<1)	3 (2)	3 (2)	6 (2)	0
複視	4 (2)	3 (2)	2 (1)	5 (1)	1 (1)
結膜炎	2 (1)	4 (2)	0	4 (1)	1 (1)
視力低下	2 (1)	3 (2)	0	3 (<1)	0
アレルギー性結膜炎	1 (<1)	2 (1)	0	2 (<1)	1 (1)
眼の異常感	0	0	1 (<1)	1 (<1)	0
眼瞼炎	0	1 (<1)	0	1 (<1)	0
眼瞼痙攣	0	0	1 (<1)	1 (<1)	0
白内障	0	0	1 (<1)	1 (<1)	0
眼乾燥	1 (<1)	1 (<1)	0	1 (<1)	0
眼刺激	0	0	1 (<1)	1 (<1)	0
眼そう痒症	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
眼部腫脹	0	0	1 (<1)	1 (<1)	0
眼瞼下垂	0	0	1 (<1)	1 (<1)	0
遠視	0	1 (<1)	0	1 (<1)	0
眼充血	0	0	1 (<1)	1 (<1)	0
動揺視	0	1 (<1)	0	1 (<1)	0
全眼球炎	0	1 (<1)	0	1 (<1)	0
光視症	0	0	1 (<1)	1 (<1)	0
老視	0	1 (<1)	0	1 (<1)	0
乾燥症候群	0	1 (<1)	0	1 (<1)	0
硝子体浮遊物	0	1 (<1)	0	1 (<1)	0
一過性失明	1 (<1)	0	0	0	0
片側失明	0	0	0	0	1 (1)
嚢下白内障	1 (<1)	0	0	0	0
霰粒腫	1 (<1)	0	0	0	0
結膜出血	1 (<1)	0	0	0	0
眼の障害	1 (<1)	0	0	0	0
黄斑浮腫	1 (<1)	0	0	0	0
ブドウ膜炎	0	0	0	0	2 (2)
硝子体出血	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
耳および迷路障害	9 (5)	11 (6)	19 (10)	30 (8)	2 (2)
回転性めまい	8 (4)	7 (4)	11 (6)	18 (5)	2 (2)
耳痛	0	2 (1)	5 (3)	7 (2)	0
耳鳴	0	0	2 (1)	2 (<1)	0
頭位性回転性めまい	0	2 (1)	0	2 (<1)	0
耳閉	0	0	1 (<1)	1 (<1)	0
耳管障害	0	0	1 (<1)	1 (<1)	0
耳管機能障害	0	0	1 (<1)	1 (<1)	0
聴覚過敏	0	0	1 (<1)	1 (<1)	0
聴力低下	1 (<1)	0	1 (<1)	1 (<1)	0
心臓障害	9 (5)	8 (4)	8 (4)	16 (4)	1 (1)
頻脈	0	4 (2)	2 (1)	6 (2)	1 (1)
狭心症	0	2 (1)	0	2 (<1)	0
動悸	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
心室性期外収縮	4 (2)	0	2 (1)	2 (<1)	0
第一度房室ブロック	0	1 (<1)	0	1 (<1)	0
右脚ブロック	0	0	1 (<1)	1 (<1)	0
心臓瘤	0	0	1 (<1)	1 (<1)	0
僧帽弁逸脱	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
洞性徐脈	2 (1)	0	1 (<1)	1 (<1)	0
上室性期外収縮	1 (<1)	0	1 (<1)	1 (<1)	0
伝導障害	1 (<1)	0	0	0	0
血管障害	19 (10)	76 (40)	65 (34)	141 (37)	5 (6)
潮紅	9 (5)	60 (31)	50 (26)	110 (29)	0
ほてり	5 (3)	15 (8)	10 (5)	25 (7)	1 (1)
充血	0	1 (<1)	3 (2)	4 (1)	0
高血圧	1 (<1)	1 (<1)	3 (2)	4 (1)	4 (5)
低血圧	0	2 (1)	0	2 (<1)	0
高血圧クリーゼ	0	0	1 (<1)	1 (<1)	0
起立性低血圧	2 (1)	0	1 (<1)	1 (<1)	0
静脈瘤	0	1 (<1)	0	1 (<1)	0
血腫	1 (<1)	0	0	0	0
末梢冷感	1 (<1)	0	0	0	0
レイノー現象	2 (1)	0	0	0	0
静脈狭窄	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	30 (15)	27 (14)	31 (16)	58 (15)	11 (13)
口腔咽頭痛	8 (4)	6 (3)	14 (7)	20 (5)	4 (5)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
咳嗽	7 (4)	11 (6)	8 (4)	19 (5)	3 (4)
鼻閉	2 (1)	2 (1)	2 (1)	4 (1)	1 (1)
鼻漏	5 (3)	3 (2)	1 (<1)	4 (1)	0
呼吸困難	1 (<1)	2 (1)	1 (<1)	3 (<1)	0
鼻出血	2 (1)	2 (1)	1 (<1)	3 (<1)	1 (1)
アレルギー性鼻炎	3 (2)	0	3 (2)	3 (<1)	1 (1)
喘息	0	2 (1)	0	2 (<1)	1 (1)
息詰まり	1 (<1)	0	2 (1)	2 (<1)	0
副鼻腔うっ血	0	0	2 (1)	2 (<1)	0
上気道咳症候群	0	1 (<1)	1 (<1)	2 (<1)	0
アレルギー性気管支炎	0	0	1 (<1)	1 (<1)	0
アレルギー性副鼻腔炎	0	1 (<1)	0	1 (<1)	0
しゃっくり	1 (<1)	0	1 (<1)	1 (<1)	0
口腔咽頭不快感	0	0	1 (<1)	1 (<1)	0
口腔咽頭プラーク	0	1 (<1)	0	1 (<1)	0
湿性咳嗽	0	1 (<1)	0	1 (<1)	0
呼吸障害	0	0	1 (<1)	1 (<1)	0
気道うっ血	0	0	1 (<1)	1 (<1)	0
気道の炎症	0	0	1 (<1)	1 (<1)	0
上気道うっ血	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
喘鳴	1 (<1)	1 (<1)	0	1 (<1)	0
アレルギー性咽頭炎	1 (<1)	0	0	0	0
慢性気管支炎	1 (<1)	0	0	0	0
咽喉乾燥	2 (1)	0	0	0	0
発声障害	3 (2)	0	0	0	0
労作性呼吸困難	1 (<1)	0	0	0	0
鼻乾燥	1 (<1)	0	0	0	0
鼻中隔穿孔	0	0	0	0	1 (1)
口腔咽頭水疱形成	1 (<1)	0	0	0	0
低音性連続性ラ音	1 (<1)	0	0	0	0
咽喉刺激感	1 (<1)	0	0	0	0
胃腸障害	67 (35)	83 (43)	97 (51)	180 (47)	11 (13)
悪心	16 (8)	28 (15)	27 (14)	55 (14)	2 (2)
下痢	18 (9)	17 (9)	35 (18)	52 (14)	3 (4)
上腹部痛	16 (8)	25 (13)	16 (8)	41 (11)	0
腹痛	10 (5)	19 (10)	16 (8)	35 (9)	2 (2)
嘔吐	7 (4)	18 (9)	13 (7)	31 (8)	1 (1)
消化不良	4 (2)	8 (4)	8 (4)	16 (4)	0
胃腸障害	0	6 (3)	10 (5)	16 (4)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
便秘	10 (5)	4 (2)	9 (5)	13 (3)	0
歯痛	5 (3)	3 (2)	7 (4)	10 (3)	0
胃炎	1 (<1)	4 (2)	5 (3)	9 (2)	0
口内乾燥	1 (<1)	4 (2)	4 (2)	8 (2)	0
胃食道逆流性疾患	2 (1)	1 (<1)	6 (3)	7 (2)	1 (1)
腹部膨満	4 (2)	1 (<1)	5 (3)	6 (2)	0
鼓腸	2 (1)	2 (1)	3 (2)	5 (1)	0
腹部不快感	1 (<1)	2 (1)	2 (1)	4 (1)	0
痔核	3 (2)	2 (1)	2 (1)	4 (1)	0
下腹部痛	0	1 (<1)	2 (1)	3 (<1)	0
嚥下障害	3 (2)	2 (1)	1 (<1)	3 (<1)	0
大腸炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
歯肉痛	0	0	2 (1)	2 (<1)	0
裂孔ヘルニア	1 (<1)	2 (1)	0	2 (<1)	0
口腔内痛	0	1 (<1)	1 (<1)	2 (<1)	0
歯周炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腹部硬直	0	0	1 (<1)	1 (<1)	0
異常便	0	1 (<1)	0	1 (<1)	0
唾液欠乏	0	1 (<1)	0	1 (<1)	0
便意切迫	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
齲歯	0	0	1 (<1)	1 (<1)	1 (1)
腸憩室	0	0	1 (<1)	1 (<1)	0
十二指腸ポリープ	0	1 (<1)	0	1 (<1)	0
腸炎	0	0	1 (<1)	1 (<1)	0
おくび	0	0	1 (<1)	1 (<1)	0
便失禁	0	0	1 (<1)	1 (<1)	0
食中毒	0	0	1 (<1)	1 (<1)	0
排便回数増加	0	1 (<1)	0	1 (<1)	0
胃潰瘍	0	0	1 (<1)	1 (<1)	0
出血性胃炎	0	1 (<1)	0	1 (<1)	0
胃腸出血	0	0	1 (<1)	1 (<1)	0
消化器痛	1 (<1)	1 (<1)	0	1 (<1)	0
歯肉嚢胞	0	0	1 (<1)	1 (<1)	0
歯肉障害	0	0	1 (<1)	1 (<1)	0
吐血	0	0	1 (<1)	1 (<1)	0
胃酸過多	2 (1)	1 (<1)	0	1 (<1)	0
口の感覚鈍麻	0	1 (<1)	0	1 (<1)	0
食道出血	0	1 (<1)	0	1 (<1)	0
食道痙攣	0	0	1 (<1)	1 (<1)	0
食道潰瘍	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
食道炎	0	1 (<1)	0	1 (<1)	0
膵臓障害	0	0	1 (<1)	1 (<1)	0
膵炎	0	1 (<1)	0	1 (<1)	0
口の錯感覚	0	1 (<1)	0	1 (<1)	0
流涎過多	0	1 (<1)	0	1 (<1)	0
舌苔	0	0	1 (<1)	1 (<1)	0
舌障害	0	0	1 (<1)	1 (<1)	0
埋伏歯	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
腹部圧痛	2 (1)	0	0	0	0
根尖肉芽腫	0	0	0	0	1 (1)
十二指腸潰瘍	1 (<1)	0	0	0	0
十二指腸胃逆流	1 (<1)	0	0	0	0
心窩部不快感	1 (<1)	0	0	0	0
胃障害	2 (1)	0	0	0	0
歯肉炎	2 (1)	0	0	0	1 (1)
舌痛	1 (<1)	0	0	0	0
血便排泄	2 (1)	0	0	0	0
直腸出血	1 (<1)	0	0	0	0
逆流性食道炎	1 (<1)	0	0	0	0
臍ヘルニア	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
肝胆道系障害	5 (3)	2 (1)	4 (2)	6 (2)	1 (1)
肝障害	0	0	2 (1)	2 (<1)	0
胆石症	0	1 (<1)	0	1 (<1)	1 (1)
肝細胞融解性肝炎	0	0	1 (<1)	1 (<1)	0
肝嚢胞	1 (<1)	0	1 (<1)	1 (<1)	0
胆汁うっ滞性肝炎	0	1 (<1)	0	1 (<1)	0
胆管結石	2 (1)	0	0	0	0
脂肪肝	1 (<1)	0	0	0	0
中毒性肝炎	1 (<1)	0	0	0	0
高ビリルビン血症	1 (<1)	0	0	0	0
皮膚および皮下組織障害	39 (20)	68 (35)	59 (31)	127 (33)	10 (12)
発疹	8 (4)	16 (8)	16 (8)	32 (8)	2 (2)
そう痒症	10 (5)	15 (8)	14 (7)	29 (8)	2 (2)
紅斑	2 (1)	14 (7)	9 (5)	23 (6)	0
多汗症	3 (2)	6 (3)	4 (2)	10 (3)	0
脱毛症	4 (2)	5 (3)	3 (2)	8 (2)	2 (2)
寝汗	4 (2)	3 (2)	5 (3)	8 (2)	0
そう痒性皮疹	0	4 (2)	2 (1)	6 (2)	0
ざ瘡	2 (1)	3 (2)	2 (1)	5 (1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚乾燥	1 (<1)	1 (<1)	4 (2)	5 (1)	0
湿疹	1 (<1)	4 (2)	1 (<1)	5 (1)	0
蕁麻疹	2 (1)	4 (2)	1 (<1)	5 (1)	0
アレルギー性皮膚炎	3 (2)	2 (1)	2 (1)	4 (1)	0
全身性皮疹	0	2 (1)	2 (1)	4 (1)	0
皮膚炎	0	2 (1)	1 (<1)	3 (<1)	0
紅斑性皮疹	0	1 (<1)	2 (1)	3 (<1)	0
斑状皮疹	0	1 (<1)	2 (1)	3 (<1)	0
皮膚刺激	0	1 (<1)	2 (1)	3 (<1)	0
水疱	0	2 (1)	0	2 (<1)	0
接触性皮膚炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
痒疹	0	1 (<1)	1 (<1)	2 (<1)	0
全身性そう痒症	2 (1)	2 (1)	0	2 (<1)	1 (1)
酒さ	0	2 (1)	0	2 (<1)	0
顔面腫脹	0	1 (<1)	1 (<1)	2 (<1)	0
日光性角化症	0	0	1 (<1)	1 (<1)	0
冷汗	0	0	1 (<1)	1 (<1)	0
皮膚嚢腫	0	0	1 (<1)	1 (<1)	1 (1)
アトピー性皮膚炎	0	1 (<1)	0	1 (<1)	0
剥脱性発疹	0	1 (<1)	0	1 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
全身紅斑	0	1 (<1)	0	1 (<1)	0
顔面感覚鈍麻	2 (1)	0	1 (<1)	1 (<1)	0
光線過敏性反応	0	1 (<1)	0	1 (<1)	0
乾癬	0	0	1 (<1)	1 (<1)	1 (1)
脂漏	0	1 (<1)	0	1 (<1)	0
皮膚灼熱感	0	1 (<1)	0	1 (<1)	0
皮膚色素脱失	0	0	1 (<1)	1 (<1)	0
皮膚剥脱	0	1 (<1)	0	1 (<1)	0
皮膚色素過剰	0	0	1 (<1)	1 (<1)	0
皮下結節	0	1 (<1)	0	1 (<1)	0
斑状出血	0	0	0	0	1 (1)
多形紅斑	1 (<1)	0	0	0	0
皮膚肉芽腫	1 (<1)	0	0	0	0
毛質異常	1 (<1)	0	0	0	0
後天性リポジストロフィー	0	0	0	0	1 (1)
点状出血	1 (<1)	0	0	0	0
色素沈着障害	1 (<1)	0	0	0	0
アレルギー性そう痒症	1 (<1)	0	0	0	0
瘢痕	1 (<1)	0	0	0	0
皮膚反応	0	0	0	0	2 (2)

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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
乾皮症	1 (<1)	0	0	0	0
筋骨格系および結合組織障害	60 (31)	59 (31)	64 (34)	123 (32)	12 (14)
背部痛	14 (7)	21 (11)	22 (12)	43 (11)	3 (4)
関節痛	12 (6)	16 (8)	22 (12)	38 (10)	4 (5)
四肢痛	12 (6)	10 (5)	13 (7)	23 (6)	6 (7)
筋痙縮	10 (5)	8 (4)	13 (7)	21 (5)	1 (1)
筋力低下	15 (8)	6 (3)	9 (5)	15 (4)	0
頚部痛	4 (2)	9 (5)	5 (3)	14 (4)	0
筋肉痛	7 (4)	3 (2)	5 (3)	8 (2)	1 (1)
筋骨格痛	7 (4)	1 (<1)	3 (2)	4 (1)	1 (1)
滑液包炎	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
筋骨格硬直	2 (1)	1 (<1)	2 (1)	3 (<1)	2 (2)
関節炎	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
関節腫脹	1 (<1)	0	2 (1)	2 (<1)	1 (1)
筋骨格系胸痛	2 (1)	0	2 (1)	2 (<1)	0
変形性関節症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
重感	2 (1)	2 (1)	0	2 (<1)	1 (1)
変形性脊椎症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腱鞘炎	0	2 (1)	0	2 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
関節障害	0	1 (<1)	0	1 (<1)	0
骨痛	0	0	1 (<1)	1 (<1)	0
椎間板変性症	0	0	1 (<1)	1 (<1)	0
椎間板突出	0	1 (<1)	0	1 (<1)	0
関節滲出液	0	0	1 (<1)	1 (<1)	0
関節硬直	0	0	1 (<1)	1 (<1)	0
四肢不快感	0	0	1 (<1)	1 (<1)	0
筋拘縮	1 (<1)	0	1 (<1)	1 (<1)	0
筋緊張	1 (<1)	0	1 (<1)	1 (<1)	0
ミオキミア	0	1 (<1)	0	1 (<1)	0
骨減少症	0	1 (<1)	0	1 (<1)	0
骨粗鬆症	1 (<1)	1 (<1)	0	1 (<1)	0
顎痛	0	1 (<1)	0	1 (<1)	0
膝蓋大腿部痛症候群	0	0	1 (<1)	1 (<1)	0
関節周囲炎	1 (<1)	1 (<1)	0	1 (<1)	0
乾癬性関節症	0	0	1 (<1)	1 (<1)	0
足根洞症候群	0	1 (<1)	0	1 (<1)	0
シェーグレン症候群	0	1 (<1)	0	1 (<1)	0
腱炎	2 (1)	1 (<1)	0	1 (<1)	0
弾発指	0	1 (<1)	0	1 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尾骨痛	1 (<1)	0	0	0	0
側腹部痛	1 (<1)	0	0	0	0
筋攣縮	1 (<1)	0	0	0	0
筋骨格不快感	1 (<1)	0	0	0	0
多発性関節炎	1 (<1)	0	0	0	0
脊柱変形	1 (<1)	0	0	0	0
斜頚	1 (<1)	0	0	0	0
腎および尿路障害	44 (23)	41 (21)	35 (18)	76 (20)	9 (11)
蛋白尿	12 (6)	17 (9)	20 (10)	37 (10)	7 (8)
血尿	11 (6)	14 (7)	11 (6)	25 (7)	3 (4)
ミクロアルブミン尿	6 (3)	16 (8)	7 (4)	23 (6)	1 (1)
ケトン尿	1 (<1)	2 (1)	6 (3)	8 (2)	1 (1)
尿意切迫	3 (2)	3 (2)	1 (<1)	4 (1)	0
排尿困難	4 (2)	2 (1)	0	2 (<1)	0
糖尿	3 (2)	1 (<1)	1 (<1)	2 (<1)	0
頻尿	3 (2)	1 (<1)	1 (<1)	2 (<1)	0
腎臓痛	0	0	2 (1)	2 (<1)	0
切迫性尿失禁	0	1 (<1)	1 (<1)	2 (<1)	0
尿失禁	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尿閉	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
膀胱機能障害	0	1 (<1)	0	1 (<1)	0
膀胱刺激症状	0	0	1 (<1)	1 (<1)	0
グロブリン尿	0	1 (<1)	0	1 (<1)	0
緊張性膀胱	0	1 (<1)	0	1 (<1)	0
排尿異常	0	1 (<1)	0	1 (<1)	0
腎結石症	6 (3)	1 (<1)	0	1 (<1)	0
起立性蛋白尿症	0	1 (<1)	0	1 (<1)	0
腎仙痛	0	1 (<1)	0	1 (<1)	0
尿管瘤	0	1 (<1)	0	1 (<1)	0
排尿躊躇	0	0	1 (<1)	1 (<1)	0
膀胱憩室	1 (<1)	0	0	0	0
非感染性膀胱炎	1 (<1)	0	0	0	0
白血球尿	1 (<1)	0	0	0	0
腎下垂症	1 (<1)	0	0	0	0
膿尿	0	0	0	0	1 (1)
生殖系および乳房障害	24 (12)	20 (10)	23 (12)	43 (11)	3 (4)
月経困難症	3 (2)	5 (3)	4 (2)	9 (2)	0
卵巣嚢胞	2 (1)	2 (1)	3 (2)	5 (1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
無月経	1 (<1)	1 (<1)	3 (2)	4 (1)	1 (1)
月経過多	1 (<1)	2 (1)	2 (1)	4 (1)	0
不規則月経	3 (2)	2 (1)	2 (1)	4 (1)	1 (1)
腟出血	0	2 (1)	2 (1)	4 (1)	0
乳房痛	0	0	3 (2)	3 (<1)	0
勃起不全	1 (<1)	0	2 (1)	2 (<1)	0
月経障害	1 (<1)	0	2 (1)	2 (<1)	0
不正子宮出血	2 (1)	1 (<1)	1 (<1)	2 (<1)	2 (2)
頻発月経	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
外陰腟そう痒症	0	1 (<1)	1 (<1)	2 (<1)	0
乳房出血	0	1 (<1)	0	1 (<1)	0
乳房腫瘤	0	0	1 (<1)	1 (<1)	0
性交困難	0	0	1 (<1)	1 (<1)	0
子宮内膜症	0	1 (<1)	0	1 (<1)	0
乳汁漏出症	0	1 (<1)	0	1 (<1)	0
閉経期症状	1 (<1)	0	1 (<1)	1 (<1)	0
卵巣嚢胞破裂	0	1 (<1)	0	1 (<1)	0
骨盤痛	2 (1)	1 (<1)	0	1 (<1)	0
多嚢胞性卵巣	0	0	1 (<1)	1 (<1)	0
精巣障害	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
子宮出血	1 (<1)	0	1 (<1)	1 (<1)	0
子宮の炎症	0	1 (<1)	0	1 (<1)	0
バルトリン嚢腫	2 (1)	0	0	0	0
子宮頚部上皮異形成	1 (<1)	0	0	0	0
希発月経	1 (<1)	0	0	0	0
閉経後出血	1 (<1)	0	0	0	0
精巣痛	1 (<1)	0	0	0	0
外陰腟痛	1 (<1)	0	0	0	0
先天性、家族性および遺伝性障害	0	0	1 (<1)	1 (<1)	0
ラウン・ギャノン・レバイン症候群	0	0	1 (<1)	1 (<1)	0
一般・全身障害および投与部位の状態	44 (23)	35 (18)	51 (27)	86 (22)	28 (33)
疲労	17 (9)	14 (7)	26 (14)	40 (10)	3 (4)
発熱	9 (5)	6 (3)	14 (7)	20 (5)	3 (4)
熱感	0	6 (3)	2 (1)	8 (2)	0
インフルエンザ様疾患	2 (1)	2 (1)	4 (2)	6 (2)	1 (1)
無力症	4 (2)	2 (1)	3 (2)	5 (1)	3 (4)
胸痛	1 (<1)	0	4 (2)	4 (1)	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
末梢性浮腫	4 (2)	2 (1)	2 (1)	4 (1)	0
胸部不快感	3 (2)	2 (1)	1 (<1)	3 (<1)	0
顔面痛	1 (<1)	1 (<1)	2 (1)	3 (<1)	1 (1)
歩行障害	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
炎症	0	0	2 (1)	2 (<1)	0
医療機器による疼痛	0	0	2 (1)	2 (<1)	0
非心臓性胸痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
疼痛	5 (3)	1 (<1)	1 (<1)	2 (<1)	1 (1)
腫脹	0	1 (<1)	1 (<1)	2 (<1)	0
悪寒	3 (2)	1 (<1)	0	1 (<1)	0
易刺激性	0	0	1 (<1)	1 (<1)	0
足のもつれ	0	1 (<1)	0	1 (<1)	0
倦怠感	1 (<1)	0	1 (<1)	1 (<1)	0
血管穿刺部位血腫	0	0	1 (<1)	1 (<1)	0
異常感	1 (<1)	0	0	0	0
体温変動感	1 (<1)	0	0	0	0
ヘルニア痛	1 (<1)	0	0	0	0
空腹	1 (<1)	0	0	0	0
注射直後反応	0	0	0	0	1 (1)
注射部位紅斑	0	0	0	0	5 (6)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
注射部位血管外漏出	0	0	0	0	1 (1)
注射部位血腫	0	0	0	0	2 (2)
注射部位出血	0	0	0	0	1 (1)
注射部位硬結	0	0	0	0	3 (4)
注射部位炎症	0	0	0	0	1 (1)
注射部位疼痛	0	0	0	0	8 (10)
注射部位そう痒感	0	0	0	0	4 (5)
注射部位反応	0	0	0	0	1 (1)
注射部位腫脹	0	0	0	0	2 (2)
注射部位熱感	0	0	0	0	1 (1)
壊死	0	0	0	0	1 (1)
浮腫	0	0	0	0	1 (1)
骨盤腔内腫瘤	1 (<1)	0	0	0	0
臨床検査	49 (25)	57 (30)	51 (27)	108 (28)	23 (27)
アラニン・アミノトランスフェラーゼ増加	9 (5)	7 (4)	17 (9)	24 (6)	5 (6)
尿中アルブミン陽性	8 (4)	11 (6)	7 (4)	18 (5)	3 (4)
アスパラギン酸アミノトランスフェラーゼ増加	7 (4)	6 (3)	11 (6)	17 (4)	3 (4)
白血球数減少	1 (<1)	7 (4)	4 (2)	11 (3)	1 (1)
尿中蛋白陽性	4 (2)	7 (4)	1 (<1)	8 (2)	3 (4)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
体重減少	1 (<1)	4 (2)	4 (2)	8 (2)	0
尿中白血球陽性	2 (1)	6 (3)	2 (1)	8 (2)	3 (4)
血中副甲状腺ホルモン増加	2 (1)	4 (2)	3 (2)	7 (2)	1 (1)
尿中血陽性	3 (2)	6 (3)	1 (<1)	7 (2)	1 (1)
γ－グルタミルトランスフェラーゼ増加	4 (2)	2 (1)	4 (2)	6 (2)	2 (2)
リンパ球数減少	0	6 (3)	0	6 (2)	0
尿中β２ミクログロブリン増加	5 (3)	2 (1)	3 (2)	5 (1)	1 (1)
好中球数増加	9 (5)	4 (2)	1 (<1)	5 (1)	0
体重増加	2 (1)	1 (<1)	4 (2)	5 (1)	0
血中クレアチニン増加	2 (1)	2 (1)	2 (1)	4 (1)	4 (5)
血中トリグリセリド増加	0	2 (1)	2 (1)	4 (1)	0
ヘモグロビン減少	3 (2)	4 (2)	0	4 (1)	0
肝酵素上昇	2 (1)	2 (1)	2 (1)	4 (1)	0
尿中ケトン体陽性	1 (<1)	2 (1)	2 (1)	4 (1)	0
β２ミクログロブリン増加	0	1 (<1)	2 (1)	3 (<1)	0
血中ブドウ糖増加	1 (<1)	0	3 (2)	3 (<1)	2 (2)
血小板数減少	1 (<1)	3 (2)	0	3 (<1)	0
赤血球数減少	2 (1)	3 (2)	0	3 (<1)	0
尿中赤血球陽性	0	2 (1)	1 (<1)	3 (<1)	1 (1)
血中ビリルビン増加	1 (<1)	0	2 (1)	2 (<1)	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血中コレステロール増加	0	1 (<1)	1 (<1)	2 (<1)	0
血中尿素増加	0	0	2 (1)	2 (<1)	1 (1)
好酸球数増加	0	1 (<1)	1 (<1)	2 (<1)	0
ヘマトクリット減少	2 (1)	2 (1)	0	2 (<1)	1 (1)
血液学的検査異常	0	1 (<1)	1 (<1)	2 (<1)	0
肝機能検査異常	0	2 (1)	0	2 (<1)	0
好中球数減少	2 (1)	2 (1)	0	2 (<1)	1 (1)
白血球数増加	8 (4)	2 (1)	0	2 (<1)	0
アレルギー検査	0	0	1 (<1)	1 (<1)	0
抗ＳＳＡ抗体陽性	0	1 (<1)	0	1 (<1)	0
血中アルカリホスファターゼ増加	2 (1)	0	1 (<1)	1 (<1)	1 (1)
血中ブドウ糖減少	0	0	1 (<1)	1 (<1)	0
血中免疫グロブリンM増加	0	0	1 (<1)	1 (<1)	0
血中カリウム増加	0	1 (<1)	0	1 (<1)	0
血圧低下	0	1 (<1)	0	1 (<1)	0
血圧上昇	0	1 (<1)	0	1 (<1)	0
体温低下	0	1 (<1)	0	1 (<1)	0
体温上昇	1 (<1)	0	1 (<1)	1 (<1)	0
白血球百分率数異常	0	0	1 (<1)	1 (<1)	0

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心電図Ｔ波振幅減少	0	0	1 (<1)	1 (<1)	0
好酸球百分率増加	0	1 (<1)	0	1 (<1)	0
尿中ブドウ糖陽性	1 (<1)	0	1 (<1)	1 (<1)	0
検査	0	0	1 (<1)	1 (<1)	0
低比重リポ蛋白増加	0	0	1 (<1)	1 (<1)	0
リンパ球数増加	2 (1)	1 (<1)	0	1 (<1)	0
リンパ球形態異常	0	0	1 (<1)	1 (<1)	0
リンパ球百分率減少	1 (<1)	1 (<1)	0	1 (<1)	0
医学的観察	0	0	1 (<1)	1 (<1)	0
好中球百分率増加	1 (<1)	1 (<1)	0	1 (<1)	0
血小板数	0	1 (<1)	0	1 (<1)	0
赤血球数増加	1 (<1)	0	1 (<1)	1 (<1)	0
腎機能検査異常	0	1 (<1)	0	1 (<1)	0
残尿量増加	0	1 (<1)	0	1 (<1)	0
ビタミンＤ増加	1 (<1)	0	1 (<1)	1 (<1)	0
アラニン・アミノトランスフェラーゼ異常	0	0	0	0	1 (1)
アスパラギン酸アミノトランスフェラーゼ異常	0	0	0	0	1 (1)
血中ビリルビン異常	0	0	0	0	1 (1)
血中カルシウム減少	0	0	0	0	1 (1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血中乳酸脱水素酵素増加	3 (2)	0	0	0	0
血中リン増加	1 (<1)	0	0	0	0
血中カリウム減少	2 (1)	0	0	0	0
血中ナトリウム増加	0	0	0	0	1 (1)
血中尿酸増加	0	0	0	0	1 (1)
心雑音	2 (1)	0	0	0	0
尿中結晶陽性	1 (<1)	0	0	0	0
心電図異常	2 (1)	0	0	0	0
心電図異常ＱＲＳ群	1 (<1)	0	0	0	0
心電図ＱＴ延長	0	0	0	0	1 (1)
心電図ＳＴ部分下降	1 (<1)	0	0	0	0
心電図Ｔ波逆転	1 (<1)	0	0	0	1 (1)
高比重リポ蛋白増加	1 (<1)	0	0	0	0
リンパ球数異常	0	0	0	0	1 (1)
後骨髄球百分率増加	1 (<1)	0	0	0	0
骨髄球数増加	1 (<1)	0	0	0	0
骨髄球百分率増加	1 (<1)	0	0	0	0
好中球数異常	0	0	0	0	1 (1)
血小板数増加	1 (<1)	0	0	0	0
ビタミンＢ１２減少	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
白血球数異常	0	0	0	0	1 (1)
傷害、中毒および処置合併症	38 (20)	21 (11)	25 (13)	46 (12)	9 (11)
転倒	5 (3)	5 (3)	6 (3)	11 (3)	6 (7)
関節捻挫	5 (3)	5 (3)	1 (<1)	6 (2)	0
節足動物咬傷	3 (2)	0	4 (2)	4 (1)	0
挫傷	6 (3)	1 (<1)	3 (2)	4 (1)	2 (2)
四肢損傷	1 (<1)	2 (1)	2 (1)	4 (1)	0
足関節部骨折	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
擦過傷	1 (<1)	0	2 (1)	2 (<1)	1 (1)
足骨折	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
処置による疼痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
外傷性血腫	0	2 (1)	0	2 (<1)	0
偶発的過量投与	0	1 (<1)	0	1 (<1)	0
凍瘡	0	1 (<1)	0	1 (<1)	0
鎖骨骨折	0	1 (<1)	0	1 (<1)	0
脳振盪	1 (<1)	1 (<1)	0	1 (<1)	0
眼外傷	2 (1)	1 (<1)	0	1 (<1)	1 (1)
顔面損傷	0	0	1 (<1)	1 (<1)	0
頭部損傷	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腸脛靱帯症候群	0	0	1 (<1)	1 (<1)	0
関節脱臼	0	1 (<1)	0	1 (<1)	0
半月板障害	1 (<1)	0	1 (<1)	1 (<1)	0
筋断裂	0	1 (<1)	0	1 (<1)	0
肉離れ	1 (<1)	0	1 (<1)	1 (<1)	0
頚部損傷	0	0	1 (<1)	1 (<1)	0
反復性挫傷	0	1 (<1)	0	1 (<1)	0
肋骨骨折	0	0	1 (<1)	1 (<1)	0
交通事故	1 (<1)	1 (<1)	0	1 (<1)	0
引っかき傷	0	0	1 (<1)	1 (<1)	0
滑膜断裂	0	0	1 (<1)	1 (<1)	0
歯牙破折	0	1 (<1)	0	1 (<1)	0
外傷性脳損傷	0	1 (<1)	0	1 (<1)	0
創傷	0	0	1 (<1)	1 (<1)	0
手首関節骨折	1 (<1)	0	1 (<1)	1 (<1)	0
動物咬傷	1 (<1)	0	0	0	1 (1)
節足動物刺傷	1 (<1)	0	0	0	0
眼部化学的損傷	1 (<1)	0	0	0	0
上顆炎	1 (<1)	0	0	0	0
大腿骨頚部骨折	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尾骨骨折	1 (<1)	0	0	0	0
手骨折	2 (1)	0	0	0	2 (2)
関節損傷	2 (1)	0	0	0	0
靭帯断裂	1 (<1)	0	0	0	0
処置後合併症	2 (1)	0	0	0	0
網膜損傷	1 (<1)	0	0	0	0
骨格損傷	1 (<1)	0	0	0	0
皮膚裂傷	0	0	0	0	1 (1)
サンバーン	1 (<1)	0	0	0	0
腱損傷	1 (<1)	0	0	0	0
熱傷	3 (2)	0	0	0	0
むち打ち損傷	1 (<1)	0	0	0	1 (1)
創傷出血	1 (<1)	0	0	0	0
外科および内科処置	1 (<1)	2 (1)	1 (<1)	3 (<1)	0
子宮摘出	0	1 (<1)	1 (<1)	2 (<1)	0
乳房腫瘤摘除	0	1 (<1)	0	1 (<1)	0
色素性母斑切除	1 (<1)	0	0	0	0
社会環境	1 (<1)	0	0	0	0

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
職場でのストレス	1 (<1)	0	0	0	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	214 (100)	175 (100)	187 (100)	362 (100)	78 (100)
Number of subjects with an event	198 (93)	164 (94)	172 (92)	336 (93)	70 (90)
感染症および寄生虫症	122 (57)	100 (57)	119 (64)	219 (60)	38 (49)
鼻咽頭炎	41 (19)	41 (23)	57 (30)	98 (27)	18 (23)
上気道感染	22 (10)	19 (11)	22 (12)	41 (11)	4 (5)
尿路感染	18 (8)	20 (11)	20 (11)	40 (11)	7 (9)
インフルエンザ	21 (10)	15 (9)	16 (9)	31 (9)	0
気管支炎	5 (2)	8 (5)	15 (8)	23 (6)	3 (4)
副鼻腔炎	8 (4)	6 (3)	16 (9)	22 (6)	1 (1)
胃腸炎	2 (<1)	10 (6)	7 (4)	17 (5)	0
鼻炎	9 (4)	4 (2)	8 (4)	12 (3)	2 (3)
ウイルス性胃腸炎	5 (2)	5 (3)	5 (3)	10 (3)	1 (1)
気道感染	6 (3)	2 (1)	7 (4)	9 (2)	1 (1)
膀胱炎	8 (4)	1 (<1)	7 (4)	8 (2)	0
咽頭炎	10 (5)	6 (3)	2 (1)	8 (2)	4 (5)
ウイルス性上気道感染	1 (<1)	5 (3)	3 (2)	8 (2)	3 (4)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
消化管感染	0	2 (1)	5 (3)	7 (2)	0
口腔ヘルペス	6 (3)	7 (4)	0	7 (2)	3 (4)
ウイルス感染	6 (3)	2 (1)	5 (3)	7 (2)	2 (3)
扁桃炎	5 (2)	2 (1)	4 (2)	6 (2)	0
歯膿瘍	3 (1)	4 (2)	2 (1)	6 (2)	1 (1)
喉頭炎	1 (<1)	3 (2)	2 (1)	5 (1)	0
外陰腟真菌感染	4 (2)	1 (<1)	4 (2)	5 (1)	1 (1)
耳感染	2 (<1)	0	4 (2)	4 (1)	0
麦粒腫	1 (<1)	2 (1)	2 (1)	4 (1)	0
中耳炎	0	2 (1)	2 (1)	4 (1)	1 (1)
感染性結膜炎	1 (<1)	0	3 (2)	3 (<1)	0
ウイルス性消化管感染	1 (<1)	0	3 (2)	3 (<1)	0
帯状疱疹	3 (1)	1 (<1)	2 (1)	3 (<1)	0
レンサ球菌性咽頭炎	2 (<1)	2 (1)	1 (<1)	3 (<1)	0
咽頭扁桃炎	0	1 (<1)	2 (1)	3 (<1)	1 (1)
歯感染	2 (<1)	0	3 (2)	3 (<1)	1 (1)
蜂巣炎	0	2 (1)	0	2 (<1)	0
遊走性紅斑	0	0	2 (1)	2 (<1)	0
ヘリコバクター性胃炎	0	1 (<1)	1 (<1)	2 (<1)	0
切開部位感染	0	2 (1)	0	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
下気道感染	4 (2)	1 (<1)	1 (<1)	2 (<1)	1 (1)
細菌性副鼻腔炎	0	2 (1)	0	2 (<1)	0
気管炎	1 (<1)	2 (1)	0	2 (<1)	1 (1)
腟感染	0	0	2 (1)	2 (<1)	1 (1)
急性副鼻腔炎	1 (<1)	1 (<1)	0	1 (<1)	0
急性扁桃炎	0	1 (<1)	0	1 (<1)	0
細菌感染	1 (<1)	1 (<1)	0	1 (<1)	0
細菌尿	1 (<1)	0	1 (<1)	1 (<1)	0
感染性湿疹	0	0	1 (<1)	1 (<1)	0
エプスタイン・バーウイルス感染	0	0	1 (<1)	1 (<1)	0
眼感染	0	1 (<1)	0	1 (<1)	0
毛包炎	2 (<1)	0	1 (<1)	1 (<1)	0
せつ	0	1 (<1)	0	1 (<1)	0
陰部ヘルペス	0	1 (<1)	0	1 (<1)	0
Ｈ１Ｎ１インフルエンザ	0	0	1 (<1)	1 (<1)	2 (3)
ヘリコバクター感染	0	0	1 (<1)	1 (<1)	0
眼帯状疱疹	0	0	1 (<1)	1 (<1)	0
咬傷感染	0	0	1 (<1)	1 (<1)	0
口腔カンジダ症	0	0	1 (<1)	1 (<1)	0
外耳炎	0	1 (<1)	0	1 (<1)	1 (1)

NOTE 1: Numbers in parentheses are percentages.
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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
歯周感染	0	0	1 (<1)	1 (<1)	0
扁桃周囲膿瘍	0	0	1 (<1)	1 (<1)	0
肺炎	1 (<1)	1 (<1)	0	1 (<1)	3 (4)
術後創感染	0	1 (<1)	0	1 (<1)	0
腎盂腎炎	0	1 (<1)	0	1 (<1)	1 (1)
卵管卵巣炎	0	1 (<1)	0	1 (<1)	0
皮膚細菌感染	0	0	1 (<1)	1 (<1)	0
皮下組織膿瘍	0	1 (<1)	0	1 (<1)	0
癜風	0	1 (<1)	0	1 (<1)	0
細菌性上気道感染	1 (<1)	1 (<1)	0	1 (<1)	0
真菌性尿路感染	0	1 (<1)	0	1 (<1)	0
泌尿生殖器真菌感染	0	0	1 (<1)	1 (<1)	0
細菌性膣炎	0	1 (<1)	0	1 (<1)	1 (1)
水痘	0	1 (<1)	0	1 (<1)	0
外陰部膣カンジダ症	0	0	1 (<1)	1 (<1)	0
膿瘍	1 (<1)	0	0	0	0
無症候性細菌尿	1 (<1)	0	0	0	0
ウイルス性気管支炎	0	0	0	0	1 (1)
熱性感染症	1 (<1)	0	0	0	0
真菌感染	0	0	0	0	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
歯肉感染	0	0	0	0	1 (1)
単純ヘルペス	1 (<1)	0	0	0	0
感染性嚢腫	1 (<1)	0	0	0	0
感染	0	0	0	0	1 (1)
寄生虫感染	0	0	0	0	1 (1)
迷路炎	1 (<1)	0	0	0	0
ライム病	0	0	0	0	1 (1)
口腔真菌感染	1 (<1)	0	0	0	0
パラインフルエンザウイルス感染	1 (<1)	0	0	0	0
爪囲炎	1 (<1)	0	0	0	0
耳下腺炎	0	0	0	0	1 (1)
細菌性咽頭炎	1 (<1)	0	0	0	0
歯髄炎	1 (<1)	0	0	0	0
膿胸	0	0	0	0	1 (1)
ウイルス性気道感染	3 (1)	0	0	0	0
ウイルス性咽頭炎	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	8 (4)	5 (3)	6 (3)	11 (3)	3 (4)
脂肪腫	0	2 (1)	2 (1)	4 (1)	1 (1)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
メラノサイト性母斑	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
子宮平滑筋腫	0	1 (<1)	1 (<1)	2 (<1)	0
乳癌	0	0	1 (<1)	1 (<1)	0
泌尿生殖器新生物	0	0	1 (<1)	1 (<1)	0
肺新生物	0	0	1 (<1)	1 (<1)	0
皮膚乳頭腫	1 (<1)	1 (<1)	0	1 (<1)	0
アクロコルドン	1 (<1)	0	0	0	0
リンパ節の良性新生物	1 (<1)	0	0	0	0
乳房新生物	1 (<1)	0	0	0	0
血管腫	1 (<1)	0	0	0	0
転移性甲状腺癌	0	0	0	0	1 (1)
甲状腺新生物	1 (<1)	0	0	0	0
血液およびリンパ系障害	5 (2)	10 (6)	17 (9)	27 (7)	1 (1)
貧血	3 (1)	4 (2)	4 (2)	8 (2)	0
リンパ球減少症	0	3 (2)	5 (3)	8 (2)	0
白血球減少症	0	1 (<1)	3 (2)	4 (1)	0
リンパ節症	0	0	4 (2)	4 (1)	1 (1)
好酸球増加症	0	0	3 (2)	3 (<1)	0
白血球増加症	1 (<1)	2 (1)	0	2 (<1)	0

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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
好中球減少症	0	0	2 (1)	2 (<1)	0
鉄欠乏性貧血	0	1 (<1)	0	1 (<1)	0
好中球増加症	1 (<1)	0	1 (<1)	1 (<1)	0
血小板減少症	0	1 (<1)	0	1 (<1)	0
リンパ節炎	1 (<1)	0	0	0	0
免疫系障害	4 (2)	5 (3)	3 (2)	8 (2)	2 (3)
過敏症	0	2 (1)	1 (<1)	3 (<1)	1 (1)
食物アレルギー	0	2 (1)	0	2 (<1)	0
季節性アレルギー	3 (1)	0	2 (1)	2 (<1)	1 (1)
造影剤アレルギー	0	1 (<1)	0	1 (<1)	0
薬物過敏症	1 (<1)	0	0	0	0
内分泌障害	2 (<1)	2 (1)	5 (3)	7 (2)	2 (3)
間脳性内分泌障害	0	0	1 (<1)	1 (<1)	0
甲状腺腫	0	1 (<1)	0	1 (<1)	1 (1)
副甲状腺機能亢進症	0	1 (<1)	0	1 (<1)	0
原発性副甲状腺機能亢進症	0	0	1 (<1)	1 (<1)	0
甲状腺機能低下症	0	0	1 (<1)	1 (<1)	1 (1)
エストロゲン欠乏症	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
甲状腺腫瘤	0	0	1 (<1)	1 (<1)	0
副腎腫瘤	1 (<1)	0	0	0	0
甲状腺機能亢進症	1 (<1)	0	0	0	0
代謝および栄養障害	18 (8)	18 (10)	12 (6)	30 (8)	7 (9)
食欲減退	2 (<1)	4 (2)	2 (1)	6 (2)	1 (1)
高コレステロール血症	1 (<1)	3 (2)	2 (1)	5 (1)	1 (1)
高血糖	2 (<1)	1 (<1)	2 (1)	3 (<1)	0
ビタミンD欠乏	2 (<1)	2 (1)	1 (<1)	3 (<1)	1 (1)
脱水	0	2 (1)	0	2 (<1)	0
耐糖能障害	0	1 (<1)	1 (<1)	2 (<1)	0
低カリウム血症	0	1 (<1)	1 (<1)	2 (<1)	0
鉄欠乏	0	1 (<1)	1 (<1)	2 (<1)	0
糖尿病	3 (1)	0	1 (<1)	1 (<1)	0
糖尿病性ケトアシドーシス	0	0	1 (<1)	1 (<1)	0
高脂血症	2 (<1)	1 (<1)	0	1 (<1)	0
高トリグリセリド血症	2 (<1)	1 (<1)	0	1 (<1)	3 (4)
高尿酸血症	0	1 (<1)	0	1 (<1)	2 (3)
低血糖症	0	0	1 (<1)	1 (<1)	0
低リン酸血症	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
２型糖尿病	0	1 (<1)	0	1 (<1)	0
ビタミンＢ１２欠乏	0	0	1 (<1)	1 (<1)	0
亜鉛欠乏	0	0	1 (<1)	1 (<1)	0
葉酸欠乏	1 (<1)	0	0	0	0
高カリウム血症	0	0	0	0	1 (1)
低ナトリウム血症	1 (<1)	0	0	0	0
食欲亢進	3 (1)	0	0	0	0
肥満	1 (<1)	0	0	0	0
精神障害	36 (17)	30 (17)	33 (18)	63 (17)	13 (17)
うつ病	15 (7)	12 (7)	10 (5)	22 (6)	2 (3)
不眠症	11 (5)	6 (3)	9 (5)	15 (4)	2 (3)
不安	4 (2)	5 (3)	7 (4)	12 (3)	2 (3)
抑うつ気分	4 (2)	2 (1)	3 (2)	5 (1)	2 (3)
睡眠障害	3 (1)	1 (<1)	3 (2)	4 (1)	1 (1)
感情障害	2 (<1)	1 (<1)	2 (1)	3 (<1)	0
気分変化	0	0	2 (1)	2 (<1)	0
気分動揺	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
神経症	0	2 (1)	0	2 (<1)	0
異常な夢	1 (<1)	0	1 (<1)	1 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
不安障害	0	1 (<1)	0	1 (<1)	0
歯ぎしり	0	0	1 (<1)	1 (<1)	0
抑うつ症状	1 (<1)	0	1 (<1)	1 (<1)	0
情動障害	0	0	1 (<1)	1 (<1)	0
全般性不安障害	0	1 (<1)	0	1 (<1)	0
自己愛性人格障害	0	1 (<1)	0	1 (<1)	0
神経過敏	0	1 (<1)	0	1 (<1)	0
パニック発作	0	0	1 (<1)	1 (<1)	0
パニック障害	0	1 (<1)	0	1 (<1)	0
落ち着きのなさ	0	1 (<1)	0	1 (<1)	0
ストレス	2 (<1)	1 (<1)	0	1 (<1)	2 (3)
適応障害	0	0	0	0	1 (1)
感情不安定	1 (<1)	0	0	0	0
激越	1 (<1)	0	0	0	0
自殺既遂	0	0	0	0	1 (1)
故意の自傷行為	0	0	0	0	1 (1)
中期不眠症	1 (<1)	0	0	0	0
強迫性障害	1 (<1)	0	0	0	0
自殺企図	0	0	0	0	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
神経系障害	141 (66)	84 (48)	107 (57)	191 (53)	39 (50)
多発性硬化症再発	93 (43)	47 (27)	56 (30)	103 (28)	27 (35)
頭痛	39 (18)	23 (13)	33 (18)	56 (15)	14 (18)
錯感覚	18 (8)	12 (7)	21 (11)	33 (9)	4 (5)
浮動性めまい	10 (5)	7 (4)	10 (5)	17 (5)	2 (3)
感覚鈍麻	17 (8)	6 (3)	10 (5)	16 (4)	3 (4)
灼熱感	2 (<1)	6 (3)	8 (4)	14 (4)	0
片頭痛	3 (1)	4 (2)	10 (5)	14 (4)	1 (1)
筋痙直	6 (3)	5 (3)	3 (2)	8 (2)	0
平衡障害	4 (2)	4 (2)	2 (1)	6 (2)	1 (1)
傾眠	2 (<1)	3 (2)	3 (2)	6 (2)	0
多発性硬化症	6 (3)	1 (<1)	4 (2)	5 (1)	2 (3)
感覚障害	3 (1)	1 (<1)	4 (2)	5 (1)	0
構語障害	0	1 (<1)	3 (2)	4 (1)	0
レルミット徴候	1 (<1)	1 (<1)	3 (2)	4 (1)	1 (1)
神経痛	4 (2)	2 (1)	2 (1)	4 (1)	0
坐骨神経痛	1 (<1)	2 (1)	2 (1)	4 (1)	0
緊張性頭痛	1 (<1)	3 (2)	1 (<1)	4 (1)	1 (1)
認知障害	0	0	3 (2)	3 (<1)	0
異常感覚	0	3 (2)	0	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
失神	1 (<1)	0	3 (2)	3 (<1)	0
振戦	1 (<1)	1 (<1)	2 (1)	3 (<1)	1 (1)
注意力障害	0	1 (<1)	1 (<1)	2 (<1)	0
味覚異常	0	1 (<1)	1 (<1)	2 (<1)	0
記憶障害	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
前兆を伴う片頭痛	0	2 (1)	0	2 (<1)	0
不随意性筋収縮	0	1 (<1)	1 (<1)	2 (<1)	0
副鼻腔炎に伴う頭痛	0	0	2 (1)	2 (<1)	0
ウートホフ現象	0	0	2 (1)	2 (<1)	0
健忘	0	0	1 (<1)	1 (<1)	0
運動失調	2 (<1)	0	1 (<1)	1 (<1)	0
帯状感	0	0	1 (<1)	1 (<1)	0
頚原性頭痛	0	1 (<1)	0	1 (<1)	0
協調運動異常	0	0	1 (<1)	1 (<1)	0
泣き	0	0	1 (<1)	1 (<1)	0
体位性めまい	0	1 (<1)	0	1 (<1)	0
てんかんの前兆	0	1 (<1)	0	1 (<1)	0
顔面不全麻痺	0	1 (<1)	0	1 (<1)	1 (1)
蟻走感	0	0	1 (<1)	1 (<1)	0
大発作痙攣	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
過眠症	1 (<1)	0	1 (<1)	1 (<1)	0
思考散乱	0	0	1 (<1)	1 (<1)	0
脳圧低下	0	0	1 (<1)	1 (<1)	0
意識消失	0	0	1 (<1)	1 (<1)	0
神経圧迫	1 (<1)	0	1 (<1)	1 (<1)	0
失神寸前の状態	0	0	1 (<1)	1 (<1)	1 (1)
下肢静止不能症候群	0	0	1 (<1)	1 (<1)	2 (3)
鎮静	0	0	1 (<1)	1 (<1)	0
感覚消失	0	1 (<1)	0	1 (<1)	0
一過性脳虚血発作	0	0	1 (<1)	1 (<1)	0
横静脈洞血栓症	0	0	1 (<1)	1 (<1)	0
三叉神経痛	2 (<1)	1 (<1)	0	1 (<1)	0
異痛症	1 (<1)	0	0	0	0
手根管症候群	1 (<1)	0	0	0	2 (3)
中枢痛症候群	1 (<1)	0	0	0	0
小脳症候群	1 (<1)	0	0	0	0
脳血管障害	0	0	0	0	1 (1)
頚髄神経根痛	1 (<1)	0	0	0	0
てんかん	1 (<1)	0	0	0	0
頭部動揺	0	0	0	0	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
片側頭痛	1 (<1)	0	0	0	0
ホルネル症候群	1 (<1)	0	0	0	0
知覚過敏	2 (<1)	0	0	0	0
反射亢進	2 (<1)	0	0	0	0
肋間神経痛	1 (<1)	0	0	0	0
末梢性ニューロパチー	1 (<1)	0	0	0	1 (1)
後頭神経痛	0	0	0	0	1 (1)
起立不耐性	0	0	0	0	1 (1)
周期性四肢運動障害	0	0	0	0	1 (1)
腓骨神経麻痺	0	0	0	0	1 (1)
片頭痛発作重積	1 (<1)	0	0	0	0
振動覚亢進	1 (<1)	0	0	0	0
視野欠損	1 (<1)	0	0	0	0
眼障害	25 (12)	14 (8)	20 (11)	34 (9)	5 (6)
複視	3 (1)	2 (1)	4 (2)	6 (2)	0
霧視	7 (3)	1 (<1)	5 (3)	6 (2)	2 (3)
眼瞼痙攣	1 (<1)	1 (<1)	3 (2)	4 (1)	0
眼痛	2 (<1)	2 (1)	2 (1)	4 (1)	1 (1)
視力低下	3 (1)	1 (<1)	3 (2)	4 (1)	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
結膜炎	2 (<1)	1 (<1)	2 (1)	3 (<1)	1 (1)
眼乾燥	0	3 (2)	0	3 (<1)	1 (1)
眼充血	0	2 (1)	0	2 (<1)	0
ブドウ膜炎	0	0	2 (1)	2 (<1)	0
硝子体浮遊物	0	1 (<1)	1 (<1)	2 (<1)	0
眼の異常感	1 (<1)	1 (<1)	0	1 (<1)	0
眼瞼炎	1 (<1)	1 (<1)	0	1 (<1)	0
アレルギー性眼瞼炎	0	0	1 (<1)	1 (<1)	0
失明	0	0	1 (<1)	1 (<1)	0
霰粒腫	0	1 (<1)	0	1 (<1)	0
眼瞼湿疹	0	1 (<1)	0	1 (<1)	0
眼出血	0	1 (<1)	0	1 (<1)	0
眼刺激	0	0	1 (<1)	1 (<1)	0
眼瞼障害	0	0	1 (<1)	1 (<1)	0
緑内障	1 (<1)	0	1 (<1)	1 (<1)	0
角膜炎	0	0	1 (<1)	1 (<1)	0
瞼板腺炎	0	0	1 (<1)	1 (<1)	0
夜盲	0	0	1 (<1)	1 (<1)	0
開放隅角緑内障	0	0	1 (<1)	1 (<1)	0
屈折障害	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
視力障害	3 (1)	0	1 (<1)	1 (<1)	0
白内障	1 (<1)	0	0	0	0
結膜出血	0	0	0	0	1 (1)
眼瞼紅斑	2 (<1)	0	0	0	0
眼そう痒症	2 (<1)	0	0	0	0
眼瞼刺激	1 (<1)	0	0	0	0
眼瞼そう痒症	1 (<1)	0	0	0	0
遠視	1 (<1)	0	0	0	0
虹彩毛様体炎	0	0	0	0	1 (1)
近視	1 (<1)	0	0	0	1 (1)
耳および迷路障害	15 (7)	10 (6)	19 (10)	29 (8)	3 (4)
回転性めまい	10 (5)	6 (3)	12 (6)	18 (5)	1 (1)
耳鳴	3 (1)	1 (<1)	3 (2)	4 (1)	0
耳痛	1 (<1)	1 (<1)	2 (1)	3 (<1)	1 (1)
耳不快感	0	1 (<1)	1 (<1)	2 (<1)	0
耳出血	0	1 (<1)	0	1 (<1)	0
外耳障害	0	0	1 (<1)	1 (<1)	0
鼓膜充血	0	1 (<1)	0	1 (<1)	0
頭位性回転性めまい	2 (<1)	0	1 (<1)	1 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
耳垢栓塞	0	0	0	0	1 (1)
外耳道紅斑	1 (<1)	0	0	0	0
耳閉	1 (<1)	0	0	0	0
乗物酔い	1 (<1)	0	0	0	0
前庭障害	1 (<1)	0	0	0	0
心臓障害	8 (4)	12 (7)	11 (6)	23 (6)	8 (10)
頻脈	2 (<1)	4 (2)	2 (1)	6 (2)	3 (4)
期外収縮	0	2 (1)	1 (<1)	3 (<1)	0
動悸	1 (<1)	2 (1)	1 (<1)	3 (<1)	1 (1)
上室性期外収縮	0	2 (1)	1 (<1)	3 (<1)	0
心室性期外収縮	2 (<1)	2 (1)	1 (<1)	3 (<1)	0
第一度房室ブロック	1 (<1)	1 (<1)	1 (<1)	2 (<1)	2 (3)
左脚ブロック	0	0	2 (1)	2 (<1)	0
急性冠動脈症候群	0	0	1 (<1)	1 (<1)	0
心不全	0	0	1 (<1)	1 (<1)	0
心筋症	0	1 (<1)	0	1 (<1)	0
結節性調律	0	0	1 (<1)	1 (<1)	0
洞性徐脈	0	0	1 (<1)	1 (<1)	0
頻脈性不整脈	0	0	1 (<1)	1 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
徐脈	0	0	0	0	2 (3)
洞性頻脈	1 (<1)	0	0	0	0
発作性頻脈	1 (<1)	0	0	0	0
血管障害	27 (13)	73 (42)	77 (41)	150 (41)	9 (12)
潮紅	10 (5)	63 (36)	61 (33)	124 (34)	2 (3)
ほてり	5 (2)	9 (5)	17 (9)	26 (7)	1 (1)
高血圧	12 (6)	3 (2)	4 (2)	7 (2)	4 (5)
血腫	0	1 (<1)	0	1 (<1)	1 (1)
静脈炎	2 (<1)	0	1 (<1)	1 (<1)	0
静脈瘤	0	1 (<1)	0	1 (<1)	0
深部静脈血栓症	0	0	0	0	1 (1)
高血圧クリーゼ	1 (<1)	0	0	0	0
末梢冷感	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	32 (15)	17 (10)	36 (19)	53 (15)	11 (14)
口腔咽頭痛	11 (5)	6 (3)	14 (7)	20 (6)	1 (1)
咳嗽	8 (4)	6 (3)	10 (5)	16 (4)	3 (4)
鼻漏	0	4 (2)	5 (3)	9 (2)	1 (1)
呼吸困難	3 (1)	1 (<1)	1 (<1)	2 (<1)	3 (4)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
鼻閉	3 (1)	2 (1)	0	2 (<1)	0
アレルギー性鼻炎	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
上気道咳症候群	0	0	2 (1)	2 (<1)	0
アレルギー性咽頭炎	0	1 (<1)	0	1 (<1)	0
喘息	0	0	1 (<1)	1 (<1)	0
息詰まり	0	0	1 (<1)	1 (<1)	0
発声障害	0	0	1 (<1)	1 (<1)	0
鼻出血	3 (1)	0	1 (<1)	1 (<1)	0
しゃっくり	1 (<1)	1 (<1)	0	1 (<1)	0
鼻浮腫	0	0	1 (<1)	1 (<1)	0
口腔咽頭不快感	1 (<1)	1 (<1)	0	1 (<1)	0
口腔咽頭腫脹	0	0	1 (<1)	1 (<1)	0
副鼻腔分泌過多	0	0	1 (<1)	1 (<1)	0
湿性咳嗽	1 (<1)	0	1 (<1)	1 (<1)	0
呼吸抑制	0	1 (<1)	0	1 (<1)	0
副鼻腔うっ血	0	1 (<1)	0	1 (<1)	0
副鼻腔障害	0	0	1 (<1)	1 (<1)	0
睡眠時無呼吸症候群	0	0	1 (<1)	1 (<1)	0
上気道うっ血	2 (<1)	0	1 (<1)	1 (<1)	1 (1)
声帯ポリープ	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
アレルギー性呼吸器症状	1 (<1)	0	0	0	0
喀血	1 (<1)	0	0	0	0
低換気	0	0	0	0	1 (1)
鼻部不快感	1 (<1)	0	0	0	0
鼻乾燥	1 (<1)	0	0	0	0
咽頭紅斑	1 (<1)	0	0	0	0
気道うっ血	1 (<1)	0	0	0	0
気道の炎症	1 (<1)	0	0	0	0
季節性鼻炎	0	0	0	0	1 (1)
胃腸障害	80 (37)	80 (46)	104 (56)	184 (51)	18 (23)
下痢	22 (10)	28 (16)	35 (19)	63 (17)	3 (4)
悪心	17 (8)	20 (11)	22 (12)	42 (12)	4 (5)
上腹部痛	12 (6)	13 (7)	22 (12)	35 (10)	1 (1)
腹痛	11 (5)	14 (8)	19 (10)	33 (9)	1 (1)
嘔吐	13 (6)	12 (7)	16 (9)	28 (8)	4 (5)
消化不良	5 (2)	10 (6)	12 (6)	22 (6)	2 (3)
便秘	7 (3)	5 (3)	5 (3)	10 (3)	2 (3)
胃炎	4 (2)	5 (3)	5 (3)	10 (3)	0
胃食道逆流性疾患	2 (<1)	3 (2)	7 (4)	10 (3)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
歯痛	4 (2)	4 (2)	6 (3)	10 (3)	3 (4)
腹部不快感	5 (2)	5 (3)	3 (2)	8 (2)	0
口内乾燥	3 (1)	5 (3)	2 (1)	7 (2)	1 (1)
胃腸障害	4 (2)	0	6 (3)	6 (2)	1 (1)
歯周炎	1 (<1)	1 (<1)	4 (2)	5 (1)	0
齲歯	1 (<1)	2 (1)	2 (1)	4 (1)	0
痔核	0	2 (1)	2 (1)	4 (1)	0
下腹部痛	2 (<1)	0	3 (2)	3 (<1)	0
嚥下障害	2 (<1)	1 (<1)	2 (1)	3 (<1)	1 (1)
小腸炎	0	1 (<1)	2 (1)	3 (<1)	0
鼓腸	4 (2)	0	3 (2)	3 (<1)	1 (1)
食中毒	1 (<1)	2 (1)	1 (<1)	3 (<1)	0
歯肉炎	0	1 (<1)	2 (1)	3 (<1)	0
逆流性食道炎	1 (<1)	0	3 (2)	3 (<1)	0
腹部膨満	1 (<1)	0	2 (1)	2 (<1)	0
十二指腸潰瘍	0	1 (<1)	1 (<1)	2 (<1)	0
腹部ヘルニア	0	1 (<1)	0	1 (<1)	0
腹部硬直	0	0	1 (<1)	1 (<1)	0
腹部圧痛	0	0	1 (<1)	1 (<1)	0
異常便	1 (<1)	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
便習慣変化	0	0	1 (<1)	1 (<1)	0
口唇炎	0	1 (<1)	0	1 (<1)	0
大腸炎	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
便意切迫	0	0	1 (<1)	1 (<1)	2 (3)
心窩部不快感	1 (<1)	1 (<1)	0	1 (<1)	0
おくび	0	0	1 (<1)	1 (<1)	0
便失禁	2 (<1)	0	1 (<1)	1 (<1)	0
胃障害	0	0	1 (<1)	1 (<1)	0
歯肉出血	1 (<1)	1 (<1)	0	1 (<1)	0
舌炎	0	1 (<1)	0	1 (<1)	0
舌痛	0	0	1 (<1)	1 (<1)	0
吐血	1 (<1)	1 (<1)	0	1 (<1)	0
血便排泄	0	0	1 (<1)	1 (<1)	0
裂孔ヘルニア	0	1 (<1)	0	1 (<1)	0
口の感覚鈍麻	0	0	1 (<1)	1 (<1)	0
胃排出不全	0	1 (<1)	0	1 (<1)	0
腸閉塞	0	0	1 (<1)	1 (<1)	0
口唇水疱	0	1 (<1)	0	1 (<1)	0
腰ヘルニア	0	0	1 (<1)	1 (<1)	0
神経因性腸	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
嚥下痛	0	0	1 (<1)	1 (<1)	0
食道炎	0	1 (<1)	0	1 (<1)	0
歯周病	0	1 (<1)	0	1 (<1)	0
逆流性胃炎	0	0	1 (<1)	1 (<1)	0
流涎過多	0	1 (<1)	0	1 (<1)	0
舌腫脹	0	1 (<1)	0	1 (<1)	0
呼気臭	1 (<1)	0	0	0	0
潰瘍性大腸炎	1 (<1)	0	0	0	0
結腸ポリープ	2 (<1)	0	0	0	0
消化器痛	1 (<1)	0	0	0	0
歯肉痛	1 (<1)	0	0	0	0
痔出血	0	0	0	0	1 (1)
過敏性腸症候群	1 (<1)	0	0	0	0
口腔内潰瘍形成	1 (<1)	0	0	0	0
膵炎	1 (<1)	0	0	0	0
急性膵炎	1 (<1)	0	0	0	0
肛門周囲痛	1 (<1)	0	0	0	0
直腸攣縮	0	0	0	0	1 (1)
口内炎	1 (<1)	0	0	0	1 (1)
脆弱歯	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
舌乾燥	1 (<1)	0	0	0	0
肝胆道系障害	1 (<1)	2 (1)	2 (1)	4 (1)	3 (4)
胆道ジスキネジー	0	0	1 (<1)	1 (<1)	0
肝細胞融解性肝炎	0	1 (<1)	0	1 (<1)	0
肝嚢胞	0	1 (<1)	0	1 (<1)	0
肝炎	0	0	1 (<1)	1 (<1)	0
胆石症	0	0	0	0	1 (1)
肝障害	1 (<1)	0	0	0	2 (3)
皮膚および皮下組織障害	48 (22)	50 (29)	69 (37)	119 (33)	15 (19)
そう痒症	11 (5)	13 (7)	18 (10)	31 (9)	2 (3)
発疹	7 (3)	14 (8)	15 (8)	29 (8)	2 (3)
紅斑	3 (1)	9 (5)	17 (9)	26 (7)	2 (3)
多汗症	2 (<1)	3 (2)	9 (5)	12 (3)	2 (3)
全身性そう痒症	1 (<1)	2 (1)	5 (3)	7 (2)	0
脱毛症	6 (3)	2 (1)	4 (2)	6 (2)	0
アレルギー性皮膚炎	1 (<1)	4 (2)	2 (1)	6 (2)	1 (1)
皮膚灼熱感	0	4 (2)	2 (1)	6 (2)	0
ざ瘡	7 (3)	1 (<1)	3 (2)	4 (1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
全身紅斑	0	0	4 (2)	4 (1)	0
光線過敏性反応	1 (<1)	2 (1)	2 (1)	4 (1)	0
丘疹性皮疹	0	1 (<1)	3 (2)	4 (1)	0
蕁麻疹	4 (2)	2 (1)	2 (1)	4 (1)	1 (1)
湿疹	0	1 (<1)	2 (1)	3 (<1)	0
皮膚乾燥	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
顔面感覚鈍麻	2 (<1)	0	2 (1)	2 (<1)	1 (1)
網状皮斑	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
アレルギー性そう痒症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
皮膚反応	0	0	2 (1)	2 (<1)	0
皮膚のつっぱり感	0	0	2 (1)	2 (<1)	0
皮膚弛緩症	0	1 (<1)	0	1 (<1)	0
皮膚嚢腫	1 (<1)	1 (<1)	0	1 (<1)	0
皮膚炎	0	0	1 (<1)	1 (<1)	0
ざ瘡様皮膚炎	0	1 (<1)	0	1 (<1)	0
紅色症	0	0	1 (<1)	1 (<1)	0
過角化	0	0	1 (<1)	1 (<1)	0
特発性蕁麻疹	0	1 (<1)	0	1 (<1)	0
毛孔性角化症	0	0	1 (<1)	1 (<1)	0
爪の障害	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚疼痛	0	0	1 (<1)	1 (<1)	0
皮膚色素過剰	0	1 (<1)	0	1 (<1)	1 (1)
皮膚硬結	0	1 (<1)	0	1 (<1)	1 (1)
皮膚病変	1 (<1)	1 (<1)	0	1 (<1)	0
皮膚熱感	0	0	1 (<1)	1 (<1)	0
接触性皮膚炎	1 (<1)	0	0	0	1 (1)
発汗障害	1 (<1)	0	0	0	0
斑状出血	2 (<1)	0	0	0	0
剥脱性発疹	1 (<1)	0	0	0	0
紅色汗疹	1 (<1)	0	0	0	0
内出血発生の増加傾向	0	0	0	0	1 (1)
嵌入爪	1 (<1)	0	0	0	1 (1)
爪床の炎症	1 (<1)	0	0	0	0
爪変色	1 (<1)	0	0	0	0
寝汗	1 (<1)	0	0	0	0
点状出血	1 (<1)	0	0	0	0
光線性皮膚症	1 (<1)	0	0	0	0
色素沈着障害	1 (<1)	0	0	0	0
乾癬	1 (<1)	0	0	0	0
そう痒性皮疹	2 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
猩紅熱様発疹	1 (<1)	0	0	0	0
小水疱性皮疹	1 (<1)	0	0	0	0
酒さ	1 (<1)	0	0	0	0
脂漏性皮膚炎	0	0	0	0	1 (1)
皮膚変色	1 (<1)	0	0	0	0
皮膚刺激	1 (<1)	0	0	0	1 (1)
皮膚小結節	0	0	0	0	1 (1)
顔面腫脹	0	0	0	0	1 (1)
毛細血管拡張症	1 (<1)	0	0	0	0
筋骨格系および結合組織障害	73 (34)	54 (31)	54 (29)	108 (30)	18 (23)
背部痛	32 (15)	20 (11)	24 (13)	44 (12)	8 (10)
四肢痛	19 (9)	10 (6)	15 (8)	25 (7)	5 (6)
関節痛	18 (8)	11 (6)	12 (6)	23 (6)	5 (6)
筋痙縮	9 (4)	3 (2)	11 (6)	14 (4)	2 (3)
頚部痛	5 (2)	7 (4)	7 (4)	14 (4)	1 (1)
筋骨格痛	5 (2)	2 (1)	6 (3)	8 (2)	3 (4)
筋力低下	4 (2)	3 (2)	4 (2)	7 (2)	2 (3)
筋肉痛	7 (3)	4 (2)	1 (<1)	5 (1)	1 (1)
関節炎	1 (<1)	2 (1)	2 (1)	4 (1)	0

NOTE 1: Numbers in parentheses are percentages.
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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
滑液包炎	0	1 (<1)	2 (1)	3 (<1)	0
変形性関節症	2 (<1)	1 (<1)	2 (1)	3 (<1)	0
骨痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
筋骨格系胸痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
筋骨格硬直	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
関節周囲炎	1 (<1)	0	2 (1)	2 (<1)	0
関節障害	0	0	1 (<1)	1 (<1)	0
尾骨痛	0	0	1 (<1)	1 (<1)	0
外骨腫	0	0	1 (<1)	1 (<1)	1 (1)
四肢拘縮	0	1 (<1)	0	1 (<1)	0
側腹部痛	0	0	1 (<1)	1 (<1)	0
鼡径部痛	0	1 (<1)	0	1 (<1)	0
椎間板突出	1 (<1)	0	1 (<1)	1 (<1)	0
下肢腫瘤	0	0	1 (<1)	1 (<1)	0
中足骨痛	0	1 (<1)	0	1 (<1)	0
筋腫脹	0	1 (<1)	0	1 (<1)	0
筋緊張	0	0	1 (<1)	1 (<1)	0
筋骨格不快感	0	0	1 (<1)	1 (<1)	0
筋硬化症	0	1 (<1)	0	1 (<1)	0
骨壊死	1 (<1)	1 (<1)	0	1 (<1)	0

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
骨減少症	0	0	1 (<1)	1 (<1)	0
肩回旋筋腱板症候群	0	0	1 (<1)	1 (<1)	0
重感	0	1 (<1)	0	1 (<1)	0
シェーグレン症候群	0	1 (<1)	0	1 (<1)	0
脊椎障害	0	1 (<1)	0	1 (<1)	0
腱炎	2 (<1)	1 (<1)	0	1 (<1)	0
斜頚	0	0	1 (<1)	1 (<1)	0
関節腫脹	1 (<1)	0	0	0	1 (1)
筋攣縮	1 (<1)	0	0	0	0
結節性変形性関節症	1 (<1)	0	0	0	0
骨粗鬆症	2 (<1)	0	0	0	0
顎痛	1 (<1)	0	0	0	1 (1)
回帰性リウマチ	1 (<1)	0	0	0	0
滑膜炎	1 (<1)	0	0	0	0
腱鞘炎	1 (<1)	0	0	0	0
腎および尿路障害	37 (17)	34 (19)	47 (25)	81 (22)	11 (14)
蛋白尿	13 (6)	16 (9)	21 (11)	37 (10)	6 (8)
血尿	10 (5)	4 (2)	10 (5)	14 (4)	3 (4)
ミクロアルブミン尿	8 (4)	5 (3)	5 (3)	10 (3)	5 (6)

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SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
排尿困難	4 (2)	1 (<1)	6 (3)	7 (2)	1 (1)
尿意切迫	4 (2)	4 (2)	3 (2)	7 (2)	1 (1)
ケトン尿	1 (<1)	0	5 (3)	5 (1)	0
腎結石症	1 (<1)	1 (<1)	4 (2)	5 (1)	1 (1)
尿失禁	2 (<1)	3 (2)	2 (1)	5 (1)	0
頻尿	3 (1)	3 (2)	0	3 (<1)	1 (1)
糖尿	5 (2)	1 (<1)	1 (<1)	2 (<1)	1 (1)
神経因性膀胱	1 (<1)	2 (1)	0	2 (<1)	0
尿閉	0	1 (<1)	1 (<1)	2 (<1)	0
膀胱機能障害	0	1 (<1)	0	1 (<1)	0
着色尿	0	0	1 (<1)	1 (<1)	0
失禁	0	0	1 (<1)	1 (<1)	0
白血球尿	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
腎嚢胞	0	1 (<1)	0	1 (<1)	0
排尿躊躇	2 (<1)	0	1 (<1)	1 (<1)	0
尿路痛	0	1 (<1)	0	1 (<1)	0
アルブミン尿	0	0	0	0	2 (3)
肋骨脊柱角圧痛	1 (<1)	0	0	0	0
非感染性膀胱炎	1 (<1)	0	0	0	0
慢性糸球体腎炎	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腎仙痛	1 (<1)	0	0	0	0
腹圧性尿失禁	1 (<1)	0	0	0	0
尿路の炎症	1 (<1)	0	0	0	0
妊娠、産褥および周産期の状態	0	1 (<1)	0	1 (<1)	0
妊娠	0	1 (<1)	0	1 (<1)	0
生殖系および乳房障害	19 (9)	15 (9)	15 (8)	30 (8)	5 (6)
勃起不全	0	3 (2)	1 (<1)	4 (1)	0
不規則月経	5 (2)	1 (<1)	3 (2)	4 (1)	0
卵巣嚢胞	0	2 (1)	1 (<1)	3 (<1)	0
性機能不全	2 (<1)	1 (<1)	2 (1)	3 (<1)	0
萎縮性外陰腟炎	0	0	2 (1)	2 (<1)	0
乳房圧痛	0	0	2 (1)	2 (<1)	0
月経困難症	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
月経過多	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
不正子宮出血	3 (1)	1 (<1)	1 (<1)	2 (<1)	2 (3)
子宮出血	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
外陰腟乾燥	0	1 (<1)	1 (<1)	2 (<1)	0
腺筋症	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
無月経	2 (<1)	1 (<1)	0	1 (<1)	0
乳房分泌	0	0	1 (<1)	1 (<1)	0
乳房障害	0	1 (<1)	0	1 (<1)	1 (1)
乳房痛	0	1 (<1)	0	1 (<1)	0
子宮頚部上皮異形成	0	1 (<1)	0	1 (<1)	0
月経障害	0	1 (<1)	0	1 (<1)	0
月経遅延	0	1 (<1)	0	1 (<1)	0
精巣痛	1 (<1)	1 (<1)	0	1 (<1)	0
腟出血	1 (<1)	0	1 (<1)	1 (<1)	0
乳房嚢胞	0	0	0	0	1 (1)
線維嚢胞性乳腺疾患	1 (<1)	0	0	0	0
生殖器病変	1 (<1)	0	0	0	0
腟分泌物	1 (<1)	0	0	0	0
先天性、家族性および遺伝性障害	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
異形成母斑症候群	0	1 (<1)	1 (<1)	2 (<1)	0
過誤腫	0	0	0	0	1 (1)
一般・全身障害および投与部位の状態	53 (25)	38 (22)	55 (29)	93 (26)	33 (42)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
疲労	24 (11)	23 (13)	31 (17)	54 (15)	13 (17)
発熱	14 (7)	5 (3)	13 (7)	18 (5)	3 (4)
無力症	8 (4)	6 (3)	2 (1)	8 (2)	4 (5)
疼痛	3 (1)	3 (2)	3 (2)	6 (2)	2 (3)
胸痛	2 (<1)	1 (<1)	4 (2)	5 (1)	1 (1)
熱感	0	3 (2)	1 (<1)	4 (1)	3 (4)
末梢性浮腫	6 (3)	1 (<1)	2 (1)	3 (<1)	1 (1)
胸部不快感	1 (<1)	0	2 (1)	2 (<1)	0
悪寒	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
嚢胞	1 (<1)	0	2 (1)	2 (<1)	0
冷感	1 (<1)	0	2 (1)	2 (<1)	0
歩行障害	1 (<1)	1 (<1)	1 (<1)	2 (<1)	3 (4)
インフルエンザ様疾患	0	0	2 (1)	2 (<1)	1 (1)
易刺激性	1 (<1)	0	2 (1)	2 (<1)	1 (1)
倦怠感	0	0	2 (1)	2 (<1)	0
非心臓性胸痛	0	0	2 (1)	2 (<1)	1 (1)
脂肪壊死	0	1 (<1)	0	1 (<1)	0
びくびく感	0	0	1 (<1)	1 (<1)	0
高熱	1 (<1)	1 (<1)	0	1 (<1)	0
注射部位硬結	0	0	1 (<1)	1 (<1)	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
局所腫脹	0	1 (<1)	0	1 (<1)	0
圧痛	0	0	1 (<1)	1 (<1)	0
血管穿刺部位出血	0	1 (<1)	0	1 (<1)	0
血管穿刺部位疼痛	0	1 (<1)	0	1 (<1)	0
血管穿刺部位反応	0	1 (<1)	0	1 (<1)	0
嚢胞破裂	0	0	0	0	1 (1)
注射直後反応	0	0	0	0	2 (3)
注射部位乾燥	0	0	0	0	1 (1)
注射部位紅斑	0	0	0	0	8 (10)
注射部位血腫	0	0	0	0	2 (3)
注射部位出血	0	0	0	0	1 (1)
注射部位過敏反応	0	0	0	0	1 (1)
注射部位肥厚	0	0	0	0	2 (3)
注射部位腫瘤	0	0	0	0	4 (5)
注射部位浮腫	0	0	0	0	1 (1)
注射部位疼痛	0	0	0	0	5 (6)
注射部位そう痒感	0	0	0	0	3 (4)
注射部位発疹	0	0	0	0	1 (1)
注射部位反応	0	0	0	0	1 (1)
注射部位腫脹	0	0	0	0	5 (6)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
注射部位熱感	0	0	0	0	1 (1)
足のもつれ	1 (<1)	0	0	0	0
臨床検査	47 (22)	41 (23)	52 (28)	93 (26)	22 (28)
アラニン・アミノトランスフェラーゼ増加	14 (7)	9 (5)	10 (5)	19 (5)	6 (8)
尿中アルブミン陽性	4 (2)	9 (5)	9 (5)	18 (5)	4 (5)
尿中蛋白陽性	4 (2)	7 (4)	5 (3)	12 (3)	3 (4)
アスパラギン酸アミノトランスフェラーゼ増加	4 (2)	4 (2)	6 (3)	10 (3)	2 (3)
尿中血陽性	0	3 (2)	5 (3)	8 (2)	1 (1)
尿中β２ミクログロブリン増加	3 (1)	5 (3)	2 (1)	7 (2)	2 (3)
尿中白血球陽性	2 (<1)	3 (2)	3 (2)	6 (2)	2 (3)
血中ブドウ糖増加	1 (<1)	1 (<1)	4 (2)	5 (1)	1 (1)
肝酵素上昇	1 (<1)	0	5 (3)	5 (1)	3 (4)
体重減少	0	3 (2)	2 (1)	5 (1)	0
体重増加	3 (1)	1 (<1)	4 (2)	5 (1)	0
血中副甲状腺ホルモン増加	1 (<1)	2 (1)	2 (1)	4 (1)	0
尿中赤血球陽性	2 (<1)	4 (2)	0	4 (1)	0
白血球数減少	0	2 (1)	2 (1)	4 (1)	0
γ－グルタミルトランスフェラーゼ増加	3 (1)	2 (1)	1 (<1)	3 (<1)	2 (3)
好中球数増加	0	2 (1)	1 (<1)	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尿中ケトン体陽性	0	0	3 (2)	3 (<1)	1 (1)
白血球数増加	0	1 (<1)	2 (1)	3 (<1)	1 (1)
β２ミクログロブリン増加	1 (<1)	0	2 (1)	2 (<1)	0
血中ビリルビン増加	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
心電図異常	0	0	2 (1)	2 (<1)	0
高比重リポ蛋白増加	0	0	2 (1)	2 (<1)	0
肝機能検査異常	2 (<1)	0	2 (1)	2 (<1)	0
リンパ球数減少	0	1 (<1)	1 (<1)	2 (<1)	0
ビタミンD減少	0	2 (1)	0	2 (<1)	0
アラニン・アミノトランスフェラーゼ異常	0	0	1 (<1)	1 (<1)	0
細菌検査陽性	0	0	1 (<1)	1 (<1)	0
血中重炭酸塩減少	0	1 (<1)	0	1 (<1)	0
血中重炭酸塩増加	0	1 (<1)	0	1 (<1)	0
血中カルシウム増加	1 (<1)	0	1 (<1)	1 (<1)	0
血中クロール増加	0	0	1 (<1)	1 (<1)	0
血中コレステロール増加	1 (<1)	0	1 (<1)	1 (<1)	0
血中クレアチニン増加	1 (<1)	0	1 (<1)	1 (<1)	0
血中ケトン体増加	0	0	1 (<1)	1 (<1)	0
血圧上昇	1 (<1)	0	1 (<1)	1 (<1)	0
血中ナトリウム増加	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血中トリグリセリド増加	1 (<1)	1 (<1)	0	1 (<1)	0
体温上昇	0	1 (<1)	0	1 (<1)	1 (1)
心雑音	0	1 (<1)	0	1 (<1)	0
心筋虚血の心電図所見	0	1 (<1)	0	1 (<1)	0
心電図ＱＴ延長	1 (<1)	0	1 (<1)	1 (<1)	2 (3)
エプスタイン・バーウイルス抗体陽性	0	0	1 (<1)	1 (<1)	0
γ－グルタミルトランスフェラーゼ異常	0	0	1 (<1)	1 (<1)	0
胃内ｐＨ上昇	0	0	1 (<1)	1 (<1)	0
血液学的検査異常	0	0	1 (<1)	1 (<1)	0
ヘモグロビン減少	0	0	1 (<1)	1 (<1)	1 (1)
低比重リポ蛋白増加	0	0	1 (<1)	1 (<1)	0
リンパ球形態異常	1 (<1)	1 (<1)	0	1 (<1)	0
単球数増加	0	0	1 (<1)	1 (<1)	0
好中球数減少	0	1 (<1)	0	1 (<1)	0
呼吸数増加	0	0	1 (<1)	1 (<1)	0
血清フェリチン減少	0	0	1 (<1)	1 (<1)	0
ビタミンＤ増加	0	0	1 (<1)	1 (<1)	0
抗甲状腺抗体陽性	1 (<1)	0	0	0	0
抗核抗体増加	1 (<1)	0	0	0	0
動脈雑音	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
細菌検査	1 (<1)	0	0	0	0
血中アルカリホスファターゼ増加	2 (<1)	0	0	0	0
血中ビリルビン減少	1 (<1)	0	0	0	0
血中クロール減少	1 (<1)	0	0	0	0
血中乳酸脱水素酵素増加	1 (<1)	0	0	0	0
血中マグネシウム減少	1 (<1)	0	0	0	0
血中リン減少	1 (<1)	0	0	0	0
収縮期血圧上昇	1 (<1)	0	0	0	0
血中尿素増加	1 (<1)	0	0	0	0
尿中結晶陽性	2 (<1)	0	0	0	0
心電図ＳＴ部分下降	0	0	0	0	1 (1)
心電図２相性Ｔ波	0	0	0	0	1 (1)
心電図Ｔ波逆転	0	0	0	0	1 (1)
好酸球数増加	1 (<1)	0	0	0	0
尿中ブドウ糖陽性	1 (<1)	0	0	0	1 (1)
心拍数増加	2 (<1)	0	0	0	0
Ａ型インフルエンザウイルス検査陽性	1 (<1)	0	0	0	0
ＱＲＳ軸異常	1 (<1)	0	0	0	0
子宮頚部スミア異常	1 (<1)	0	0	0	0
トランスアミナーゼ上昇	1 (<1)	0	0	0	0

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膀胱超音波検査異常	1 (<1)	0	0	0	0
傷害、中毒および処置合併症	35 (16)	18 (10)	36 (19)	54 (15)	9 (12)
挫傷	5 (2)	6 (3)	7 (4)	13 (4)	0
関節捻挫	4 (2)	4 (2)	5 (3)	9 (2)	1 (1)
転倒	5 (2)	4 (2)	3 (2)	7 (2)	3 (4)
足骨折	2 (<1)	3 (2)	3 (2)	6 (2)	1 (1)
節足動物刺傷	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
四肢損傷	2 (<1)	2 (1)	1 (<1)	3 (<1)	1 (1)
交通事故	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
節足動物咬傷	2 (<1)	1 (<1)	1 (<1)	2 (<1)	0
肉離れ	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
処置による疼痛	0	0	2 (1)	2 (<1)	2 (3)
骨格損傷	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
サンバーン	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
熱傷	1 (<1)	0	2 (1)	2 (<1)	0
歯牙破折	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
アルコール中毒	0	0	1 (<1)	1 (<1)	0
鎖骨骨折	0	0	1 (<1)	1 (<1)	0
脳振盪	0	1 (<1)	0	1 (<1)	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
上顎炎	0	0	1 (<1)	1 (<1)	0
擦過傷	1 (<1)	1 (<1)	0	1 (<1)	0
顔面損傷	0	1 (<1)	0	1 (<1)	0
損傷	0	0	1 (<1)	1 (<1)	1 (1)
靭帯断裂	1 (<1)	0	1 (<1)	1 (<1)	0
靭帯捻挫	0	0	1 (<1)	1 (<1)	0
半月板障害	1 (<1)	0	1 (<1)	1 (<1)	0
神経損傷	0	0	1 (<1)	1 (<1)	0
過量投与	0	1 (<1)	0	1 (<1)	0
放射線皮膚損傷	0	0	1 (<1)	1 (<1)	0
皮膚裂傷	5 (2)	1 (<1)	0	1 (<1)	0
舌損傷	0	1 (<1)	0	1 (<1)	0
外傷性骨折	0	0	1 (<1)	1 (<1)	0
外傷性血腫	0	0	1 (<1)	1 (<1)	0
上肢骨折	0	0	1 (<1)	1 (<1)	1 (1)
創傷	1 (<1)	1 (<1)	0	1 (<1)	0
手首関節骨折	0	0	1 (<1)	1 (<1)	0
労働災害	1 (<1)	0	0	0	0
動物による引っかき傷	0	0	0	0	1 (1)
凍瘡	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腓骨骨折	1 (<1)	0	0	0	0
筋損傷	2 (<1)	0	0	0	0
処置後合併症	0	0	0	0	1 (1)
外傷後疼痛	2 (<1)	0	0	0	1 (1)
橈骨骨折	0	0	0	0	1 (1)
ストレス骨折	0	0	0	0	1 (1)
腱断裂	3 (1)	0	0	0	0
治療薬毒性	1 (<1)	0	0	0	0
有毒性刺傷	1 (<1)	0	0	0	0
むち打ち損傷	1 (<1)	0	0	0	0
外科および内科処置	3 (1)	0	2 (1)	2 (<1)	1 (1)
デンタルケア	0	0	1 (<1)	1 (<1)	0
椎間板手術	0	0	1 (<1)	1 (<1)	0
子宮頚部円錐切除	1 (<1)	0	0	0	0
抜歯	2 (<1)	0	0	0	1 (1)
社会環境	2 (<1)	0	0	0	0
元タバコ使用者	1 (<1)	0	0	0	0
社会問題	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	180 (100)	183 (100)	186 (100)	369 (100)	83 (100)
Number of subjects with an event	168 (93)	175 (96)	177 (95)	352 (95)	75 (90)
感染症および寄生虫症	113 (63)	116 (63)	114 (61)	230 (62)	44 (53)
鼻咽頭炎	42 (23)	47 (26)	41 (22)	88 (24)	12 (14)
上気道感染	29 (16)	33 (18)	29 (16)	62 (17)	7 (8)
尿路感染	16 (9)	21 (11)	23 (12)	44 (12)	10 (12)
インフルエンザ	19 (11)	15 (8)	24 (13)	39 (11)	7 (8)
胃腸炎	7 (4)	9 (5)	10 (5)	19 (5)	0
気管支炎	11 (6)	10 (5)	8 (4)	18 (5)	5 (6)
副鼻腔炎	13 (7)	8 (4)	10 (5)	18 (5)	8 (10)
咽頭炎	7 (4)	6 (3)	8 (4)	14 (4)	3 (4)
耳感染	3 (2)	4 (2)	7 (4)	11 (3)	1 (1)
鼻炎	5 (3)	7 (4)	4 (2)	11 (3)	2 (2)
ウイルス性胃腸炎	4 (2)	5 (3)	4 (2)	9 (2)	3 (4)
帯状疱疹	3 (2)	2 (1)	6 (3)	8 (2)	1 (1)
喉頭炎	1 (<1)	4 (2)	4 (2)	8 (2)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膀胱炎	2 (1)	3 (2)	3 (2)	6 (2)	1 (1)
口腔ヘルペス	6 (3)	5 (3)	1 (<1)	6 (2)	0
中耳炎	0	5 (3)	1 (<1)	6 (2)	0
気道感染	2 (1)	1 (<1)	5 (3)	6 (2)	2 (2)
ウイルス感染	2 (1)	2 (1)	4 (2)	6 (2)	2 (2)
ウイルス性上気道感染	6 (3)	3 (2)	3 (2)	6 (2)	2 (2)
感染性結膜炎	0	3 (2)	2 (1)	5 (1)	0
麦粒腫	0	3 (2)	2 (1)	5 (1)	0
外陰腟真菌感染	0	0	5 (3)	5 (1)	2 (2)
歯膿瘍	2 (1)	3 (2)	1 (<1)	4 (1)	2 (2)
消化管感染	5 (3)	1 (<1)	2 (1)	3 (<1)	0
ウイルス性消化管感染	1 (<1)	3 (2)	0	3 (<1)	0
外耳炎	0	2 (1)	1 (<1)	3 (<1)	0
レンサ球菌性咽頭炎	2 (1)	0	3 (2)	3 (<1)	1 (1)
肺炎	2 (1)	1 (<1)	2 (1)	3 (<1)	2 (2)
ウイルス性気道感染	0	2 (1)	1 (<1)	3 (<1)	0
扁桃炎	2 (1)	2 (1)	1 (<1)	3 (<1)	0
蜂巣炎	2 (1)	0	2 (1)	2 (<1)	0
毛包炎	1 (<1)	2 (1)	0	2 (<1)	1 (1)
真菌感染	0	2 (1)	0	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
せつ	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
Ｈ１Ｎ１インフルエンザ	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
爪真菌症	0	2 (1)	0	2 (<1)	0
口腔カンジダ症	0	0	2 (1)	2 (<1)	0
ブドウ球菌感染	0	0	2 (1)	2 (<1)	0
気管炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腹壁膿瘍	0	0	1 (<1)	1 (<1)	0
急性副鼻腔炎	0	0	1 (<1)	1 (<1)	1 (1)
急性扁桃炎	2 (1)	1 (<1)	0	1 (<1)	0
無症候性細菌尿	0	0	1 (<1)	1 (<1)	0
細菌尿	0	1 (<1)	0	1 (<1)	0
ボレリア感染	2 (1)	1 (<1)	0	1 (<1)	0
乳房膿瘍	0	0	1 (<1)	1 (<1)	0
乳房蜂巣炎	0	0	1 (<1)	1 (<1)	0
細菌性結膜炎	0	0	1 (<1)	1 (<1)	0
憩室炎	0	0	1 (<1)	1 (<1)	0
遊走性紅斑	0	1 (<1)	0	1 (<1)	0
大腸菌性尿路感染	0	1 (<1)	0	1 (<1)	0
熱性感染症	0	0	1 (<1)	1 (<1)	0
ロタウイルス胃腸炎	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
性器カンジダ症	0	1 (<1)	0	1 (<1)	0
歯肉感染	0	0	1 (<1)	1 (<1)	0
感染性皮脂嚢腫	0	0	1 (<1)	1 (<1)	0
カンジダ性間擦疹	0	0	1 (<1)	1 (<1)	0
下気道感染	2 (1)	0	1 (<1)	1 (<1)	0
ライム病	0	0	1 (<1)	1 (<1)	0
乳腺炎	0	1 (<1)	0	1 (<1)	0
マイコプラズマ感染	0	0	1 (<1)	1 (<1)	0
爪感染	0	0	1 (<1)	1 (<1)	0
精巣炎	0	0	1 (<1)	1 (<1)	0
急性中耳炎	0	0	1 (<1)	1 (<1)	0
歯周感染	1 (<1)	1 (<1)	0	1 (<1)	1 (1)
歯髄炎	0	0	1 (<1)	1 (<1)	0
膿疱性皮疹	0	1 (<1)	0	1 (<1)	0
陰嚢膿瘍	0	0	1 (<1)	1 (<1)	0
細菌性副鼻腔炎	0	1 (<1)	0	1 (<1)	0
足部白癬	2 (1)	0	1 (<1)	1 (<1)	0
歯感染	0	0	1 (<1)	1 (<1)	3 (4)
気管気管支炎	1 (<1)	1 (<1)	0	1 (<1)	0
細菌性尿路感染	2 (1)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腟感染	1 (<1)	1 (<1)	0	1 (<1)	1 (1)
外陰部膿瘍	1 (<1)	0	1 (<1)	1 (<1)	0
外陰部腟カンジダ症	2 (1)	0	1 (<1)	1 (<1)	0
四肢膿瘍	1 (<1)	0	0	0	0
肛門膿瘍	1 (<1)	0	0	0	0
デング熱	0	0	0	0	1 (1)
医療機器関連感染	1 (<1)	0	0	0	0
皮膚真菌感染	1 (<1)	0	0	0	0
細菌性性器感染	2 (1)	0	0	0	0
ヘリコバクター性胃炎	0	0	0	0	1 (1)
ヘルペスウイルス感染	0	0	0	0	1 (1)
迷路炎	0	0	0	0	1 (1)
限局性感染	2 (1)	0	0	0	0
ムンプス	1 (<1)	0	0	0	0
細菌性咽頭炎	1 (<1)	0	0	0	1 (1)
毛巣嚢胞	1 (<1)	0	0	0	0
術後膿瘍	1 (<1)	0	0	0	0
術後創感染	1 (<1)	0	0	0	0
猩紅熱	1 (<1)	0	0	0	0
敗血症	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
レンサ球菌感染	1 (<1)	0	0	0	0
白癬感染	1 (<1)	0	0	0	0
細菌性膣炎	1 (<1)	0	0	0	0
創傷感染	2 (1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	5 (3)	4 (2)	5 (3)	9 (2)	2 (2)
脂肪腫	0	1 (<1)	1 (<1)	2 (<1)	0
子宮頚部癌	0	0	1 (<1)	1 (<1)	0
線維腫	1 (<1)	1 (<1)	0	1 (<1)	0
肝臓血管腫	0	0	1 (<1)	1 (<1)	0
神経鞘腫	0	1 (<1)	0	1 (<1)	0
腎新生物	0	1 (<1)	0	1 (<1)	0
皮膚乳頭腫	0	0	1 (<1)	1 (<1)	0
移行上皮癌	0	1 (<1)	0	1 (<1)	0
子宮平滑筋腫	0	0	1 (<1)	1 (<1)	0
基底細胞癌	0	0	0	0	1 (1)
甲状腺の良性新生物	1 (<1)	0	0	0	0
メラノサイト性母斑	1 (<1)	0	0	0	1 (1)
モートン神経腫	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
皮膚の新生物	1 (<1)	0	0	0	0
血液およびリンパ系障害	8 (4)	13 (7)	16 (9)	29 (8)	1 (1)
リンパ球減少症	0	4 (2)	6 (3)	10 (3)	0
貧血	3 (2)	1 (<1)	4 (2)	5 (1)	0
白血球減少症	0	1 (<1)	4 (2)	5 (1)	0
リンパ節症	3 (2)	2 (1)	2 (1)	4 (1)	1 (1)
好中球増加症	0	2 (1)	2 (1)	4 (1)	0
白血球増加症	0	3 (2)	0	3 (<1)	0
好酸球増加症	1 (<1)	2 (1)	0	2 (<1)	0
鉄欠乏性貧血	0	0	1 (<1)	1 (<1)	0
正色素性正球性貧血	0	0	1 (<1)	1 (<1)	0
脾腫	0	0	1 (<1)	1 (<1)	0
血小板減少症	0	1 (<1)	0	1 (<1)	0
低色素性貧血	1 (<1)	0	0	0	0
免疫系障害	7 (4)	6 (3)	5 (3)	11 (3)	1 (1)
過敏症	2 (1)	2 (1)	3 (2)	5 (1)	0
薬物過敏症	2 (1)	2 (1)	1 (<1)	3 (<1)	1 (1)
季節性アレルギー	2 (1)	3 (2)	0	3 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
食物アレルギー	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
アナフィラキシー様反応	0	0	1 (<1)	1 (<1)	0
造影剤アレルギー	0	0	1 (<1)	1 (<1)	0
化学物質アレルギー	1 (<1)	0	0	0	0
内分泌障害	0	1 (<1)	0	1 (<1)	0
続発性副甲状腺機能亢進症	0	1 (<1)	0	1 (<1)	0
代謝および栄養障害	18 (10)	11 (6)	13 (7)	24 (7)	7 (8)
食欲減退	3 (2)	3 (2)	4 (2)	7 (2)	0
ビタミンD欠乏	3 (2)	1 (<1)	3 (2)	4 (1)	2 (2)
脱水	0	0	2 (1)	2 (<1)	0
高脂血症	3 (2)	0	2 (1)	2 (<1)	1 (1)
食欲亢進	0	2 (1)	0	2 (<1)	0
糖尿病	0	1 (<1)	0	1 (<1)	2 (2)
脂質異常症	0	0	1 (<1)	1 (<1)	0
耐糖能障害	0	0	1 (<1)	1 (<1)	1 (1)
痛風	1 (<1)	1 (<1)	0	1 (<1)	0
高コレステロール血症	1 (<1)	0	1 (<1)	1 (<1)	0
高血糖	1 (<1)	1 (<1)	0	1 (<1)	0

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2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
高トリグリセリド血症	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
ビタミン欠乏症	2 (1)	1 (<1)	0	1 (<1)	0
ケトーシス	0	0	1 (<1)	1 (<1)	0
１型糖尿病	0	1 (<1)	0	1 (<1)	0
２型糖尿病	0	1 (<1)	0	1 (<1)	0
ビタミンＢ１２欠乏	0	0	1 (<1)	1 (<1)	0
電解質失調	1 (<1)	0	0	0	0
高カリウム血症	1 (<1)	0	0	0	0
肥満	0	0	0	0	1 (1)
多飲症	1 (<1)	0	0	0	0
精神障害	40 (22)	38 (21)	28 (15)	66 (18)	24 (29)
うつ病	21 (12)	15 (8)	8 (4)	23 (6)	14 (17)
不眠症	7 (4)	14 (8)	9 (5)	23 (6)	5 (6)
不安	8 (4)	10 (5)	5 (3)	15 (4)	2 (2)
抑うつ気分	4 (2)	4 (2)	1 (<1)	5 (1)	0
睡眠障害	3 (2)	3 (2)	0	3 (<1)	1 (1)
ストレス	0	2 (1)	1 (<1)	3 (<1)	1 (1)
感情障害	0	0	1 (<1)	1 (<1)	0
性的興奮障害	0	0	1 (<1)	1 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
幻聴	0	1 (<1)	0	1 (<1)	0
初期不眠症	0	0	1 (<1)	1 (<1)	0
リビドー減退	0	1 (<1)	0	1 (<1)	0
気分変化	0	1 (<1)	0	1 (<1)	0
気分動揺	1 (<1)	0	1 (<1)	1 (<1)	0
神経症	0	0	1 (<1)	1 (<1)	0
パニック発作	0	0	1 (<1)	1 (<1)	0
人格障害	0	1 (<1)	0	1 (<1)	0
落ち着きのなさ	0	1 (<1)	0	1 (<1)	0
睡眠発作	0	0	1 (<1)	1 (<1)	0
感情不安定	2 (1)	0	0	0	2 (2)
気晴らし食い	1 (<1)	0	0	0	0
閉所恐怖症	0	0	0	0	1 (1)
精神障害	0	0	0	0	1 (1)
神経過敏	1 (<1)	0	0	0	0
身体表現性障害	0	0	0	0	1 (1)
自殺念慮	1 (<1)	0	0	0	2 (2)
タバコ乱用	1 (<1)	0	0	0	0
神経系障害	115 (64)	106 (58)	90 (48)	196 (53)	42 (51)

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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
多発性硬化症再発	68 (38)	48 (26)	49 (26)	97 (26)	23 (28)
頭痛	32 (18)	33 (18)	28 (15)	61 (17)	8 (10)
錯感覚	19 (11)	15 (8)	16 (9)	31 (8)	4 (5)
感覚鈍麻	11 (6)	11 (6)	10 (5)	21 (6)	6 (7)
浮動性めまい	11 (6)	7 (4)	5 (3)	12 (3)	2 (2)
片頭痛	2 (1)	4 (2)	6 (3)	10 (3)	3 (4)
灼熱感	2 (1)	4 (2)	5 (3)	9 (2)	0
平衡障害	3 (2)	4 (2)	4 (2)	8 (2)	1 (1)
筋痙直	5 (3)	2 (1)	3 (2)	5 (1)	1 (1)
坐骨神経痛	3 (2)	3 (2)	2 (1)	5 (1)	2 (2)
異常感覚	4 (2)	2 (1)	2 (1)	4 (1)	0
レルミット徴候	3 (2)	0	4 (2)	4 (1)	0
多発性硬化症	2 (1)	3 (2)	1 (<1)	4 (1)	0
三叉神経痛	2 (1)	1 (<1)	3 (2)	4 (1)	0
手根管症候群	3 (2)	2 (1)	1 (<1)	3 (<1)	0
前兆を伴う片頭痛	1 (<1)	3 (2)	0	3 (<1)	0
感覚障害	1 (<1)	2 (1)	1 (<1)	3 (<1)	0
失神	0	1 (<1)	2 (1)	3 (<1)	1 (1)
ウートホフ現象	1 (<1)	2 (1)	1 (<1)	3 (<1)	1 (1)
不器用	1 (<1)	2 (1)	0	2 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
注意力障害	0	1 (<1)	1 (<1)	2 (<1)	2 (2)
構語障害	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
知覚過敏	1 (<1)	2 (1)	0	2 (<1)	1 (1)
感覚異常性大腿神経痛	0	1 (<1)	1 (<1)	2 (<1)	0
神経痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
後頭神経痛	1 (<1)	0	2 (1)	2 (<1)	0
振戦	4 (2)	2 (1)	0	2 (<1)	2 (2)
健忘	1 (<1)	1 (<1)	0	1 (<1)	0
自律神経失調	0	0	1 (<1)	1 (<1)	0
帯状感	0	0	1 (<1)	1 (<1)	0
良性頭蓋内圧亢進	0	0	1 (<1)	1 (<1)	0
認知障害	0	0	1 (<1)	1 (<1)	1 (1)
ジスキネジー	0	1 (<1)	0	1 (<1)	0
ジストニー	0	1 (<1)	0	1 (<1)	0
てんかん	1 (<1)	1 (<1)	0	1 (<1)	0
顔面不全麻痺	0	0	1 (<1)	1 (<1)	0
大発作痙攣	0	0	1 (<1)	1 (<1)	1 (1)
頭部動揺	0	0	1 (<1)	1 (<1)	0
不全片麻痺	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
反射亢進	3 (2)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
腰髄神経根障害	0	1 (<1)	0	1 (<1)	0
記憶障害	3 (2)	1 (<1)	0	1 (<1)	3 (4)
運動機能障害	0	0	1 (<1)	1 (<1)	0
神経圧迫	0	0	1 (<1)	1 (<1)	0
末梢性ニューロパチー	1 (<1)	0	1 (<1)	1 (<1)	0
眼振	1 (<1)	1 (<1)	0	1 (<1)	0
視神経炎	0	1 (<1)	0	1 (<1)	0
腓骨神経麻痺	0	1 (<1)	0	1 (<1)	0
睡眠の質低下	0	1 (<1)	0	1 (<1)	1 (1)
失神寸前の状態	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
神経根痛	0	1 (<1)	0	1 (<1)	0
下肢静止不能症候群	4 (2)	1 (<1)	0	1 (<1)	0
副鼻腔炎に伴う頭痛	2 (1)	0	1 (<1)	1 (<1)	0
傾眠	0	1 (<1)	0	1 (<1)	0
会話障害	0	1 (<1)	0	1 (<1)	0
緊張性頭痛	0	0	1 (<1)	1 (<1)	1 (1)
舌の麻痺	0	1 (<1)	0	1 (<1)	0
尺骨神経管症候群	0	1 (<1)	0	1 (<1)	0
視野欠損	0	1 (<1)	0	1 (<1)	0
失語症	0	0	0	0	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
中枢神経系病変	1 (<1)	0	0	0	0
脳血管発作	1 (<1)	0	0	0	0
頚腕症候群	1 (<1)	0	0	0	0
複雑部分発作	1 (<1)	0	0	0	0
痙攣	2 (1)	0	0	0	0
協調運動異常	1 (<1)	0	0	0	0
振動覚低下	1 (<1)	0	0	0	0
味覚異常	0	0	0	0	1 (1)
顔面痙攣	0	0	0	0	2 (2)
痙性歩行	1 (<1)	0	0	0	0
片側頭痛	2 (1)	0	0	0	0
過眠症	1 (<1)	0	0	0	0
筋緊張亢進	1 (<1)	0	0	0	0
仮面状顔貌	0	0	0	0	1 (1)
不随意性筋収縮	0	0	0	0	1 (1)
嗅覚錯誤	1 (<1)	0	0	0	0
部分発作	0	0	0	0	1 (1)
感覚消失	0	0	0	0	1 (1)
足根管症候群	0	0	0	0	1 (1)
第７脳神経麻痺	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
第６脳神経麻痺	0	0	0	0	1 (1)
眼障害	25 (14)	15 (8)	26 (14)	41 (11)	12 (14)
霧視	5 (3)	6 (3)	8 (4)	14 (4)	2 (2)
眼痛	7 (4)	4 (2)	5 (3)	9 (2)	4 (5)
結膜炎	1 (<1)	2 (1)	3 (2)	5 (1)	1 (1)
眼瞼痙攣	3 (2)	1 (<1)	1 (<1)	2 (<1)	0
アレルギー性結膜炎	0	0	2 (1)	2 (<1)	0
複視	4 (2)	0	2 (1)	2 (<1)	3 (4)
眼乾燥	2 (1)	0	2 (1)	2 (<1)	0
眼充血	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
眼の異常感	0	1 (<1)	0	1 (<1)	0
眼精疲労	1 (<1)	0	1 (<1)	1 (<1)	0
眼瞼炎	0	0	1 (<1)	1 (<1)	0
失明	0	1 (<1)	0	1 (<1)	0
白内障	0	0	1 (<1)	1 (<1)	0
霰粒腫	0	0	1 (<1)	1 (<1)	0
眼出血	0	0	1 (<1)	1 (<1)	0
眼瞼浮腫	0	0	1 (<1)	1 (<1)	0
眼瞼下垂	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
緑内障	0	0	1 (<1)	1 (<1)	0
眼球運動失調	0	1 (<1)	0	1 (<1)	0
眼筋麻痺	0	1 (<1)	0	1 (<1)	0
羞明	2 (1)	0	1 (<1)	1 (<1)	0
光視症	0	1 (<1)	0	1 (<1)	0
視力低下	4 (2)	0	1 (<1)	1 (<1)	1 (1)
視力障害	0	1 (<1)	0	1 (<1)	1 (1)
眼のアレルギー	0	0	0	0	1 (1)
眼刺激	1 (<1)	0	0	0	0
眼部腫脹	0	0	0	0	1 (1)
ホームズ・アディー瞳孔	1 (<1)	0	0	0	0
流涙増加	0	0	0	0	1 (1)
翼状片	1 (<1)	0	0	0	0
耳および迷路障害	19 (11)	13 (7)	9 (5)	22 (6)	12 (14)
回転性めまい	9 (5)	3 (2)	6 (3)	9 (2)	6 (7)
耳鳴	3 (2)	4 (2)	1 (<1)	5 (1)	2 (2)
乗物酔い	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
耳垢栓塞	0	1 (<1)	0	1 (<1)	0
難聴	2 (1)	1 (<1)	0	1 (<1)	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
耳閉	0	0	1 (<1)	1 (<1)	0
耳痛	2 (1)	1 (<1)	0	1 (<1)	0
耳そう痒症	0	1 (<1)	0	1 (<1)	0
外耳痛	0	1 (<1)	0	1 (<1)	0
聴力低下	2 (1)	0	1 (<1)	1 (<1)	1 (1)
頭位性回転性めまい	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
耳不快感	1 (<1)	0	0	0	2 (2)
耳管機能障害	0	0	0	0	1 (1)
中耳の炎症	1 (<1)	0	0	0	0
心臓障害	12 (7)	10 (5)	14 (8)	24 (7)	6 (7)
動悸	3 (2)	4 (2)	1 (<1)	5 (1)	2 (2)
第一度房室ブロック	0	3 (2)	0	3 (<1)	0
徐脈	1 (<1)	0	3 (2)	3 (<1)	0
心室性期外収縮	1 (<1)	0	3 (2)	3 (<1)	0
狭心症	0	1 (<1)	1 (<1)	2 (<1)	0
洞性徐脈	0	1 (<1)	1 (<1)	2 (<1)	0
頻脈	3 (2)	0	2 (1)	2 (<1)	1 (1)
心房細動	0	0	1 (<1)	1 (<1)	0
うっ血性心不全	0	0	1 (<1)	1 (<1)	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心筋症	0	0	1 (<1)	1 (<1)	0
伝導障害	1 (<1)	1 (<1)	0	1 (<1)	0
洞性頻脈	1 (<1)	0	1 (<1)	1 (<1)	0
上室性期外収縮	0	0	1 (<1)	1 (<1)	1 (1)
左脚ブロック	1 (<1)	0	0	0	1 (1)
右脚ブロック	0	0	0	0	1 (1)
期外収縮	1 (<1)	0	0	0	0
心筋虚血	1 (<1)	0	0	0	0
血管障害	24 (13)	90 (49)	76 (41)	166 (45)	8 (10)
潮紅	11 (6)	73 (40)	56 (30)	129 (35)	2 (2)
ほてり	4 (2)	14 (8)	10 (5)	24 (7)	2 (2)
高血圧	9 (5)	6 (3)	11 (6)	17 (5)	5 (6)
充血	0	0	3 (2)	3 (<1)	0
静脈瘤	0	1 (<1)	1 (<1)	2 (<1)	0
静脈不全	0	1 (<1)	1 (<1)	2 (<1)	0
動脈障害	0	1 (<1)	0	1 (<1)	0
深部静脈血栓症	0	0	1 (<1)	1 (<1)	0
血腫	2 (1)	0	1 (<1)	1 (<1)	0
低血圧	0	1 (<1)	0	1 (<1)	0

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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
末梢冷感	1 (<1)	1 (<1)	0	1 (<1)	0
呼吸器、胸郭および縦隔障害	31 (17)	34 (19)	32 (17)	66 (18)	9 (11)
咳嗽	11 (6)	8 (4)	12 (6)	20 (5)	2 (2)
口腔咽頭痛	7 (4)	10 (5)	9 (5)	19 (5)	3 (4)
鼻漏	0	5 (3)	1 (<1)	6 (2)	0
副鼻腔うっ血	2 (1)	0	5 (3)	5 (1)	0
鼻閉	2 (1)	3 (2)	1 (<1)	4 (1)	0
呼吸困難	0	1 (<1)	2 (1)	3 (<1)	2 (2)
咽喉刺激感	2 (1)	3 (2)	0	3 (<1)	0
喘息	2 (1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
咽頭紅斑	0	1 (<1)	1 (<1)	2 (<1)	0
湿性咳嗽	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
気道うっ血	3 (2)	1 (<1)	1 (<1)	2 (<1)	1 (1)
咽喉絞扼感	0	1 (<1)	1 (<1)	2 (<1)	0
喘鳴	0	2 (1)	0	2 (<1)	0
息詰まり感	0	1 (<1)	0	1 (<1)	0
鼻出血	2 (1)	1 (<1)	0	1 (<1)	0
鼻乾燥	0	0	1 (<1)	1 (<1)	0
口腔咽頭不快感	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
呼吸時疼痛	0	0	1 (<1)	1 (<1)	0
副鼻腔嚢胞	0	0	1 (<1)	1 (<1)	0
誤嚥性肺炎	0	1 (<1)	0	1 (<1)	0
ラ音	2 (1)	0	1 (<1)	1 (<1)	0
アレルギー性鼻炎	2 (1)	0	1 (<1)	1 (<1)	0
上気道うっ血	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
声帯の炎症	1 (<1)	0	1 (<1)	1 (<1)	0
息詰まり	1 (<1)	0	0	0	1 (1)
過換気	1 (<1)	0	0	0	0
鼻茸	1 (<1)	0	0	0	0
咽頭の炎症	1 (<1)	0	0	0	0
低音性連続性ラ音	1 (<1)	0	0	0	0
副鼻腔障害	1 (<1)	0	0	0	0
睡眠時無呼吸症候群	0	0	0	0	2 (2)
くしゃみ	0	0	0	0	1 (1)
扁桃障害	1 (<1)	0	0	0	0
上気道咳症候群	3 (2)	0	0	0	0
胃腸障害	73 (41)	100 (55)	93 (50)	193 (52)	18 (22)
下痢	27 (15)	32 (17)	32 (17)	64 (17)	5 (6)

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
悪心	16 (9)	21 (11)	28 (15)	49 (13)	4 (5)
上腹部痛	10 (6)	25 (14)	22 (12)	47 (13)	0
腹痛	9 (5)	16 (9)	11 (6)	27 (7)	1 (1)
嘔吐	8 (4)	13 (7)	14 (8)	27 (7)	2 (2)
消化不良	7 (4)	5 (3)	16 (9)	21 (6)	2 (2)
歯痛	2 (1)	3 (2)	10 (5)	13 (4)	1 (1)
便秘	7 (4)	7 (4)	5 (3)	12 (3)	3 (4)
胃腸障害	1 (<1)	4 (2)	8 (4)	12 (3)	1 (1)
腹部不快感	4 (2)	6 (3)	5 (3)	11 (3)	1 (1)
胃食道逆流性疾患	9 (5)	7 (4)	4 (2)	11 (3)	1 (1)
胃炎	0	4 (2)	5 (3)	9 (2)	1 (1)
腹部膨満	4 (2)	2 (1)	3 (2)	5 (1)	0
痔核	2 (1)	3 (2)	2 (1)	5 (1)	1 (1)
便失禁	0	2 (1)	2 (1)	4 (1)	0
鼓腸	5 (3)	4 (2)	0	4 (1)	0
齲歯	0	2 (1)	1 (<1)	3 (<1)	2 (2)
下腹部痛	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腹部圧痛	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
口内乾燥	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
嚥下障害	0	2 (1)	0	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
食中毒	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
排便回数増加	0	0	2 (1)	2 (<1)	0
胃障害	0	1 (<1)	1 (<1)	2 (<1)	0
歯肉炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
口の感覚鈍麻	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
歯周炎	1 (<1)	0	2 (1)	2 (<1)	0
腹部ヘルニア	0	1 (<1)	0	1 (<1)	0
腹部硬直	0	1 (<1)	0	1 (<1)	0
便通不規則	1 (<1)	0	1 (<1)	1 (<1)	0
クローン病	0	1 (<1)	0	1 (<1)	0
便意切迫	0	0	1 (<1)	1 (<1)	0
憩室穿孔	0	1 (<1)	0	1 (<1)	0
心窩部不快感	0	0	1 (<1)	1 (<1)	0
おくび	0	1 (<1)	0	1 (<1)	0
変色便	0	0	1 (<1)	1 (<1)	1 (1)
舌痛	0	1 (<1)	0	1 (<1)	0
裂孔ヘルニア	1 (<1)	0	1 (<1)	1 (<1)	0
胃酸過多	0	1 (<1)	0	1 (<1)	0
マロリー・ワイス症候群	0	1 (<1)	0	1 (<1)	0
膵脂肪腫症	0	1 (<1)	0	1 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膵機能不全	0	0	1 (<1)	1 (<1)	0
唾液管閉塞	0	0	1 (<1)	1 (<1)	0
流涎過多	0	1 (<1)	0	1 (<1)	0
口内炎	2 (1)	0	1 (<1)	1 (<1)	0
地図状舌	0	1 (<1)	0	1 (<1)	0
歯の障害	1 (<1)	1 (<1)	0	1 (<1)	0
歯の磨耗	0	1 (<1)	0	1 (<1)	0
埋伏歯	0	0	1 (<1)	1 (<1)	0
臍ヘルニア	0	0	1 (<1)	1 (<1)	0
裂肛	1 (<1)	0	0	0	0
アフタ性口内炎	1 (<1)	0	0	0	0
口唇のひび割れ	1 (<1)	0	0	0	0
結腸ポリープ	0	0	0	0	1 (1)
腸憩室	0	0	0	0	1 (1)
胃ポリープ	1 (<1)	0	0	0	0
出血性胃炎	0	0	0	0	1 (1)
胃腸出血	1 (<1)	0	0	0	0
消化器痛	1 (<1)	0	0	0	0
歯肉出血	0	0	0	0	1 (1)
歯肉紅斑	0	0	0	0	1 (1)

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
口唇乾燥	1 (<1)	0	0	0	0
口腔内潰瘍形成	1 (<1)	0	0	0	0
口の錯感覚	1 (<1)	0	0	0	0
肛門周囲痛	1 (<1)	0	0	0	0
逆流性食道炎	0	0	0	0	1 (1)
歯の脱落	1 (<1)	0	0	0	0
肝胆道系障害	3 (2)	3 (2)	7 (4)	10 (3)	1 (1)
肝障害	0	1 (<1)	4 (2)	5 (1)	0
脂肪肝	0	2 (1)	0	2 (<1)	0
胆管結石	0	0	1 (<1)	1 (<1)	0
胆石症	3 (2)	0	1 (<1)	1 (<1)	0
胆嚢浮腫	0	0	1 (<1)	1 (<1)	0
高ビリルビン血症	0	0	1 (<1)	1 (<1)	0
胆道ジスキネジー	0	0	0	0	1 (1)
皮膚および皮下組織障害	37 (21)	62 (34)	61 (33)	123 (33)	14 (17)
そう痒症	5 (3)	18 (10)	13 (7)	31 (8)	1 (1)
発疹	9 (5)	13 (7)	12 (6)	25 (7)	1 (1)
紅斑	3 (2)	6 (3)	18 (10)	24 (7)	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
多汗症	2 (1)	4 (2)	7 (4)	11 (3)	2 (2)
全身性そう痒症	0	5 (3)	3 (2)	8 (2)	1 (1)
蕁麻疹	2 (1)	3 (2)	4 (2)	7 (2)	1 (1)
アレルギー性皮膚炎	1 (<1)	4 (2)	1 (<1)	5 (1)	0
皮膚乾燥	3 (2)	3 (2)	2 (1)	5 (1)	0
寝汗	2 (1)	3 (2)	2 (1)	5 (1)	1 (1)
そう痒性皮疹	0	3 (2)	2 (1)	5 (1)	0
皮膚灼熱感	0	1 (<1)	3 (2)	4 (1)	0
ざ瘡	1 (<1)	2 (1)	1 (<1)	3 (<1)	2 (2)
全身紅斑	0	3 (2)	0	3 (<1)	0
紅斑性皮疹	0	1 (<1)	2 (1)	3 (<1)	0
全身性皮疹	0	2 (1)	1 (<1)	3 (<1)	0
酒さ	0	3 (2)	0	3 (<1)	0
脱毛症	4 (2)	0	2 (1)	2 (<1)	1 (1)
皮膚炎	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
湿疹	1 (<1)	1 (<1)	1 (<1)	2 (<1)	2 (2)
顔面感覚鈍麻	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
光線過敏性反応	0	0	2 (1)	2 (<1)	1 (1)
乾癬	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
斑状皮疹	1 (<1)	0	2 (1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
水疱	1 (<1)	1 (<1)	0	1 (<1)	0
ざ瘡様皮膚炎	0	1 (<1)	0	1 (<1)	0
接触性皮膚炎	1 (<1)	1 (<1)	0	1 (<1)	0
薬疹	0	0	1 (<1)	1 (<1)	0
斑状出血	0	0	1 (<1)	1 (<1)	0
紅色汗疹	0	1 (<1)	0	1 (<1)	0
過角化	0	0	1 (<1)	1 (<1)	0
嵌入爪	0	0	1 (<1)	1 (<1)	0
爪破損	1 (<1)	1 (<1)	0	1 (<1)	0
色素沈着障害	0	1 (<1)	0	1 (<1)	0
アレルギー性そう痒症	0	1 (<1)	0	1 (<1)	0
脂腺障害	0	0	1 (<1)	1 (<1)	0
皮膚変色	0	0	1 (<1)	1 (<1)	0
皮膚剥脱	1 (<1)	1 (<1)	0	1 (<1)	0
皮膚色素過剰	2 (1)	1 (<1)	0	1 (<1)	0
皮膚硬結	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
皮膚刺激	0	1 (<1)	0	1 (<1)	0
皮膚反応	0	1 (<1)	0	1 (<1)	0
皮膚潰瘍	0	0	1 (<1)	1 (<1)	0
皮膚熱感	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
毛細血管拡張症	0	1 (<1)	0	1 (<1)	0
一過性棘融解性皮膚症	0	0	1 (<1)	1 (<1)	0
血管浮腫	0	0	0	0	1 (1)
冷汗	1 (<1)	0	0	0	0
皮膚嚢腫	1 (<1)	0	0	0	0
アトピー性皮膚炎	1 (<1)	0	0	0	0
爪床障害	1 (<1)	0	0	0	0
点状出血	1 (<1)	0	0	0	0
ばら色粃糠疹	2 (1)	0	0	0	0
皮膚病変	1 (<1)	0	0	0	0
皮下結節	1 (<1)	0	0	0	0
顔面腫脹	0	0	0	0	1 (1)
裂毛	1 (<1)	0	0	0	0
筋骨格系および結合組織障害	73 (41)	70 (38)	78 (42)	148 (40)	32 (39)
背部痛	24 (13)	23 (13)	20 (11)	43 (12)	13 (16)
関節痛	23 (13)	17 (9)	17 (9)	34 (9)	6 (7)
四肢痛	13 (7)	19 (10)	15 (8)	34 (9)	5 (6)
筋痙縮	10 (6)	8 (4)	14 (8)	22 (6)	4 (5)
筋骨格痛	10 (6)	9 (5)	9 (5)	18 (5)	3 (4)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋力低下	9 (5)	6 (3)	5 (3)	11 (3)	2 (2)
頚部痛	6 (3)	6 (3)	4 (2)	10 (3)	2 (2)
筋肉痛	4 (2)	3 (2)	3 (2)	6 (2)	1 (1)
滑液包炎	1 (<1)	2 (1)	2 (1)	4 (1)	0
関節炎	0	0	3 (2)	3 (<1)	1 (1)
骨痛	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
関節腫脹	1 (<1)	2 (1)	1 (<1)	3 (<1)	0
筋緊張	1 (<1)	2 (1)	1 (<1)	3 (<1)	0
筋骨格系胸痛	2 (1)	2 (1)	1 (<1)	3 (<1)	0
筋骨格硬直	3 (2)	3 (2)	0	3 (<1)	3 (4)
重感	1 (<1)	2 (1)	1 (<1)	3 (<1)	0
滑液嚢腫	2 (1)	1 (<1)	2 (1)	3 (<1)	0
腱炎	3 (2)	1 (<1)	2 (1)	3 (<1)	0
側腹部痛	0	0	2 (1)	2 (<1)	1 (1)
椎間板障害	0	1 (<1)	1 (<1)	2 (<1)	0
関節硬直	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
筋攣縮	2 (1)	2 (1)	0	2 (<1)	1 (1)
変形性脊椎症	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腱鞘炎	1 (<1)	0	2 (1)	2 (<1)	0
尾骨痛	1 (<1)	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
肛径部痛	0	1 (<1)	0	1 (<1)	0
成長痛	0	0	1 (<1)	1 (<1)	1 (1)
椎間板圧迫	0	1 (<1)	0	1 (<1)	0
椎間板突出	0	1 (<1)	0	1 (<1)	0
筋拘縮	0	0	1 (<1)	1 (<1)	1 (1)
筋肉内出血	0	0	1 (<1)	1 (<1)	0
筋骨格不快感	1 (<1)	1 (<1)	0	1 (<1)	0
ミオキミア	0	0	1 (<1)	1 (<1)	0
筋炎	1 (<1)	0	1 (<1)	1 (<1)	0
四肢の結節	0	0	1 (<1)	1 (<1)	0
変形性関節症	2 (1)	1 (<1)	0	1 (<1)	0
骨端症	0	0	1 (<1)	1 (<1)	0
骨壊死	0	0	1 (<1)	1 (<1)	0
骨粗鬆症	0	1 (<1)	0	1 (<1)	0
関節周囲炎	1 (<1)	0	1 (<1)	1 (<1)	0
脊椎分離	0	1 (<1)	0	1 (<1)	0
腱障害	1 (<1)	1 (<1)	0	1 (<1)	0
外骨腫	0	0	0	0	1 (1)
線維筋痛	1 (<1)	0	0	0	0
四肢不快感	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
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3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
運動性低下	1 (<1)	0	0	0	0
筋肉疲労	1 (<1)	0	0	0	0
筋固縮	0	0	0	0	1 (1)
筋硬化症	1 (<1)	0	0	0	0
骨減少症	0	0	0	0	1 (1)
顎痛	2 (1)	0	0	0	0
足底筋膜炎	1 (<1)	0	0	0	0
関節リウマチ	1 (<1)	0	0	0	0
肩回旋筋腱板症候群	1 (<1)	0	0	0	0
腎および尿路障害	36 (20)	36 (20)	47 (25)	83 (22)	17 (20)
蛋白尿	16 (9)	13 (7)	23 (12)	36 (10)	6 (7)
血尿	6 (3)	5 (3)	12 (6)	17 (5)	1 (1)
ミクロアルブミン尿	2 (1)	6 (3)	10 (5)	16 (4)	2 (2)
排尿困難	1 (<1)	2 (1)	6 (3)	8 (2)	0
腎結石症	0	2 (1)	4 (2)	6 (2)	0
ケトン尿	3 (2)	2 (1)	3 (2)	5 (1)	0
頻尿	1 (<1)	2 (1)	3 (2)	5 (1)	0
尿意切迫	1 (<1)	2 (1)	2 (1)	4 (1)	3 (4)
排尿躊躇	2 (1)	1 (<1)	2 (1)	3 (<1)	1 (1)

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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尿失禁	3 (2)	2 (1)	1 (<1)	3 (<1)	3 (4)
糖尿	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
腎仙痛	0	0	2 (1)	2 (<1)	0
腎臓痛	1 (<1)	2 (1)	0	2 (<1)	0
切迫性尿失禁	0	0	2 (1)	2 (<1)	0
尿閉	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
アルブミン尿	0	1 (<1)	0	1 (<1)	0
膀胱機能障害	0	0	1 (<1)	1 (<1)	0
非感染性膀胱炎	0	0	1 (<1)	1 (<1)	0
グロブリン尿	0	1 (<1)	0	1 (<1)	0
神経因性膀胱	1 (<1)	0	1 (<1)	1 (<1)	0
腎嚢胞	0	1 (<1)	0	1 (<1)	0
慢性腎不全	0	0	1 (<1)	1 (<1)	0
有痛性排尿困難	0	1 (<1)	0	1 (<1)	0
尿臭異常	1 (<1)	0	1 (<1)	1 (<1)	0
尿路結石	1 (<1)	0	0	0	0
高血圧性腎症	0	0	0	0	1 (1)
失禁	0	0	0	0	1 (1)
夜間頻尿	1 (<1)	0	0	0	1 (1)
尿路痛	1 (<1)	0	0	0	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
妊娠、産褥および周産期の状態	1 (<1)	0	0	0	0
自然流産	1 (<1)	0	0	0	0
生殖系および乳房障害	14 (8)	14 (8)	16 (9)	30 (8)	5 (6)
不正子宮出血	0	4 (2)	2 (1)	6 (2)	1 (1)
月経困難症	0	2 (1)	2 (1)	4 (1)	0
勃起不全	3 (2)	1 (<1)	2 (1)	3 (<1)	0
乳房痛	0	0	2 (1)	2 (<1)	0
骨盤痛	0	0	2 (1)	2 (<1)	0
乳房不快感	0	1 (<1)	0	1 (<1)	0
乳房腫瘤	1 (<1)	1 (<1)	0	1 (<1)	0
射精障害	0	1 (<1)	0	1 (<1)	0
子宮内膜増殖症	0	1 (<1)	0	1 (<1)	0
線維嚢胞性乳腺疾患	0	0	1 (<1)	1 (<1)	0
閉経期症状	0	1 (<1)	0	1 (<1)	0
月経過多	1 (<1)	0	1 (<1)	1 (<1)	0
月経障害	0	0	1 (<1)	1 (<1)	0
不規則月経	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
卵巣嚢胞	0	1 (<1)	0	1 (<1)	1 (1)
頻発月経	0	1 (<1)	0	1 (<1)	0

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
閉経後出血	1 (<1)	0	1 (<1)	1 (<1)	0
前立腺炎	0	1 (<1)	0	1 (<1)	0
前立腺腫大	0	0	1 (<1)	1 (<1)	1 (1)
子宮出血	0	0	1 (<1)	1 (<1)	0
子宮ポリープ	1 (<1)	1 (<1)	0	1 (<1)	0
子宮脱	0	1 (<1)	0	1 (<1)	0
無月経	2 (1)	0	0	0	1 (1)
良性前立腺肥大症	1 (<1)	0	0	0	0
乳房硬結	1 (<1)	0	0	0	0
子宮頚管ポリープ	0	0	0	0	1 (1)
卵巣嚢胞破裂	1 (<1)	0	0	0	0
精巣痛	1 (<1)	0	0	0	0
子宮頚部びらん	1 (<1)	0	0	0	0
膣出血	1 (<1)	0	0	0	0
先天性、家族性および遺伝性障害	0	0	1 (<1)	1 (<1)	0
陰嚢水瘤	0	0	1 (<1)	1 (<1)	0
一般・全身障害および投与部位の状態	52 (29)	55 (30)	63 (34)	118 (32)	28 (34)

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
疲労	20 (11)	32 (17)	23 (12)	55 (15)	7 (8)
無力症	5 (3)	8 (4)	4 (2)	12 (3)	3 (4)
インフルエンザ様疾患	5 (3)	5 (3)	7 (4)	12 (3)	0
末梢性浮腫	7 (4)	4 (2)	7 (4)	11 (3)	2 (2)
疼痛	1 (<1)	7 (4)	4 (2)	11 (3)	1 (1)
胸痛	6 (3)	5 (3)	5 (3)	10 (3)	0
熱感	2 (1)	2 (1)	8 (4)	10 (3)	1 (1)
歩行障害	5 (3)	5 (3)	3 (2)	8 (2)	0
発熱	5 (3)	3 (2)	5 (3)	8 (2)	5 (6)
非心臓性胸痛	1 (<1)	1 (<1)	4 (2)	5 (1)	0
易刺激性	3 (2)	4 (2)	0	4 (1)	1 (1)
胸部不快感	0	2 (1)	0	2 (<1)	1 (1)
悪寒	1 (<1)	0	2 (1)	2 (<1)	2 (2)
顔面痛	2 (1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
高熱	0	1 (<1)	1 (<1)	2 (<1)	0
倦怠感	0	1 (<1)	1 (<1)	2 (<1)	2 (2)
浮腫	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
嚢胞	0	0	1 (<1)	1 (<1)	0
医療機器不具合	0	1 (<1)	0	1 (<1)	0
不快感	0	0	1 (<1)	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
異常感	0	0	1 (<1)	1 (<1)	1 (1)
全身性浮腫	0	1 (<1)	0	1 (<1)	0
重力性浮腫	0	0	1 (<1)	1 (<1)	0
閉塞性ヘルニア	0	0	1 (<1)	1 (<1)	0
注入部位血腫	0	1 (<1)	0	1 (<1)	0
腫瘤	0	1 (<1)	0	1 (<1)	0
粘膜乾燥	0	1 (<1)	0	1 (<1)	0
温度変化不耐症	0	1 (<1)	0	1 (<1)	0
圧痛	0	0	1 (<1)	1 (<1)	0
全身症状	1 (<1)	0	0	0	0
注射直後反応	0	0	0	0	1 (1)
注射部位紅斑	0	0	0	0	7 (8)
注射部位硬結	0	0	0	0	1 (1)
注射部位腫瘤	0	0	0	0	2 (2)
注射部位結節	0	0	0	0	1 (1)
注射部位疼痛	0	0	0	0	6 (7)
注射部位そう痒感	0	0	0	0	4 (5)
注射部位発疹	0	0	0	0	1 (1)
注射部位反応	0	0	0	0	1 (1)
注射部位腫脹	0	0	0	0	1 (1)

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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
注射部位蕁麻疹	0	0	0	0	3 (4)
注射部位熱感	0	0	0	0	1 (1)
口渇	1 (<1)	0	0	0	0
臨床検査	59 (33)	52 (28)	56 (30)	108 (29)	30 (36)
アラニン・アミノトランスフェラーゼ増加	8 (4)	15 (8)	10 (5)	25 (7)	5 (6)
尿中アルブミン陽性	8 (4)	8 (4)	9 (5)	17 (5)	7 (8)
尿中蛋白陽性	10 (6)	9 (5)	7 (4)	16 (4)	3 (4)
アスパラギン酸アミノトランスフェラーゼ増加	6 (3)	9 (5)	5 (3)	14 (4)	3 (4)
血中ブドウ糖増加	4 (2)	7 (4)	5 (3)	12 (3)	2 (2)
γ－グルタミルトランスフェラーゼ増加	8 (4)	9 (5)	3 (2)	12 (3)	2 (2)
尿中血陽性	3 (2)	4 (2)	6 (3)	10 (3)	0
尿中β２ミクログロブリン増加	1 (<1)	2 (1)	6 (3)	8 (2)	0
血中副甲状腺ホルモン増加	0	3 (2)	5 (3)	8 (2)	0
尿中白血球陽性	3 (2)	3 (2)	3 (2)	6 (2)	2 (2)
尿中ブドウ糖陽性	1 (<1)	3 (2)	2 (1)	5 (1)	1 (1)
肝酵素上昇	5 (3)	5 (3)	0	5 (1)	2 (2)
β２ミクログロブリン増加	0	2 (1)	2 (1)	4 (1)	0
血中トリグリセリド増加	3 (2)	3 (2)	1 (<1)	4 (1)	3 (4)
心電図ＱＴ延長	3 (2)	0	4 (2)	4 (1)	1 (1)

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
尿中赤血球陽性	4 (2)	2 (1)	2 (1)	4 (1)	0
尿中ケトン体陽性	1 (<1)	1 (<1)	3 (2)	4 (1)	1 (1)
体重減少	0	1 (<1)	3 (2)	4 (1)	1 (1)
体重増加	4 (2)	2 (1)	2 (1)	4 (1)	4 (5)
血中アルカリホスファターゼ増加	0	3 (2)	0	3 (<1)	0
血中乳酸脱水素酵素増加	0	3 (2)	0	3 (<1)	0
血中カリウム増加	0	3 (2)	0	3 (<1)	0
好中球数増加	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
白血球数増加	1 (<1)	2 (1)	1 (<1)	3 (<1)	1 (1)
血中クレアチニン増加	2 (1)	2 (1)	0	2 (<1)	2 (2)
血圧上昇	0	1 (<1)	1 (<1)	2 (<1)	1 (1)
血中尿酸増加	2 (1)	0	2 (1)	2 (<1)	0
体温上昇	0	1 (<1)	1 (<1)	2 (<1)	0
尿中結晶陽性	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
ヘモグロビン減少	0	0	2 (1)	2 (<1)	0
肝機能検査異常	0	1 (<1)	1 (<1)	2 (<1)	0
リンパ球数減少	1 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
リンパ球数増加	0	1 (<1)	1 (<1)	2 (<1)	0
ビタミンD減少	2 (1)	0	2 (1)	2 (<1)	1 (1)
白血球数減少	0	0	2 (1)	2 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血中カルシウム減少	0	1 (<1)	0	1 (<1)	0
血中コレステロール増加	0	1 (<1)	0	1 (<1)	0
血中クレアチン増加	0	1 (<1)	0	1 (<1)	0
血中クレアチニン異常	0	1 (<1)	0	1 (<1)	0
血中葉酸減少	0	1 (<1)	0	1 (<1)	0
血中ケトン体増加	0	1 (<1)	0	1 (<1)	1 (1)
血中副甲状腺ホルモン異常	0	0	1 (<1)	1 (<1)	0
血中カリウム減少	0	0	1 (<1)	1 (<1)	0
拡張期血圧上昇	0	0	1 (<1)	1 (<1)	0
血中ナトリウム増加	0	1 (<1)	0	1 (<1)	0
血中甲状腺刺激ホルモン増加	0	0	1 (<1)	1 (<1)	0
血中尿素増加	1 (<1)	0	1 (<1)	1 (<1)	0
心電図異常	0	0	1 (<1)	1 (<1)	0
心電図Ｔ波逆転	0	1 (<1)	0	1 (<1)	0
好酸球数異常	1 (<1)	0	1 (<1)	1 (<1)	0
好酸球数増加	1 (<1)	1 (<1)	0	1 (<1)	0
ヘマトクリット減少	0	0	1 (<1)	1 (<1)	0
心拍数減少	0	0	1 (<1)	1 (<1)	0
低比重リポ蛋白増加	0	1 (<1)	0	1 (<1)	0
リンパ球形態異常	0	1 (<1)	0	1 (<1)	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
血小板数増加	1 (<1)	0	1 (<1)	1 (<1)	0
赤血球数減少	0	0	1 (<1)	1 (<1)	0
子宮頚部スミア異常	0	0	1 (<1)	1 (<1)	0
尿円柱	0	0	1 (<1)	1 (<1)	0
ビタミンＢ１２減少	1 (<1)	1 (<1)	0	1 (<1)	0
細菌検査	1 (<1)	0	0	0	0
血中ビリルビン増加	3 (2)	0	0	0	0
血中カルシウム増加	0	0	0	0	1 (1)
血中クレアチン異常	1 (<1)	0	0	0	0
血中ブドウ糖減少	1 (<1)	0	0	0	0
血中鉄減少	1 (<1)	0	0	0	0
血中副甲状腺ホルモン減少	1 (<1)	0	0	0	0
血圧低下	1 (<1)	0	0	0	0
中枢神経系機能検査異常	1 (<1)	0	0	0	0
心電図ＰＲ延長	1 (<1)	0	0	0	0
心電図ＱＲＳ群延長	1 (<1)	0	0	0	0
心電図Ｔ波振幅減少	1 (<1)	0	0	0	1 (1)
全血球数異常	1 (<1)	0	0	0	0

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Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
握力低下	0	0	0	0	1 (1)
心音異常	1 (<1)	0	0	0	0
好中球百分率異常	1 (<1)	0	0	0	0
便潜血陽性	0	0	0	0	1 (1)
血小板数減少	1 (<1)	0	0	0	0
ＱＲＳ軸異常	1 (<1)	0	0	0	0
トランスアミナーゼ上昇	1 (<1)	0	0	0	0
尿細胞診異常	1 (<1)	0	0	0	0
傷害、中毒および処置合併症	41 (23)	33 (18)	40 (22)	73 (20)	14 (17)
挫傷	5 (3)	10 (5)	9 (5)	19 (5)	1 (1)
転倒	5 (3)	7 (4)	8 (4)	15 (4)	3 (4)
肉離れ	3 (2)	3 (2)	5 (3)	8 (2)	0
皮膚裂傷	1 (<1)	3 (2)	3 (2)	6 (2)	0
関節捻挫	5 (3)	2 (1)	3 (2)	5 (1)	1 (1)
処置による疼痛	1 (<1)	3 (2)	2 (1)	5 (1)	0
擦過傷	1 (<1)	1 (<1)	3 (2)	4 (1)	1 (1)
節足動物咬傷	2 (1)	2 (1)	1 (<1)	3 (<1)	1 (1)
靭帯断裂	1 (<1)	1 (<1)	2 (1)	3 (<1)	0
四肢損傷	1 (<1)	0	3 (2)	3 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
半月板障害	1 (<1)	3 (2)	0	3 (<1)	0
サンバーン	1 (<1)	1 (<1)	2 (1)	3 (<1)	1 (1)
熱傷	2 (1)	1 (<1)	2 (1)	3 (<1)	0
むち打ち損傷	0	3 (2)	0	3 (<1)	2 (2)
足骨折	2 (1)	0	2 (1)	2 (<1)	0
関節損傷	2 (1)	0	2 (1)	2 (<1)	0
橈骨骨折	1 (<1)	0	2 (1)	2 (<1)	1 (1)
交通事故	1 (<1)	1 (<1)	1 (<1)	2 (<1)	3 (4)
歯牙破折	1 (<1)	1 (<1)	1 (<1)	2 (<1)	0
足関節部骨折	0	0	1 (<1)	1 (<1)	0
節足動物刺傷	1 (<1)	1 (<1)	0	1 (<1)	0
上顆炎	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
眼瞼損傷	0	1 (<1)	0	1 (<1)	0
顔面骨骨折	0	1 (<1)	0	1 (<1)	0
瘢痕ヘルニア	0	1 (<1)	0	1 (<1)	0
閉塞性瘢痕ヘルニア	0	0	1 (<1)	1 (<1)	0
損傷	0	0	1 (<1)	1 (<1)	0
靭帯損傷	1 (<1)	0	1 (<1)	1 (<1)	0
下肢骨折	0	0	1 (<1)	1 (<1)	0
頚部損傷	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
処置後出血	1 (<1)	1 (<1)	0	1 (<1)	0
処置による悪心	1 (<1)	1 (<1)	0	1 (<1)	0
処置による嘔吐	0	1 (<1)	0	1 (<1)	0
軟部組織損傷	0	1 (<1)	0	1 (<1)	0
脊椎圧迫骨折	0	1 (<1)	0	1 (<1)	0
ワクチン接種合併症	1 (<1)	0	1 (<1)	1 (<1)	0
動物咬傷	1 (<1)	0	0	0	0
気圧性中耳炎	0	0	0	0	1 (1)
第２度熱傷	1 (<1)	0	0	0	0
脳振盪	0	0	0	0	1 (1)
眼外傷	1 (<1)	0	0	0	0
前腕骨折	0	0	0	0	1 (1)
眼内異物	1 (<1)	0	0	0	0
手骨折	0	0	0	0	1 (1)
頭部損傷	1 (<1)	0	0	0	0
口唇損傷	0	0	0	0	1 (1)
反復性挫傷	1 (<1)	0	0	0	0
骨格損傷	3 (2)	0	0	0	0
腱断裂	0	0	0	0	1 (1)
脛骨骨折	2 (1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Incidence of adverse events by system organ class and preferred term - by body weight quartiles:
Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
歯の完全脱臼	1 (<1)	0	0	0	0
外傷性血腫	0	0	0	0	1 (1)
上肢骨折	1 (<1)	0	0	0	0
第７神経損傷	0	0	0	0	1 (1)
創傷	2 (1)	0	0	0	0
手首関節骨折	1 (<1)	0	0	0	0
外科および内科処置	3 (2)	3 (2)	1 (<1)	4 (1)	2 (2)
抜歯	1 (<1)	2 (1)	0	2 (<1)	1 (1)
ヘルニア修復	0	1 (<1)	0	1 (<1)	0
静脈ステント挿入	0	0	1 (<1)	1 (<1)	0
嚢胞ドレナージ	1 (<1)	0	0	0	0
不妊手術	0	0	0	0	1 (1)
鼻甲介切除	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-WGTQ-A.SAS DATE: 02DEC2015

Table 282: Incidence of Serious Adverse Events by System Organ Class and Preferred Term - by Body Weight Quartiles: Studies 109MS301 and 109MS302

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	176 (100)	216 (100)	193 (100)	409 (100)	106 (100)
Number of subjects with an event	54 (31)	48 (22)	28 (15)	76 (19)	19 (18)
感染症および寄生虫症	4 (2)	5 (2)	3 (2)	8 (2)	1 (<1)
蜂巣炎	0	1 (<1)	1 (<1)	2 (<1)	0
胃腸炎	0	2 (<1)	0	2 (<1)	0
ダグラス窩膿瘍	0	0	1 (<1)	1 (<1)	0
ウイルス性胃腸炎	0	0	1 (<1)	1 (<1)	0
ウイルス感染後疲労症候群	0	1 (<1)	0	1 (<1)	0
急性腎盂腎炎	0	0	1 (<1)	1 (<1)	0
ウイルス感染	0	1 (<1)	0	1 (<1)	0
虫垂炎	0	0	0	0	1 (<1)
Ｈ１Ｎ１インフルエンザ	1 (<1)	0	0	0	0
鼻咽頭炎	1 (<1)	0	0	0	0
敗血症	1 (<1)	0	0	0	0
消化器結核	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	2 (1)	0	0	0	1 (<1)
乳癌	1 (<1)	0	0	0	0
子宮内膜癌	0	0	0	0	1 (<1)
子宮平滑筋腫	1 (<1)	0	0	0	0
血液およびリンパ系障害	1 (<1)	0	0	0	0
貧血	1 (<1)	0	0	0	0
免疫系障害	0	0	0	0	1 (<1)
アナフィラキシー反応	0	0	0	0	1 (<1)
内分泌障害	0	1 (<1)	1 (<1)	2 (<1)	0
甲状腺腫	0	1 (<1)	1 (<1)	2 (<1)	0
代謝および栄養障害	0	0	1 (<1)	1 (<1)	0
脱水	0	0	1 (<1)	1 (<1)	0
精神障害	1 (<1)	2 (<1)	1 (<1)	3 (<1)	0
抑うつ気分を伴う適応障害	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
双極１型障害	0	1 (<1)	0	1 (<1)	0
うつ病	0	0	1 (<1)	1 (<1)	0
自殺念慮	0	1 (<1)	0	1 (<1)	0
不安	1 (<1)	0	0	0	0
神経系障害	46 (26)	30 (14)	18 (9)	48 (12)	13 (12)
多発性硬化症再発	45 (26)	30 (14)	17 (9)	47 (11)	12 (11)
構語障害	0	0	1 (<1)	1 (<1)	0
神経学的症状	0	0	1 (<1)	1 (<1)	0
一過性脳虚血発作	0	1 (<1)	0	1 (<1)	0
失語症	0	0	0	0	1 (<1)
痙攣	1 (<1)	0	0	0	0
大発作痙攣	1 (<1)	0	0	0	0
意識消失	0	0	0	0	1 (<1)
片頭痛	2 (1)	0	0	0	0
耳および迷路障害	0	0	1 (<1)	1 (<1)	1 (<1)
頭位性回転性めまい	0	0	1 (<1)	1 (<1)	0
前庭性運動失調	0	0	0	0	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
心臓障害	0	0	0	0	1 (<1)
心筋炎	0	0	0	0	1 (<1)
血管障害	1 (<1)	0	0	0	0
末梢性虚血	1 (<1)	0	0	0	0
呼吸器、胸郭および縦隔障害	0	1 (<1)	0	1 (<1)	0
胸水	0	1 (<1)	0	1 (<1)	0
胃腸障害	2 (1)	2 (<1)	4 (2)	6 (1)	0
胃炎	0	0	2 (1)	2 (<1)	0
嘔吐	1 (<1)	2 (<1)	0	2 (<1)	0
腹痛	0	1 (<1)	0	1 (<1)	0
下腹部痛	0	0	1 (<1)	1 (<1)	0
十二指腸炎	0	0	1 (<1)	1 (<1)	0
悪心	1 (<1)	1 (<1)	0	1 (<1)	0
腹膜出血	1 (<1)	0	0	0	0
皮膚および皮下組織障害	0	1 (<1)	0	1 (<1)	0
スティーブンス・ジョンソン症候群	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋骨格系および結合組織障害	0	2 (<1)	0	2 (<1)	0
関節痛	0	1 (<1)	0	1 (<1)	0
背部痛	0	1 (<1)	0	1 (<1)	0
腎および尿路障害	0	0	2 (1)	2 (<1)	0
膀胱穿孔	0	0	1 (<1)	1 (<1)	0
尿失禁	0	0	1 (<1)	1 (<1)	0
妊娠、産褥および周産期の状態	2 (1)	0	0	0	0
自然流産	1 (<1)	0	0	0	0
妊娠浮腫	1 (<1)	0	0	0	0
生殖系および乳房障害	2 (1)	3 (1)	0	3 (<1)	1 (<1)
月経過多	0	1 (<1)	0	1 (<1)	0
卵巣嚢胞	1 (<1)	1 (<1)	0	1 (<1)	0
卵巣嚢胞破裂	0	1 (<1)	0	1 (<1)	0
月経障害	1 (<1)	0	0	0	0
子宮出血	0	0	0	0	1 (<1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
一般・全身障害および投与部位の状態	0	1 (<1)	2 (1)	3 (<1)	1 (<1)
発熱	0	1 (<1)	1 (<1)	2 (<1)	0
無力症	0	0	1 (<1)	1 (<1)	0
末梢性浮腫	0	0	0	0	1 (<1)
臨床検査	0	1 (<1)	1 (<1)	2 (<1)	0
尿中β２ミクログロブリン増加	0	0	1 (<1)	1 (<1)	0
結腸内視鏡検査	0	1 (<1)	0	1 (<1)	0
傷害、中毒および処置合併症	0	4 (2)	2 (1)	6 (1)	1 (<1)
大腿骨骨折	0	1 (<1)	1 (<1)	2 (<1)	1 (<1)
足関節部骨折	0	0	1 (<1)	1 (<1)	0
転倒	0	1 (<1)	0	1 (<1)	0
足骨折	0	1 (<1)	0	1 (<1)	0
半月板障害	0	1 (<1)	0	1 (<1)	0
術後発熱	0	1 (<1)	0	1 (<1)	0
処置による低血圧	0	1 (<1)	0	1 (<1)	0
交通事故	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(<=Q1)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
外科および内科処置	0	2 (<1)	0	2 (<1)	0
女性不妊手術	0	1 (<1)	0	1 (<1)	0
治療食	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	194 (100)	192 (100)	191 (100)	383 (100)	84 (100)
Number of subjects with an event	44 (23)	42 (22)	32 (17)	74 (19)	12 (14)
感染症および寄生虫症	3 (2)	6 (3)	3 (2)	9 (2)	0
胃腸炎	0	2 (1)	1 (<1)	3 (<1)	0
副鼻腔炎	0	1 (<1)	1 (<1)	2 (<1)	0
ウイルス感染	0	1 (<1)	1 (<1)	2 (<1)	0
虫垂炎	0	1 (<1)	0	1 (<1)	0
骨盤内炎症性疾患	1 (<1)	0	1 (<1)	1 (<1)	0
肺炎	0	1 (<1)	0	1 (<1)	0
感染性下痢	1 (<1)	0	0	0	0
細菌性心内膜炎	1 (<1)	0	0	0	0
ライター症候群	1 (<1)	0	0	0	0
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	0	1 (<1)	1 (<1)	2 (<1)	2 (2)
肺の良性新生物	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
子宮平滑筋腫	0	0	1 (<1)	1 (<1)	1 (1)
子宮頚部癌	0	0	0	0	1 (1)
血液およびリンパ系障害	1 (<1)	0	0	0	0
小球性貧血	1 (<1)	0	0	0	0
免疫系障害	0	1 (<1)	0	1 (<1)	1 (1)
過敏症	0	1 (<1)	0	1 (<1)	0
アナフィラキシー反応	0	0	0	0	1 (1)
代謝および栄養障害	1 (<1)	0	0	0	0
糖尿病性ケトアシドーシス	1 (<1)	0	0	0	0
精神障害	2 (1)	1 (<1)	1 (<1)	2 (<1)	0
躁病	0	1 (<1)	0	1 (<1)	0
自殺企図	0	0	1 (<1)	1 (<1)	0
うつ病	2 (1)	0	0	0	0
神経系障害	32 (16)	25 (13)	22 (12)	47 (12)	8 (10)
多発性硬化症再発	30 (15)	23 (12)	19 (10)	42 (11)	8 (10)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
頭痛	0	0	2 (1)	2 (<1)	0
意識変容状態	0	0	1 (<1)	1 (<1)	0
舌咽神経痛	0	1 (<1)	0	1 (<1)	0
虚血性脳卒中	0	0	1 (<1)	1 (<1)	0
多発性硬化症	0	0	1 (<1)	1 (<1)	0
神経学的症状	0	1 (<1)	0	1 (<1)	0
部分発作	0	1 (<1)	0	1 (<1)	0
下肢静止不能症候群	0	0	1 (<1)	1 (<1)	0
一過性全健忘	0	0	1 (<1)	1 (<1)	0
第７脳神経麻痺	0	1 (<1)	0	1 (<1)	0
痙攣	1 (<1)	0	0	0	0
脳症	1 (<1)	0	0	0	0
大発作痙攣	1 (<1)	0	0	0	0
意識消失	1 (<1)	0	0	0	0
血管障害	0	1 (<1)	1 (<1)	2 (<1)	0
潮紅	0	1 (<1)	1 (<1)	2 (<1)	0
胃腸障害	0	1 (<1)	3 (2)	4 (1)	0
胃炎	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
胃腸障害	0	1 (<1)	0	1 (<1)	0
胃腸出血	0	0	1 (<1)	1 (<1)	0
嘔吐	0	0	1 (<1)	1 (<1)	0
肝胆道系障害	0	2 (1)	0	2 (<1)	0
胆石症	0	1 (<1)	0	1 (<1)	0
胆汁うっ滞性肝炎	0	1 (<1)	0	1 (<1)	0
皮膚および皮下組織障害	0	0	1 (<1)	1 (<1)	0
そう痒症	0	0	1 (<1)	1 (<1)	0
筋骨格系および結合組織障害	1 (<1)	2 (1)	2 (1)	4 (1)	0
背部痛	0	1 (<1)	0	1 (<1)	0
変形性関節症	0	0	1 (<1)	1 (<1)	0
シェーグレン症候群	0	1 (<1)	0	1 (<1)	0
変形性脊椎症	0	0	1 (<1)	1 (<1)	0
多発性関節炎	1 (<1)	0	0	0	0
腎および尿路障害	2 (1)	1 (<1)	0	1 (<1)	0
尿管瘤	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
膀胱憩室	1 (<1)	0	0	0	0
腎下垂症	1 (<1)	0	0	0	0
生殖系および乳房障害	3 (2)	1 (<1)	2 (1)	3 (<1)	1 (1)
子宮内膜症	0	1 (<1)	0	1 (<1)	0
不正子宮出血	0	0	1 (<1)	1 (<1)	1 (1)
卵巣嚢胞	0	0	1 (<1)	1 (<1)	0
バルトリン嚢腫	1 (<1)	0	0	0	0
骨盤痛	1 (<1)	0	0	0	0
子宮出血	1 (<1)	0	0	0	0
一般・全身障害および投与部位の状態	2 (1)	0	1 (<1)	1 (<1)	0
発熱	0	0	1 (<1)	1 (<1)	0
インフルエンザ様疾患	1 (<1)	0	0	0	0
骨盤腔内腫瘤	1 (<1)	0	0	0	0
臨床検査	1 (<1)	0	3 (2)	3 (<1)	0
アレルギー検査	0	0	1 (<1)	1 (<1)	0
検査	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q1 - median)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
医学的観察	0	0	1 (<1)	1 (<1)	0
肝酵素上昇	1 (<1)	0	0	0	0
傷害、中毒および処置合併症	3 (2)	2 (1)	1 (<1)	3 (<1)	0
交通事故	0	1 (<1)	0	1 (<1)	0
外傷性脳損傷	0	1 (<1)	0	1 (<1)	0
外傷性血腫	0	1 (<1)	0	1 (<1)	0
手首関節骨折	0	0	1 (<1)	1 (<1)	0
眼外傷	1 (<1)	0	0	0	0
大腿骨頚部骨折	1 (<1)	0	0	0	0
手骨折	1 (<1)	0	0	0	0
外科および内科処置	0	2 (1)	0	2 (<1)	0
乳房腫瘤摘除	0	1 (<1)	0	1 (<1)	0
子宮摘出	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	214 (100)	175 (100)	187 (100)	362 (100)	78 (100)
Number of subjects with an event	36 (17)	21 (12)	27 (14)	48 (13)	20 (26)
感染症および寄生虫症	1 (<1)	3 (2)	4 (2)	7 (2)	3 (4)
胃腸炎	0	2 (1)	1 (<1)	3 (<1)	0
蜂巣炎	0	1 (<1)	0	1 (<1)	0
Ｈ１Ｎ１インフルエンザ	0	0	1 (<1)	1 (<1)	0
インフルエンザ	0	0	1 (<1)	1 (<1)	0
扁桃周囲膿瘍	0	0	1 (<1)	1 (<1)	0
肺炎	1 (<1)	0	0	0	2 (3)
膿胸	0	0	0	0	1 (1)
ウイルス感染	0	0	0	0	1 (1)
良性、悪性および詳細不明の新生物（嚢胞およびポリープを含む）	2 (<1)	1 (<1)	1 (<1)	2 (<1)	1 (1)
乳癌	0	0	1 (<1)	1 (<1)	0
子宮平滑筋腫	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
乳房新生物	1 (<1)	0	0	0	0
血管腫	1 (<1)	0	0	0	0
転移性甲状腺癌	0	0	0	0	1 (1)
免疫系障害	0	0	0	0	1 (1)
過敏症	0	0	0	0	1 (1)
内分泌障害	0	0	1 (<1)	1 (<1)	0
間脳性内分泌障害	0	0	1 (<1)	1 (<1)	0
代謝および栄養障害	0	0	1 (<1)	1 (<1)	0
低血糖症	0	0	1 (<1)	1 (<1)	0
精神障害	0	2 (1)	0	2 (<1)	3 (4)
うつ病	0	1 (<1)	0	1 (<1)	1 (1)
全般性不安障害	0	1 (<1)	0	1 (<1)	0
自己愛性人格障害	0	1 (<1)	0	1 (<1)	0
自殺既遂	0	0	0	0	1 (1)
自殺企図	0	0	0	0	1 (1)

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
神経系障害	24 (11)	12 (7)	16 (9)	28 (8)	13 (17)
多発性硬化症再発	23 (11)	12 (7)	14 (7)	26 (7)	12 (15)
大発作痙攣	0	0	1 (<1)	1 (<1)	0
片頭痛	0	0	1 (<1)	1 (<1)	0
横静脈洞血栓症	0	0	1 (<1)	1 (<1)	0
脳血管障害	0	0	0	0	1 (1)
てんかん	1 (<1)	0	0	0	0
多発性硬化症	1 (<1)	0	0	0	0
眼障害	1 (<1)	0	0	0	0
眼痛	1 (<1)	0	0	0	0
心臓障害	0	0	2 (1)	2 (<1)	0
急性冠動脈症候群	0	0	1 (<1)	1 (<1)	0
心不全	0	0	1 (<1)	1 (<1)	0
血管障害	0	0	0	0	1 (1)
深部静脈血栓症	0	0	0	0	1 (1)
胃腸障害	2 (<1)	2 (1)	1 (<1)	3 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
便秘	0	1 (<1)	0	1 (<1)	0
裂孔ヘルニア	0	1 (<1)	0	1 (<1)	0
腸閉塞	0	0	1 (<1)	1 (<1)	0
大腸炎	1 (<1)	0	0	0	0
潰瘍性大腸炎	1 (<1)	0	0	0	0
急性膵炎	1 (<1)	0	0	0	0
肝胆道系障害	0	0	0	0	1 (1)
胆石症	0	0	0	0	1 (1)
	0	1 (<1)	0	1 (<1)	0
腎および尿路障害					
膀胱機能障害	0	1 (<1)	0	1 (<1)	0
生殖系および乳房障害	1 (<1)	0	1 (<1)	1 (<1)	0
腺筋症	0	0	1 (<1)	1 (<1)	0
卵巣嚢胞	0	0	1 (<1)	1 (<1)	0
子宮出血	1 (<1)	0	0	0	0
一般・全身障害および投与部位の状態	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>median - Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
無力症	1 (<1)	0	0	0	0
	1 (<1)	0	0	0	0
臨床検査					
肝酵素上昇	1 (<1)	0	0	0	0
	4 (2)	2 (1)	2 (1)	4 (1)	1 (1)
傷害、中毒および処置合併症					
アルコール中毒	0	0	1 (<1)	1 (<1)	0
脳振盪	0	1 (<1)	0	1 (<1)	0
過量投与	0	1 (<1)	0	1 (<1)	0
手首関節骨折	0	0	1 (<1)	1 (<1)	0
橈骨骨折	0	0	0	0	1 (1)
腱断裂	3 (1)	0	0	0	0
治療薬毒性	1 (<1)	0	0	0	0
	1 (<1)	0	1 (<1)	1 (<1)	0
外科および内科処置					
椎間板手術	0	0	1 (<1)	1 (<1)	0
子宮頚部円錐切除	1 (<1)	0	0	0	0
	1 (<1)	0	0	0	0
社会環境					
社会問題	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
Number of subjects in safety population	180 (100)	183 (100)	186 (100)	369 (100)	83 (100)
Number of subjects with an event	29 (16)	24 (13)	31 (17)	55 (15)	9 (11)
感染症および寄生虫症	4 (2)	3 (2)	5 (3)	8 (2)	0
尿路感染	0	1 (<1)	2 (1)	3 (<1)	0
蜂巣炎	0	0	1 (<1)	1 (<1)	0
胃腸炎	0	0	1 (<1)	1 (<1)	0
Ｈ１Ｎ１インフルエンザ	0	1 (<1)	0	1 (<1)	0
肺炎	1 (<1)	1 (<1)	0	1 (<1)	0
外陰部膿瘍	0	0	1 (<1)	1 (<1)	0
肛門膿瘍	1 (<1)	0	0	0	0
ボレリア感染	1 (<1)	0	0	0	0
インフルエンザ	1 (<1)	0	0	0	0
敗血症	1 (<1)	0	0	0	0
気管炎	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
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4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
良性、悪性および詳細不明の新生物 (嚢胞およびポリープを含む)	1 (<1)	2 (1)	1 (<1)	3 (<1)	1 (1)
子宮頚部癌	0	0	1 (<1)	1 (<1)	0
神経鞘腫	0	1 (<1)	0	1 (<1)	0
移行上皮癌	0	1 (<1)	0	1 (<1)	0
基底細胞癌	0	0	0	0	1 (1)
線維腫	1 (<1)	0	0	0	0
	0	0	2 (1)	2 (<1)	0
免疫系障害					
アナフィラキシー様反応	0	0	1 (<1)	1 (<1)	0
過敏症	0	0	1 (<1)	1 (<1)	0
	1 (<1)	0	0	0	1 (1)
精神障害					
うつ病	0	0	0	0	1 (1)
自殺念慮	1 (<1)	0	0	0	1 (1)
	15 (8)	14 (8)	13 (7)	27 (7)	6 (7)
神経系障害					
多発性硬化症再発	12 (7)	13 (7)	12 (6)	25 (7)	4 (5)
良性頭蓋内圧亢進	0	0	1 (<1)	1 (<1)	0
てんかん	0	1 (<1)	0	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
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5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
頭痛	0	0	1 (<1)	1 (<1)	0
後頭神経痛	0	0	1 (<1)	1 (<1)	0
脳血管発作	1 (<1)	0	0	0	0
痙攣	1 (<1)	0	0	0	0
大発作痙攣	0	0	0	0	1 (1)
部分発作	0	0	0	0	1 (1)
下肢静止不能症候群	1 (<1)	0	0	0	0
眼障害	2 (1)	0	0	0	0
ホームズ・アディー瞳孔	1 (<1)	0	0	0	0
視力低下	1 (<1)	0	0	0	0
心臓障害	0	0	2 (1)	2 (<1)	0
徐脈	0	0	1 (<1)	1 (<1)	0
うっ血性心不全	0	0	1 (<1)	1 (<1)	0
血管障害	0	1 (<1)	2 (1)	3 (<1)	0
静脈瘤	0	1 (<1)	1 (<1)	2 (<1)	0
深部静脈血栓症	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
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Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
呼吸器、胸郭および縦隔障害	1 (<1)	2 (1)	0	2 (<1)	0
喘息	0	1 (<1)	0	1 (<1)	0
誤嚥性肺炎	0	1 (<1)	0	1 (<1)	0
鼻茸	1 (<1)	0	0	0	0
胃腸障害	1 (<1)	3 (2)	2 (1)	5 (1)	0
腹部ヘルニア	0	1 (<1)	0	1 (<1)	0
腹痛	0	1 (<1)	0	1 (<1)	0
憩室穿孔	0	1 (<1)	0	1 (<1)	0
臍ヘルニア	0	0	1 (<1)	1 (<1)	0
嘔吐	0	0	1 (<1)	1 (<1)	0
胃腸出血	1 (<1)	0	0	0	0
肝胆道系障害	0	0	1 (<1)	1 (<1)	0
胆管結石	0	0	1 (<1)	1 (<1)	0
胆石症	0	0	1 (<1)	1 (<1)	0
皮膚および皮下組織障害	1 (<1)	0	0	0	0
アレルギー性皮膚炎	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
筋骨格系および結合組織障害	2 (1)	1 (<1)	0	1 (<1)	0
滑液包炎	0	1 (<1)	0	1 (<1)	0
変形性関節症	1 (<1)	0	0	0	0
滑液嚢腫	1 (<1)	0	0	0	0
腎および尿路障害	0	0	1 (<1)	1 (<1)	0
腎仙痛	0	0	1 (<1)	1 (<1)	0
妊娠、産褥および周産期の状態	1 (<1)	0	0	0	0
自然流産	1 (<1)	0	0	0	0
先天性、家族性および遺伝性障害	0	0	1 (<1)	1 (<1)	0
陰嚢水瘤	0	0	1 (<1)	1 (<1)	0
一般・全身障害および投与部位の状態	0	0	3 (2)	3 (<1)	0
閉塞性ヘルニア	0	0	1 (<1)	1 (<1)	0
非心臓性胸痛	0	0	1 (<1)	1 (<1)	0
末梢性浮腫	0	0	1 (<1)	1 (<1)	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

SOURCE: BG12MS/JAPAN/ISS/T-AE-SOCPT-SER-WGTQ-A.SAS DATE: 02DEC2015

Incidence of serious adverse events by system organ class and preferred term - by body weight quartiles: Studies 109MS301 and 109MS302
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(>Q3)

	Placebo	BG00012 240 mg BID	BG00012 240 mg TID	Total BG00012	GA
臨床検査	0	0	1 (<1)	1 (<1)	0
血中ブドウ糖増加	0	0	1 (<1)	1 (<1)	0
傷害、中毒および処置合併症	2 (1)	2 (1)	4 (2)	6 (2)	1 (1)
肉離れ	0	0	2 (1)	2 (<1)	0
顔面骨骨折	0	1 (<1)	0	1 (<1)	0
靭帯断裂	0	1 (<1)	0	1 (<1)	0
橈骨骨折	0	0	1 (<1)	1 (<1)	0
交通事故	0	0	1 (<1)	1 (<1)	1 (1)
靭帯損傷	1 (<1)	0	0	0	0
半月板障害	1 (<1)	0	0	0	0
脛骨骨折	1 (<1)	0	0	0	0
むち打ち損傷	0	0	0	0	1 (1)
外科および内科処置	1 (<1)	0	1 (<1)	1 (<1)	1 (1)
静脈ステント挿入	0	0	1 (<1)	1 (<1)	0
不妊手術	0	0	0	0	1 (1)
鼻甲介切除	1 (<1)	0	0	0	0

NOTE 1: Numbers in parentheses are percentages.
2: Data after subjects switched to alternative MS treatment are excluded.
3: A subject was counted only once within each system organ class/preferred term.
4: Preferred terms are presented by decreasing order of incidence in Total BG00012 column within each system organ class.
5: Body weight quartile values are 59 kg (Q1), 68 kg (median), and 81 kg (Q3).

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