番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料
35	4.2.1.1.35	An Exploratory Comparison Study of Pharmacokinetics Between mAb158 and rec158 in Tg2576 Mice (NSEA2013-025)	20[redacted]（報告書作成年月）	Eisai Co., Ltd.	国内	参考資料
36	4.2.1.1.36	A Longitudinal Multimodal Imaging Study of the Effects of mAb158 on Brain Function in Aged Tg2576 (BIOMA-2012-056)	20[redacted]-20[redacted]	Eisai Inc.	海外	参考資料
37	4.2.1.1.37	ABBA: Effects of mAb158 on Fear Conditioning Test in Tg2576 Mice (W-20100159)	20[redacted]-20[redacted]	Eisai Co., Ltd.	国内	参考資料
38	4.2.1.1.38	Specificity of lecanemab for Aβ protofibril by Inhibition ELISA (M22001)	20[redacted]-20[redacted]	Eisai Co., Ltd.	国内	評価資料
39	4.2.1.1.39	Characterization of lecanemab binding to amyloid β species by surface plasmon resonance in Biacore S200 system (M22002)	20[redacted]-20[redacted]	Eisai Co., Ltd.	国内	評価資料
40	4.2.1.1.40	Binding studies of lecanemab and other Aβ binding antibodies to Aβ protofibrils in competition with monomers and fibrils (NCL-1120)	20[redacted]-20[redacted]	[redacted]	海外	参考資料
41	4.2.1.1.41	Characterization of amyloid β - Lecanemab interaction by HDX-MS (W-20220659)	20[redacted]-20[redacted]	Eisai Co., Ltd.	国内	参考資料

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料
42	4.2.1.1.42	Time course study to evaluate the effects of mAb158 on amyloid-beta protofibril levels and plaque load in aged female Tg2576 mice following treatment for 18 weeks and after an off-treatment period (NCL-1065)	20[redacted]-20[redacted]	[redacted]	海外	参考資料
43	4.2.1.1.43	Effects of 16-weeks treatment of mAb158 on Aβ protofibrils, TBS-insoluble Aβ levels and Aβ plaque in brain of *App*$^{NL-G-F}$ knock-in mice (M20003)	20[redacted]-20[redacted]	Eisai Co., Ltd.	国内	評価資料
44	4.2.1.2.1	BAN2401: An Integrated Summary of Studies Investigating the Potential Interaction of BAN2401 With Multiple Proteins (BIOMT-2012 001)	20[redacted]-20[redacted]	Eisai EKC	海外	参考資料
45	4.2.1.2.2	Identification of BAN2401 - Binding Plasma Proteins (AD-TR-060)	20[redacted]-20[redacted]	[redacted]	海外	参考資料
46	4.2.1.2.3	ABBA: Immunogenicity of BAN2401 Antibody (W-20090269)	20[redacted]-20[redacted]	Eisai Co., Ltd.	国内	参考資料
47	4.2.1.2.4	In Silico Analysis of BAN2401 Variable Region Sequences (AD-TR-117)	20[redacted]-20[redacted]	[redacted]	海外	参考資料
48	4.2.1.2.5	Antitope Episcreen Immunogenicity Analysis of BAN2401 (AD-TR-145)	20[redacted]-20[redacted]	[redacted]	海外	参考資料

4.2.2　薬物動態試験

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料
1	4.2.2.1.1	BAN2401: Method Validation for the Quantitative Determination of mAb158 in Mouse Plasma by ELISA (B09010)	20[redacted]-20[redacted]	Eisai Co., Ltd.（日本）	国内	評価資料
2	4.2.2.1.2	BAN2401: Method Validation for the Quantitative Determination of mAb158 in Buffer by ELISA (B09012)	20[redacted]-20[redacted]	Eisai Co., Ltd.（日本）	国内	評価資料
3	4.2.2.1.3	BAN2401: Method Validation for the Quantitative Determination of BAN2401 in Monkey Serum by ELISA (PRD09-018)	20[redacted]-20[redacted]	[redacted]（日本）	国内	評価資料
4	4.2.2.1.4	BAN2401: Long-Term Storage Stability Study for the Quantitative Determination of BAN2401 in Monkey Serum by ELISA (PRD09-019)	20[redacted]-20[redacted]	[redacted]（日本）	国内	評価資料
5	4.2.2.1.5	BAN2401: Method Validation for the Anti-BAN2401 Antibody Determination in Monkey Serum by ELISA (PRD09-079)	20[redacted]-20[redacted]	[redacted]（日本）	国内	評価資料
6	4.2.2.1.6	BAN2401: Long-Term Storage Stability Study for the Anti-BAN2401 Antibody in Monkey Serum by ELISA (PRD09-080)	20[redacted]-20[redacted]	[redacted]（日本）	国内	評価資料

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料
7	4.2.2.1.7	BAN2401: Method Partial Validation for the Quantitative Determination of BAN2401 in Monkey Serum by ELISA (M19-0280-01)	20[redacted]-20[redacted]	[redacted]（日本）	国内	評価資料
8	4.2.2.1.8	BAN2401: Method Validation for the Determination of Anti-BAN2401 Antibody in Monkey Serum by ECL (M19-0281-01)	20[redacted]-20[redacted]	[redacted]（日本）	国内	評価資料
9	4.2.2.2.1	BAN2401: Pharmacokinetic Profile of mAb158 After an Intraperitoneal Administration to Female Tg2576 Mice (B09013)	20[redacted]-20[redacted]	Eisai Co., Ltd.（日本）	国内	評価資料
10	4.2.2.2.2	SEC07: Pharmacokinetic Study of BAN2401 and rec158 Antibodies in Tg-APP$_{ArcSwe}$ and Non-Transgenic Mice (AD-TR-059)	20[redacted]（報告書作成年月）	[redacted]（スウェーデン）	外国	参考資料
11	4.2.2.2.3	BAN2401: A Pharmacokinetic Study in Cynomolgus Monkeys After Single Subcutaneous Administration of BAN2401 (B121284)	20[redacted]（報告書作成年月）	[redacted]（日本）	国内	参考資料
12	4.2.2.2.4	BAN2401: A Pharmacokinetic Analysis of BAN2401 After Single Intravenous and Subcutaneous Administratin of BAN2401 in Male Monkeys (B200685)	20[redacted]-20[redacted]	[redacted]（日本）	国内	評価資料
13	4.2.2.3.1	^{125}I/I-rec158 Biodistribution Study in Tg2576 Mice (BIOMA-2012-057)	20[redacted]（報告書作成年月）	Eisai Inc.（米国）	外国	参考資料

4.2.3　毒性試験

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料
1	4.2.3.1.1	BAN2401: Single Intravenous Dose Toxicity Study in Rats (S09060)	20[redacted]-20[redacted]	Eisai Co., Ltd.	国内	評価資料
2	4.2.3.1.2	BAN2401: Single Intravenous Dose Range Toxicity Study in Monkeys (S09019)	20[redacted]-20[redacted]	Eisai Co., Ltd.	国内	参考資料
3	4.2.3.2.1	BAN2401: A 4-Week Intermittent Intravenous Dose Toxicity Study with 5-Week Recovery Period in Monkeys (B090486)	20[redacted]-20[redacted]	[redacted]	国内	評価資料
4	4.2.3.2.2	BAN2401: A 39-Week Intermittent Intravenous Dose Toxicity Study with 13-Week Recovery Period in Monkeys (B100068)	20[redacted]-20[redacted]	[redacted]	国内	評価資料
5	4.2.3.6.1	BAN2401: A 4-Week Subcutaneous Local Irritation Study in Monkeys (B200192)	20[redacted]-20[redacted]	[redacted]	国内	評価資料
6	4.2.3.7.7.1	Preliminary Studies to Establish the Conditions for Cross-Reactivity of BAN2401 with Selected, Normal Human Tissues (IM1553)	20[redacted] (報告書作成年月)	[redacted]	外国	参考資料

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料
7	4.2.3.7.7.2	BAN2401: Cross-Reactivity Study with Normal Rat and Monkey Tissues (S09058)	20[redacted]-20[redacted]	Eisai Co., Ltd.	国内	評価資料
8	4.2.3.7.7.3	Cross-Reactivity Study of BAN2401 with Normal Human Tissues (IM1559)	20[redacted] （報告書作成年月）	[redacted]	外国	評価資料

4.3 参考文献

番号	タイトル
1	Adolfsson O, Pihlgren M, Toni N, Varisco Y, Buccarello AL, Antoniello K, et al. An effector-reduced anti-β-amyloid (Aβ) antibody with unique Aβ binding properties promotes neuroprotection and glial engulfment of Aβ. J Neurosci. 2012;32:9677–89.
2	Bard F, Barbour R, Cannon C, Carretto R, Fox M, Games D, et al. Epitope and isotype specificities of antibodies to β-amyloid peptide for protection against Alzheimer's disease-like neuropathology. Proc Natl Acad Sci USA. 2003;100:2023–8.
3	Bard F, Cannon C, Barbour R, Burke RL, Games D, Grajeda H, et al. Peripherally administered antibodies against amyloid β-peptide enter the central nervous system and reduce pathology in a mouse model of Alzheimer disease. Nat Med. 2000;6:916–9.
4	Deng R, Jin F, Prabhu S, Iyer S. Monoclonal antibodies: what are the pharmacokinetic and pharmacodynamic considerations for drug development? Expert Opin Drug Metab Toxicol. 2012;8:141–60.
5	Deng R, Loyet KM, Lien S, Iyer S, DeForge LE, Theil F-P, et al. Pharmacokinetics of humanized monoclonal anti-tumor necrosis factor-α antibody and its neonatal Fc receptor variants in mice and cynomolgus monkeys. Drug Metab Dispos. 2010;38:600–5.
6	De Zafra CLZ, Markgraf CG, Compton, DR, Hudzik TJ. Abuse liability assessment for biologic drugs – all molecules are not created equal. Regul Toxicol Pharmacol. 2018;92:165-172.
7	Diebolder CA, Beurskens FJ, de Jong RN, Koning RI, Strumane K, Lindorfer MA, et al. Complement is activated by IgG hexamers assembled at the cell surface. Science. 2014;343:1260-3

番号	タイトル
8	Dodart JC, May P. Overview on rodent models of Alzheimer's disease. Curr Protoc Neurosci. 2005;Chapter 9:Unit 9.22.
9	Esemuede N, Lee T, Pierre-Paul D, Sumpio BE, Gahtan V. The role of thrombospondin-1 in human disease. J Surg Res. 2004;122:135–42.
10	Feinstein A, Richardson N, Taussig MJ. Immunoglobulin flexibility in complement activation. Immunol Today. 1986;7:169–74.
11	Götz J, Streffer JR, David D, Schild A, Hoerndli F, Pennanen L, et al. Transgenic animal models of Alzheimer's disease and related disorders: histopathology, behavior and therapy. Mol Psychiatry. 2004;9:664–83.
12	Greaves P. Histopathology of preclinical toxicity studies. Interpretation and relevance in drug safety evaluation. Third ed. New York: Elsevier; 1990. p. 122.
13	Hall W, Price-Schiavi S, Wicks J, Rojko J. Tissue cross-reactivity studies for monoclonal antibodies: Predictive value and use for selection of relevant animal species for toxicity testing. In: Cavagnaro JA, editor. Preclinical safety evaluation of biopharmaceuticals: a science-based approach to facilitating clinical trials. Hoboken: Wiley-Interscience; 2008. p. 208-40.
14	Hartley DM, Walsh DM, Ye CP, Diehl T, Vasquez S, Vassilev PM, et al. Protofibrillar intermediates of amyloid β-protein induce acute electrophysiological changes and progressive neurotoxicity in cortical neurons. J Neurosci. 1999;19:8876-84.

番号	タイトル
15	Hsiao K, Chapman P, Nilsen S, Eckman C, Harigaya Y, Younkin S, et al. Correlative memory deficits, Aβ elevation, and amyloid plaques in transgenic mice. Science. 1996;274:99–102.
16	Huttunen HJ, Havas D, Peach C, Barren C, Duller S, Xia W, et al. The acyl-coenzyme A: cholesterol acyltransferase inhibitor CI-1011 reverses diffuse brain amyloid pathology in aged amyloid precursor protein transgenic mice. J Neuropathol Exp Neurol. 2010;69:777–88.
17	Kawarabayashi T, Younkin LH, Saido TC, Shoji M, Ashe KH, Younkin SG. Age-dependent changes in brain, CSF, and plasma amyloid β protein in the Tg2576 transgenic mouse model of Alzheimer's disease. J Neurosci. 2001;21:372–81.
18	Keizer RJ, Huitema ADR, Schellens JHM, Beijnen JH. Clinical pharmacokinetics of therapeutic monoclonal antibodies. Clin Pharmacokinet. 2010;49:493–507.
19	Kellner C, Otte A, Cappuzzello E, Klausz K, Peipp M. Modulating cytotoxic effector functions by Fc engineering to improve cancer therapy. Transfus Med. Hemother. 2017;44:327–36.
20	Klein WL, Krafft GA, Finch CE. Targeting small Aβ oligomers: the solution to an Alzheimer's disease conundrum? Trends Neurosci. 2001;24:219-24.
21	Lacor PN, Buniel MC, Chang L, Fernandez SJ, Gong Y, Viola KL, et al. Synaptic targeting by Alzheimer's-related amyloid β oligomers. J Neurosci. 2004;24:10191–200.

番号	タイトル
22	Lambert MP, Barlow AK, Chromy BA, Edwards C, Freed R, Liosatos M, et al. Diffusible, nonfibrillar ligands derived from $A\beta_{1-42}$ are potent central nervous system neurotoxins. Proc Nat Acad Sci USA. 1998;95:6448-53.
23	Lawler J, Sunday M, Thibert V, Duquette M, George EL, Rayburn H, et al. Thrombospondin-1 is required for normal murine pulmonary homeostasis and its absence causes pneumonia. J Clin Invest. 1998;101:982–92.
24	Lord A, Kalimo H, Eckman C, Zhang XQ, Lannfelt L, Nilsson LN. The arctic Alzheimer mutation facilitates early intraneuronal Aβ aggregation and senile plaque formation in transgenic mice. Neurobiol Aging. 2006;27:67–77.
25	Morgan D. The role of microglia in antibody-mediated clearance of amyloid-beta from the brain. CNS Neurol Disord Drug Targets. 2009;8:7-15.
26	Müller U, Cristina N, Li ZW, Wolfer DP, Lipp HP, Rülicke T, et al. Behavioral and anatomical deficits in mice homozygous for a modified β-amyloid precursor protein gene. Cell. 1994;79:755-65.
27	Nilsberth C, Westlind-Danielsson A, Eckman CB, Condron MM, Axelman K, Forsell C, et al. The 'Arctic' APP mutation (E693G) causes Alzheimer's disease by enhanced Aβ protofibril formation. Nat Neurosci. 2001;4:887–93.
28	Nilsson P, Saito T, Saido TC. New mouse model of Alzheimer's. ACS Chem Neurosci. 2014;5:499–502.

番号	タイトル
29	Nitsch RM, Hock C. Targeting β-amyloid pathology in Alzheimer's disease with Aβ immunotherapy. Neurotherapeutics. 2008;5:415–20.
30	Palmeira P, Costa-Carvalho BT, Arslanian C, Pontes GN, Nagao AT, Carneiro-Sampaio MMS. Transfer of antibodies across the placenta and in breast milk from mothers on intravenous immunoglobulin. Pediatr Allergy Immunol. 2009;20:528–35.
31	Palmeira P, Quinello C, Silveira-Lessa AL, Zago CA, Carneiro-Sampaio M. IgG placental transfer in healthy and pathological pregnancies. Clin Dev Immunol. 2012;2012:985646.
32	Pankiewicz JE, Baquero-Buitrago J, Sanchez S, Lopez-Contreras J, Kim J, Sullivan PM, et al. APOE genotype differentially modulates effects of anti-Aβ, passive immunization in APP transgenic mice. Mol Neurodegener. 2017;12:12.
33	Pfeifer M, Boncristiano S, Bondolfi L, Stalder A, Deller T, Staufenbiel M, et al. Cerebral hemorrhage after passive anti-Aβ immunotherapy. Science. 2002;298:1379.
34	Racke MM, Boone LI, Hepburn DL, Parsadainian M, Bryan MT, Ness DK, et al. Exacerbation of cerebral amyloid angiopathy-associated microhemorrhage in amyloid precursor protein transgenic mice by immunotherapy is dependent on antibody recognition of deposited forms of amyloid β. J Neurosci. 2005;25:629–36.
35	Rogers J, Li R, Mastroeni D, Grover A, Leonard B, Ahern G, et al. Peripheral clearance of amyloid beta peptide by complement C3-dependent adherence to erythrocytes. Neurobiol Aging. 2006;27:1733-9.

番号	タイトル
36	Roopenian DC, Akilesh S. FcRn: the neonatal Fc receptor comes of age. Nat Rev Immunol. 2007;7:715–25.
37	Sasaguri H, Nilsson P, Hashimoto S, Nagata K, Saito T, Strooper BD, et al. APP mouse models for Alzheimer's disease preclinical studies. EMBO J. 2017;36:2473–87.
38	Selkoe DJ. Alzheimer disease and aducanumab: adjusting our approach. Nat Rev Neurol. 2019;15:365-6.
39	Senechal Y, Kelly PH, Dev KK. Amyloid precursor protein knockout mice show age-dependent deficits in passive avoidance learning. Behav Brain Res. 2008; 186(1):126-32
40	Sevigny J, Chiao P, Bussière T, Weinreb PH, Williams L, Maier M, et al. The antibody aducanumab reduces Aβ plaques in Alzheimer's disease. Nature. 2016;537:50–6.
41	Strasser J, de Jong RN, Beurskens FJ, Wang G, Heck AJR, Schuurman J, et al. Unraveling the macromolecular pathways of IgG oligomerization and complement activation on antigenic surfaces. Nano. Lett. 2019;19:4787–96.
42	Terai K, Iwai A, Kawabata S, Tasaki Y, Watanabe T, Miyata K, et al. β-amyloid deposits in transgenic mice expressing human β-amyloid precursor protein have the same characteristics as those in Alzheimer's disease. Neuroscience. 2001;104:299–310.

番号	タイトル
43	Thakker DR, Weatherspoon MR, Harrison J, Keene TE, Lane DS, Kaemmerer WF, et al. Intracerebroventicular amyloid-beta antibodies reduce cerebral amyloid angiopathy and associated micro-hemorrhages in aged Tg2576 mice. Proc Natl Acad Sci USA. 2009;106:4501-6.
44	Van de Perre P. Transfer of antibody via mother's milk. Vaccine. 2003;21:3374–6.
45	Vugmeyster Y, Szklut P, Wensel D, Ross J, Xu X, Awwad M, et al. Complex pharmacokinetics of a humanized antibody against human amyloid beta peptide, anti-Abeta Ab2, in nonclinical species. Pharm Res. 2011;28:1696-706.
46	Walsh DM, Selkoe DJ. Deciphering the molecular basis of memory failure in Alzheimer's disease. Neuron. 2004;44:181-93.
47	Wang B, Yang C, Jin X, Du Q, Wu H, Dall'Acqua W, et al. Regulation of antibody-mediated complement-dependent cytotoxicity by modulating the intrinsic affinity and binding valency of IgG for target antigen. MAbs. 2020;12:1690959.
48	Wang W, Wang EQ, Balthasar JP. Monoclonal antibody pharmacokinetics and pharmacodynamics. Clin Pharmacol Ther. 2008;84:548–58.
49	Wilcock DM, Colton CA. Anti-Aβ immunotherapy in Alzheimer's disease: Relevance of transgenic mouse studies to clinical trials. J Alzheimers Dis. 2008;15:555–69.

番号	タイトル
50	Wilcock DM, Colton CA. Immunotherapy, vascular pathology, and microhemorrhages in transgenic mice. CNS Neurol Disord Drug Targets. 2009;8:50-64.
51	Wilcock DM, Rojiani A, Rosenthal A, Subbarao S, Freeman MJ, Gordon MN, et al. Passive immunotherapy against Aβ in aged APP-transgenic mice reverses cognitive deficits and depletes parenchymal amyloid deposits in spite of increased vascular amyloid and microhemorrhage. J Neuroinflammation. 2004;1:24.
52	Zago W, Schroeter S, Guido T, Khan K, Seubert P, Yednock T et al. Vascular alterations in PDAPP mice after anti-Aβ immunotherapy: Implications for amyloid-related imaging abnormalities. Alzheimers Dement. 2013;9:S105–15.
53	Zheng H, Jiang M, Trumbauer ME, Sirinathsinghji DJ, Hopkins R, Smith DW, et al. β-Amyloid precursor protein-deficient mice show reactive gliosis and decreased locomotor activity. Cell. 1995;81:525-31

第5部　臨床試験報告書

5.3.1　生物薬剤学試験報告書

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
1	5.3.1.1.1	An Open-Label, Parallel-Group, Randomized Study to Evaluate the Absolute Bioavailability of Single Dose Subcutaneous Administration of Lecanemab in Healthy Subjects (Protocol Number: BAN2401-A001-004)	2021.9-2021.12	1施設 （米国）	外国	参考資料	無
2	5.3.1.4.1	Validation of an Enzyme-Linked Immunosorbent Assay (ELISA) Method for the Quantification of BAN2401 in Human Serum (TCAR10-120)	20[redacted]	[redacted]	外国	参考資料	無
3	5.3.1.4.2	Validation Report for Method BTM-1425-R0: Determination of BAN2401 in Human Serum by LC-MS/MS (EIS-R1696)	20[redacted]	[redacted]	外国	参考資料	無
4	5.3.1.4.3	Validation Addendum Report for Method BTM-1425-R0: Long-Term Sample Stability for BAN2401 in Human Serum by LC-MS/MS (EIS-R1696A1)	20[redacted]	[redacted]	外国	参考資料	無
5	5.3.1.4.4	Protocol Addendum No.2 for the Partial Validation of Method BTM-1425-R3: Determination of BAN2401 in Human Serum by LC-MS/MS (EIS-R1696A2)	20[redacted]	[redacted]	外国	参考資料	無
6	5.3.1.4.5	Addendum Report for the Partial Validation of Method BTM-1425-R3: Determination of BAN2401 in Human Serum by LC-MS/MS (EIS-R1696A3)	20[redacted]	[redacted]	外国	参考資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
7	5.3.1.4.6	Addendum Report for the Partial Validation of Method BTM-1425-R3: Determination of BAN2401 in Human Serum by LC-MS/MS (EIS-R1696A4)	20[redacted]	[redacted]	外国	参考資料	無
8	5.3.1.4.7	Validation of an Electrochemiluminescence (ECL) Method for the Quantification of BAN2401 in Human Cerebral Spinal Fluid (CSF) (TCAR10-050)	20[redacted]	[redacted]	外国	参考資料	無
9	5.3.1.4.8	Validation Report for Method BTM-1416-R0: Determination of BAN2401 in Human Cerebrospinal Fluid by LC-MS/MS (EIS-R1663)	20[redacted]	[redacted]	外国	参考資料	無
10	5.3.1.4.9	Validation Addendum Report for Method BTM-1416-R0: Long-Term and Extended Long-Term Sample Storage Stability Evaluation at -70°C for BAN2401 in Human CSF by LC-MS/MS (EIS-R1663A1R1)	20[redacted]	[redacted]	外国	参考資料	無
11	5.3.1.4.10	Addendum Report for the Partial Validation of Method BTM-1416-R1: Determination of BAN2401 in Human CSF by LC-MS/MS (EIS-R1663A2)	20[redacted]	[redacted]	外国	参考資料	無
12	5.3.1.4.11	Addendum Report for the Partial Validation of Method BTM-1416-R1: Determination of BAN2401 in Human CSF by LC-MS/MS (EIS-R1663A3)	20[redacted]	[redacted]	外国	参考資料	無
13	5.3.1.4.12	Addendum Report for the Partial Validation of Method BTM-1416-R1: Determination of BAN2401 in Human CSF by LC-MS/MS (EIS-R1663A4)	20[redacted]	[redacted]	外国	参考資料	無
14	5.3.1.4.13	Validation of an MSD Immunogenicity Method for Detection of Antibodies to 316_2401 in Human Serum (TCAR10-069)	20[redacted]	[redacted]	外国	参考資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
15	5.3.1.4.14	Validation of an Analytical Method (With Acid Dissociation) for the Detection of Antibodies to 316_2401 (BAN2401) in Human Serum by Meso-Scale Discovery (MSD®) Electrochemiluminescence (ECL) (TCAR12-038)	20[redacted]	[redacted]	外国	参考資料	無
16	5.3.1.4.15	Validation of an Analytical Method (With Acid Dissociation) for the Detection of Antibodies to BAN2401 in Human Serum by Meso-Scale Discovery (MSD) Electrochemiluminescence (ECL) (TNJR14-225)	20[redacted]	[redacted]	外国	参考資料	無
17	5.3.1.4.16	Detection of Anti-BAN2401 Antibodies in Human Serum (BAM-0039)	20[redacted]	[redacted]	外国	参考資料	無
18	5.3.1.4.17	Validation of Electrochemiluminescent Immunoassay for the Detection of Anti-BAN2401 Antibodies in Human Serum (BAV-0039-R v00)	20[redacted]	[redacted]	外国	参考資料	無
19	5.3.1.4.18	The Validation of an ECL Method for the Detection of Anti-Drug Antibodies (ADA) Directed Against BAN2401 in Human Serum (45-1807)	20[redacted]	[redacted]	外国	参考資料	無
20	5.3.1.4.19	The Validation of an ECL Method for the Detection of Anti-Drug Antibodies (ADA) Directed Against BAN2401 in Human Serum (45-1807 addendum1)	20[redacted]	[redacted]	外国	参考資料	無
21	5.3.1.4.20	Detection of Neutralizing Anti-BAN2401 Antibodies in Human Serum (BAM-0031)	20[redacted]	[redacted]	外国	参考資料	無
22	5.3.1.4.21	Validation of Electrochemiluminescent Immunoassay for the Measurement of Anti-BAN2401 Neutralizing Antibodies in Human Serum (BAV-0031-R v02)	20[redacted]	[redacted]	外国	参考資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
23	5.3.1.4.22	The Validation of an ECL Method for the Detection of Neutralizing Antibodies (NAb) Directed Against BAN2401 in Human Serum (45-1808)	20[redacted]	[redacted]	外国	参考資料	無
24	5.3.1.4.23	Quantification of Samples for Analysis of BAN2401 in Human Serum in Support of Eisai Protocol BAN2401-A001-101 (TCAR10-048)	20[redacted]	[redacted]	外国	参考資料	無
25	5.3.1.4.24	LC/MS/MS Analysis for the Determination of BAN2401 in Human Serum by LC-MS/MS: A Randomized, Double-Blind, Placebo-Controlled, Combined Single Ascending Dose and Multiple Ascending Dose Study to Assess Safety, Tolerability, Immunogenicity, Pharmacodynamic Response, and Pharmacokinetics of Intravenous Infusions of BAN2401 in Subjects With Mild to Moderate Alzheimer's Disease (BAN2401-A001-101) (EIS-R1760)	20[redacted]	[redacted]	外国	参考資料	無
26	5.3.1.4.25	Quantification of Samples for Analysis of BAN2401 in Human Cerebrospinal Fluid in Support of Protocol BAN2401-A001-101 (TCAR10-051)	20[redacted]	[redacted]	外国	参考資料	無
27	5.3.1.4.26	Detection of Antibodies to BAN2401 in Serum by Meso Scale Discovery (MSD®) Electrochemiluminescence (ECL) Method in Support of Study: BAN2401-A001-101 (TCAR10-070)	20[redacted]	[redacted]	外国	参考資料	無
28	5.3.1.4.27	LC/MS/MS Analysis for the Determination of BAN2401 in Human Serum and CSF Samples: A Randomized, Double-Blind, Placebo-Controlled Study to Assess Safety, Tolerability, Pharmacokinetics, Immunogenicity, and Pharmacodynamic Response of Repeated Intravenous Infusions of BAN2401 in Subjects With Mild Cognitive Impairment Due to Alzheimer's Disease and Mild Alzheimer's Disease (BAN2401-J081-104) (EIS-R2740)	20[redacted]	[redacted]	外国	評価資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
29	5.3.1.4.28	Detection of Antibodies to BAN2401 in Human Serum by Meso-Scale Discover (MSD) Electrochemiluminescence (ECL) in Support of Protocol Number BAN2401-J081-104 (TNJR14-227)	20[redacted]	[redacted]	外国	評価資料	無
30	5.3.1.4.29	Detection of Anti-BAN2401 Antibodies in Human Serum Samples From Clinical Study BAN2401-J081-104 (BAS-0044-R)	20[redacted]	[redacted]	外国	評価資料	無
31	5.3.1.4.30	LC/MS/MS Analysis for the Determination of BAN2401 in Human Serum and Human Cerebrospinal Fluid Human Samples Originating From Eisai Study: "A Placebo-Controlled, Double-Blind, Parallel-Group, Bayesian Adaptive Randomization Design and Dose Regimen-Finding Study to Evaluate the Safety, Tolerability and Efficacy of BAN2401 in Subjects With Early Alzheimer's Disease" (BAN2401-G000-201 Core) (EIS-R3653R1)	20[redacted]	[redacted]	外国	評価資料	無
32	5.3.1.4.31	Detection of Anti-BAN2401 Antibodies in Human Serum Samples From Clinical Study BAN2401-G000-201 (BAN2401-G000-201 Core) (BAS-0051-R v00)	20[redacted]	[redacted]	外国	評価資料	無
33	5.3.1.4.32	Detection of Neutralizing Anti-BAN2401 Antibodies in Human Serum Samples From Clinical Study BAN2401-G000-201 (BAN2401-G000-201 Core) (BAS-0052-R v00)	20[redacted]	[redacted]	外国	評価資料	無
34	5.3.1.4.33	Detection of Antibodies to BAN2401 in Serum by Meso Scale Discovery (MSD) Electrochemiluminescence (ECL) Method in Support of Study: BAN2401-G000-201 (BAN2401-G000-201 Core) (TNJR14-226)	20[redacted]	[redacted]	外国	評価資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
35	5.3.1.4.34	BAN2401-G000-201 - Neurogranin (NRGN) Validation in CSF (Neurogranin_CSF_20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
36	5.3.1.4.35	Validation Report for Euroimmun ELISA Kit: Quantitation of Neurogranin in Human CSF Using the ELISA Platform (NRGN-CSF-20[redacted]R1)	20[redacted]	[redacted]	外国	参考資料	無
37	5.3.1.4.36	BAN2401-G000-201 - NfL Validation in CSF (NfL_CSF-20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
38	5.3.1.4.37	BAN2401-G000-201 - NfL Validation in CSF (NfL-CSF-20[redacted]R1)	20[redacted]	[redacted]	外国	参考資料	無
39	5.3.1.4.38	BAN2401-G000-201 - YKL-40 Validation in CSF (YKL-40_CSF_20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
40	5.3.1.4.39	BAN2401-G000-201 - YKL-40 Validation in CSF (YKL-40-CSF-20[redacted]R1)	20[redacted]	[redacted]	外国	参考資料	無
41	5.3.1.4.40	BAN2401-G000-201 - Contactin-2 (CNTN2) Validation in CSF (Contactin-2_CSF_20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
42	5.3.1.4.41	BAN2401-G000-201 - Contactin-2 (CNTN2) Validation in CSF (Contactin-2-CSF-20[redacted]R1)	20[redacted]	[redacted]	外国	参考資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
43	5.3.1.4.42	Validation of Phospho-Tau (181P), B-Amyloid (1-42) and hTauAg (pT181, Aβ42 and hTauAg_CSF_20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
44	5.3.1.4.43	Determination of Aβ1-42, Tau and PTau Proteins in CSF for EISAI Study BAN2401-J081-104 (BAR79/E97)	20[redacted]	[redacted]	外国	評価資料	無
45	5.3.1.4.44	Determination of Aβ1-42, Tau, and PTau Proteins in Human CSF Samples for EISAI Study BAN2401-G000-201 (MSE6Q-BAR86)	20[redacted]	[redacted]	外国	評価資料	無
46	5.3.1.4.45	BAN2401-G000-201 - NfL Validation in Plasma (NfL_Plasma_20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
47	5.3.1.4.46	BAN2401-G000-201 - NfL Validation in Plasma (NfL-Plasma-20[redacted]R1)	20[redacted]	[redacted]	外国	参考資料	無
48	5.3.1.4.47	Determination of Neurofilament Light Protein (NFLP), Neurogranin (NRGN), YKL-40, Contactin-2 (CNTN-2) in Human CSF Samples and NFLP in Plasma Using ELISA and SIMOA for Eisai Study BAN2401-G000-201 (SAR-[redacted]-NFLP/NRGN/YKL-40/CNTN-2)	20[redacted]	[redacted]	外国	評価資料	無
49	5.3.1.4.48	Validation of IBL ELISA Kit for the Determination of Full Length Amyloid Beta 1-42 in Human EDTA Plasma (Aβ42_Plasma_20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
50	5.3.1.4.49	Validation of IBL ELISA Kit for the Determination of Full Length Amyloid Beta 1-40 in Human EDTA Plasma (Aβ40_Plasma_20[redacted])	20[redacted]	[redacted]	外国	参考資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
51	5.3.1.4.50	Validation Report for Method BTM-3467: Quantitation of pTau-181 in Human Plasma (K2EDTA) on the Quanterix Simoa Platform (110-R11817-R1)	20[redacted]	[redacted]	外国	評価資料	無
52	5.3.1.4.51	Long-Term Stability for Method BTM-3467: Quantitation of pTau-181 in Human Plasma (K2EDTA) on the Quanterix Simoa Platform (110-R11817A1)	20[redacted]	[redacted]	外国	評価資料	無
53	5.3.1.4.52	Drug Interference for Method BTM-3467: Quantitation of pTau-181 in Human Plasma (K2EDTA) on the Quanterix Simoa Platform (110-R11817A2)	20[redacted]	[redacted]	外国	評価資料	無
54	5.3.1.4.53	Long-Term Stability for Method BTM-3467: Quantitation of pTau-181 in Human Plasma (K2EDTA) on the Quanterix Simoa Platform (110-R11817A3)	20[redacted]	[redacted]	外国	評価資料	無
55	5.3.1.4.54	Assessment of Interference of Drug BAN2401 in Quantifying Plasma Amyloid Beta 40 and 42 by [redacted] (Aβ42_40 Drug Spike_Plasma_20[redacted])	20[redacted]	Eisai Center for Genetics Guided Dementia Discovery, [redacted]	外国	参考資料	無
56	5.3.1.4.55	Molecular Genotyping Analysis APOE 2, 3, and 4 and Sample Banking (BAN2401-G000-201) (R19012034V1)	20[redacted]	[redacted]	外国	評価資料	無
57	5.3.1.4.56	Quantitation of pTau-181 in Human Plasma (K_2EDTA) on the Quanterix Simoa Platform (BAN2401-G000-201) (110-R12068)	20[redacted]	[redacted]	外国	評価資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
58	5.3.1.4.57	Sample Analysis Report: Determination of Aβ40 and Aβ42 in Human Plasma Samples Using [redacted] for Eisai Study BAN2401-G000-201 (STUDY 113)	20[redacted]	[redacted]	外国	評価資料	無
59	5.3.1.4.58	Biomarker Validation of an Enzyme Immunoassay for the Measurement of Amyloid Beta 1-X in Human Plasma (TCAR10-001)	20[redacted]	[redacted]	外国	参考資料	無
60	5.3.1.4.59	Quantification of Samples for Measurement of Amyloid Beta 1-X in Human Plasma in Support of Eisai Protocol BAN2401-A001-101 (TCAR10-056)	20[redacted]	[redacted]	外国	評価資料	無
61	5.3.1.4.60	Validation Report for Method BTM-3218: Quantitation of NF-Light in Human Plasma, Serum and CSF on the Quanterix Simoa Platform (1629-R11293)	20[redacted]	[redacted]	外国	参考資料	無
62	5.3.1.4.61	Quantitation of GFAP in Human Plasma (K_2EDTA) on the Quanterix Simoa Platform (BAN2401-G000-301) (110-R12753)	20[redacted]	[redacted]	外国	評価資料	無
63	5.3.1.4.62	Quantitation of pTau-181 in Human Plasma (K_2EDTA) on the Quanterix Simoa Platform (BAN2401-G000-301) (110-R12754)	20[redacted]	[redacted]	外国	評価資料	無
64	5.3.1.4.63	Quantitation of NFL in Human Plasma (K_2EDTA) on the Quanterix Simoa Platform (BAN2401-G000-301) (110-R12755)	20[redacted]	[redacted]	外国	評価資料	無
65	5.3.1.4.64	Validation Report for Method BTM-3750: Quantitation of GFAP in Human Plasma and Cerebrospinal Fluid (CSF) Using Quanterix Simoa Platform (1679-R12607)	20[redacted]	[redacted]	外国	評価資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
66	5.3.1.4.65	Amyloid-β 1-42 Peptide Assay Using the ELISA Technique (MOS-CMF-103.v1)	20[redacted]	[redacted]	外国	参考資料	無
67	5.3.1.4.66	Amyloid-β 1-42 Peptide Assay Using the ELISA FUJIREBIO Kit (MOS-CMF-103.v2)	20[redacted]	[redacted]	外国	参考資料	無
68	5.3.1.4.67	TAU Protein Assay Using the ELISA Method (MOS-CMF-101.v1)	20[redacted]	[redacted]	外国	参考資料	無
69	5.3.1.4.68	TAU Protein Assay by FUJIREBIO ELISA Kit (MOS-CMF-101.v2)	20[redacted]	[redacted]	外国	参考資料	無
70	5.3.1.4.69	P-TAU Protein Assay by ELISA Technique (MOS-CMF-102.v1)	20[redacted]	[redacted]	外国	参考資料	無
71	5.3.1.4.70	P-TAU Protein Assay by FUJIREBIO ELISA Kit (MOS-CMF-102.v2)	20[redacted]	[redacted]	外国	参考資料	無
72	5.3.1.4.71	Quantitative Determination of β-Amyloid$_{1-40}$ in Cerebrospinal Fluid (CSF) Samples by Chemiluminescence Enzyme Immunoassay (CLEIA) Using Fujirebio, Inc. Lumipulse® G1200 (Aβ40-CSF-Lumipulse-20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
73	5.3.1.4.72	Quantitative Determination of β-Amyloid$_{1-42}$ (IFCC Standardized) in Cerebrospinal Fluid (CSF) Samples by Chemiluminescence Enzyme Immunoassay (CLEIA) Using Fujirebio, Inc. Lumipulse® G1200 (Aβ42-CSF-Lumipulse-20[redacted])	20[redacted]	[redacted]	外国	参考資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
74	5.3.1.4.73	Quantitative Determination of Phospho Tau (pTau) 181 in Cerebrospinal Fluid (CSF) Samples by Chemiluminescence Enzyme Immunoassay (CLEIA) Using Fujirebio, Inc. Lumipulse® G1200 (Pt181-CSF-Lumipulse-20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
75	5.3.1.4.74	Quantitative Determination of Total Tau (tTau) in Human Cerebrospinal Fluid (CSF) Samples by Chemiluminescence Enzyme Immunoassay (CLEIA) Using the Fujirebio, Inc. Lumipulse® G1200 (Ttau-CSF-Lumipulse-20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
76	5.3.1.4.75	Quantitative Determination of β-Amyloid$_{1-42}$ (International Federation of Clinical Chemistry (IFCC) Standardized) in Cerebrospinal Fluid (CSF) Samples by Chemiluminescence Enzyme Immunoassay (CLEIA) Using Fujirebio, Inc. Lumipulse® G1200 and Lumipulse® G600II Analyzers (BAN2401-G000-301) (Aβ42-CSF-Lumipulse-SAR-20[redacted])	20[redacted]	[redacted]	外国	評価資料	無
77	5.3.1.4.76	Quantitative Determination of β-Amyloid$_{1-40}$ in Cerebrospinal Fluid (CSF) Samples by Chemiluminescence Enzyme Immunoassay (CLEIA) Using Fujirebio, Inc. Lumipulse® G1200 Analyzer (BAN2401-G000-301) (Aβ40-CSF-Lumipulse-SAR-20[redacted])	20[redacted]	[redacted]	外国	評価資料	無
78	5.3.1.4.77	Quantitative Determination of Total Tau (tTau) in Cerebrospinal Fluid (CSF) Samples by Chemiluminescence Enzyme Immunoassay (CLEIA) Using Fujirebio, Inc. Lumipulse® G1200 and Lumipulse® G600II Analyzers (BAN2401-G000-301) (Ttau-CSF-Lumipulse-SAR-20[redacted])	20[redacted]	[redacted]	外国	評価資料	無
79	5.3.1.4.78	Quantitative Determination of Phospho Tau (pTau) 181 in Cerebrospinal Fluid (CSF) Samples by Chemiluminescence Enzyme Immunoassay (CLEIA) Using Fujirebio, Inc. Lumipulse® G1200 Analyzer (BAN2401-G000-301) (Pt181-CSF-Lumipulse-SAR-20[redacted])	20[redacted]	[redacted]	外国	評価資料	無
80	5.3.1.4.79	Validation Report for Method Simoa™ NF-Light® Kit: Quantitation of NF-Light in Human CSF on the Quanterix Simoa Platform (NfL-CSF-20[redacted])	20[redacted]	[redacted]	外国	参考資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
81	5.3.1.4.80	Determination of Neurofilament Light Protein (NfL) and Neurogranin (NRGN) in CSF Samples Using ELISA and SIMOA for Eisai Study BAN2401-G000-301 (SAR-[redacted]-NFL-NRGN-CSF20[redacted])	20[redacted]	[redacted]	外国	評価資料	無
82	5.3.1.4.81	Genotyping of ApoE SNPs rs429358 and rs7412 : Data Validation Document for BAN2401-G000-301 (ApoE_Whole Blood_20[redacted])	20[redacted]	[redacted]	外国	参考資料	無
83	5.3.1.4.82	Molecular Genotyping Analysis APOE 2, 3, and 4 and Sample Banking (BAN2401-G000-301) (ApoE-[redacted]-20[redacted])	20[redacted]	[redacted]	外国	評価資料	無
84	5.3.1.4.83	Sample Analysis Report: Determination of Aβ40 and Aβ42 in Human Plasma Samples Using [redacted] for Eisai Study BAN2401-G000-301 (STUDY 122)	20[redacted]	[redacted]	外国	評価資料	無
85	5.3.1.4.84	Analytical Validation of [redacted] for Measuring Concentrations of Aβ Isoforms in Plasma (135087.126)	20[redacted]	[redacted]	外国	参考資料	無
86	5.3.1.4.85	Method Validation of TAU Protein (DV-CMF-101-02)	20[redacted]	[redacted]	外国	参考資料	無
87	5.3.1.4.86	Method Validation of P-TAU Protein (DV-CMF-102-02)	20[redacted]	[redacted]	外国	参考資料	無
88	5.3.1.4.87	Method Validation of Peptide AB1-42 (DV-CMF-103-02)	20[redacted]	[redacted]	外国	参考資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
89	5.3.1.4.88	Interference Testing Upon Quantitation of Aβ40 and Aβ42 in the [redacted] in the Presence of BAN2401 in Human K2EDTA Plasma Samples (STUDY 162)	20[redacted]	[redacted]	外国	評価資料	無
90	5.3.1.4.89	LC-MS/MS Determination of BAN2401 in Human Serum Samples Originating From Eisai Study: “A Placebo-Controlled, Double-Blind, Parallel-Group, Bayesian Adaptive Randomization Design and Dose Regimen-Finding Study With an Open-Label Extension Phase to Evaluate Safety, Tolerability and Efficacy of BAN2401 in Subjects With Early Alzheimer’s Disease” (BAN2401-G000-201 OLE) (110-R10679)	20[redacted]	[redacted]	外国	評価資料	無
91	5.3.1.4.90	LC-MS/MS Determination of BAN2401 in Human Serum Samples Originating From Eisai Study: “A Placebo-Controlled, Double-Blind, Parallel-Group, Bayesian Adaptive Randomization Design and Dose Regimen-Finding Study With an Open-Label Extension Phase to Evaluate Safety, Tolerability and Efficacy of BAN2401 in Subjects With Early Alzheimer’s Disease” (BAN2401-G000-201 OLE) (110-R10679A1)	20[redacted]	[redacted]	外国	評価資料	無
92	5.3.1.4.91	Detection of Anti-BAN2401 Antibodies in Human Serum Samples by ECL (BAN2401-G000-201 OLE) (45-1809)	20[redacted]	[redacted]	外国	評価資料	無
93	5.3.1.4.92	Detection of Anti-BAN2401 Antibodies in Human Serum Samples by ECL (BAN2401-G000-201 OLE) (45-1809 interim2)	20[redacted]	[redacted]	外国	評価資料	無
94	5.3.1.4.93	Detection of Neutralizing Anti-BAN2401 Antibodies in Human Serum Samples by ECL (BAN2401-G000-201 OLE) (45-1810)	20[redacted]	[redacted]	外国	評価資料	無
95	5.3.1.4.94	Detection of Neutralizing Anti-BAN2401 Antibodies in Human Serum Samples by ECL (BAN2401-G000-201 OLE) (45-1810 interim2)	20[redacted]	[redacted]	外国	評価資料	無

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
96	5.3.1.4.95	LC-MS/MS Determination of BAN2401 in Human Serum and Human Cerebrospinal Fluid (CSF) Samples Originating From Eisai Study: "Placebo-Controlled, Double-Blind, Parallel-Group, 18-Month Study With an Open-Label Extension Phase to Confirm Safety and Efficacy of BAN2401 in Subjects With Early Alzheimer's Disease" (BAN2401-G000-301) (110-R10680)	20[redacted]	[redacted]	外国	評価資料	無
97	5.3.1.4.96	Detection of Anti-BAN2401 Antibodies in Human Serum Samples by ECL for Protocol BAN2401-G000-301 (45-1908)	20[redacted]	[redacted]	外国	評価資料	無
98	5.3.1.4.97	Detection of Neutralizing Anti-BAN2401 Antibodies in Human Serum Samples by ECL for Protocol BAN2401-G000-301 (45-1909)	20[redacted]	[redacted]	外国	評価資料	無
99	5.3.1.4.98	LC-MS/MS Determination of BAN2401 in Human Serum Samples Originating From Eisai Study: "An Open-Label, Parallel-Group, Randomized Study to Evaluate the Absolute Bioavailability of Single Dose Subcutaneous Administration of Lecanemab in Healthy Subjects" (BAN2401-A001-004) (110-R12282)	20[redacted]	[redacted]	外国	参考資料	無
100	5.3.1.4.99	Detection of Anti-BAN2401 Antibodies in Human Serum by ECL From Study BAN2401-A001-004 (45-2103A)	20[redacted]	[redacted]	外国	参考資料	無
101	5.3.1.4.100	Detection of Neutralizing Anti-BAN2401 Antibodies in Human Serum by ECL From Study BAN2401-A001-004 (45-2103B)	20[redacted]	[redacted]	外国	参考資料	無
102	5.3.1.4.101	検査法バリデーション結果: ヒトAPOE 遺伝子多型解析 (8949)	20[redacted]	[redacted]	日本	参考資料	無

5.3.2　ヒト生体試料を用いた薬物動態関連の試験報告書

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料
1	5.3.2.3.1	BAN2401 Partition in Plasma and Blood (EIS-R1912R1)	20[redacted] （報告書作成年月）	[redacted] （米国）	外国	参考資料

5.3.3　臨床薬物動態（PK）試験報告書

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
1	5.3.3.5.1	Population Pharmacokinetic and Exposure-Response Analyses for Efficacy (CDR-SB & ADAS-Cog14) and Safety (ARIA-E and and Isolated ARIA-H) of Lecanemab in Patients with Early Alzheimer's Disease. （Report Number: CPMS-BAN2401-003R1-v1）	2022.12 （報告書作成年月）	Eisai Inc.	外国	参考資料	有
2	5.3.3.5.2	Exposure-Response Analyses for Pharmacodynamic Biomarkers (Amyloid PET, Plasma Aβ42/40 Ratio and p-tau181, and tau PET) of Lecanemab in Patients with Early Alzheimer's Disease. （Report Number: CPMS-BAN2401-003R2-v1）	2022.12 （報告書作成年月）	Eisai Inc.	外国	参考資料	有
3	5.3.3.5.3	Summary Report of the Influence of APOE4 Genotype on Lecanemab Exposure-Response Relationships. （Report Number: CPMS-BAN2401-003R-ADD-v1）	2022.12 （報告書作成年月）	Eisai Inc.	外国	参考資料	有

5.3.4　臨床薬力学（PD）試験報告書

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
1	5.3.4.2.1	A Randomized, Double-Blind, Placebo-Controlled, Combined Single Ascending Dose and Multiple Ascending Dose Study to Assess Safety, Tolerability, Immunogenicity, Pharmacodynamic Response, and Pharmacokinetics of Intravenous Infusions of BAN2401 in Subjects With Mild to Moderate Alzheimer's disease (Protocol Number: BAN2401-A001-101)	2010.8-2012.9	15施設 （米国）	外国	参考資料	有
2	5.3.4.2.2	A Randomized, Double-Blind, Placebo-Controlled, Combined Single Ascending Dose and Multiple Ascending Dose Study to Assess Safety, Tolerability, Immunogenicity, Pharmacodynamic Response, and Pharmacokinetics of Intravenous Infusions of BAN2401 in Subjects With Mild to Moderate Alzheimer's disease (Protocol Number: BAN2401-A001-101) - CLINICAL STUDY REPORT ADDENDUM	2010.8-2012.9	15施設 （米国）	外国	参考資料	有
3	5.3.4.2.3	A Randomized, Double-Blind, Placebo-Controlled Study to Assess Safety, Tolerability, Pharmacokinetics, Immunogenicity, and Pharmacodynamic Response of Repeated Intravenous Infusions of BAN2401 in Subjects With Mild Cognitive Impairment due to Alzheimer's Disease and Mild Alzheimer's Disease (Protocol Number: BAN2401-J081-104)	2013.9-2015.3	7施設 （日本）	国内	評価資料	有
4	5.3.4.2.4	A Randomized, Double-Blind, Placebo-Controlled Study to Assess Safety, Tolerability, Pharmacokinetics, Immunogenicity, and Pharmacodynamic Response of Repeated Intravenous Infusions of BAN2401 in Subjects With Mild Cognitive Impairment due to Alzheimer's Disease and Mild Alzheimer's Disease (Protocol Number: BAN2401-J081-104) - CLINICAL STUDY REPORT ADDENDUM 1	2013.9-2015.3	7施設 （日本）	国内	評価資料	有

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
5	5.3.4.2.5	A Randomized, Double-Blind, Placebo-Controlled Study to Assess Safety, Tolerability, Pharmacokinetics, Immunogenicity, and Pharmacodynamic Response of Repeated Intravenous Infusions of BAN2401 in Subjects With Mild Cognitive Impairment due to Alzheimer's Disease and Mild Alzheimer's Disease (Protocol Number: BAN2401-J081-104) - CLINICAL STUDY REPORT ADDENDUM 2	2013.9-2015.3	7施設 （日本）	国内	評価資料	有

5.3.5　有効性及び安全性試験報告書

5.3.5.1 申請する適応症に関する比較対照試験報告書

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
1	5.3.5.1.1	A Placebo-Controlled, Double-Blind, Parallel-Group, Bayesian Adaptive Randomization Design and Dose Regimen-Finding Study With an Open-Label Extension Phase to Evaluate Safety, Tolerability and Efficacy of BAN2401 in Subjects With Early Alzheimer's Disease (Protocol Number: BAN2401-G000-201)	2012.12-2018.7	149施設 （米国，日本等）	外国	評価資料	有
2	5.3.5.1.2	A Placebo-Controlled, Double-Blind, Parallel-Group, Bayesian Adaptive Randomization Design and Dose Regimen-Finding Study With an Open-Label Extension Phase to Evaluate Safety, Tolerability and Efficacy of BAN2401 in Subjects With Early Alzheimer's Disease (Protocol Number: BAN2401-G000-201) - CLINICAL STUDY REPORT ADDENDUM	2012.12-2018.7	149施設 （米国，日本等）	外国	評価資料	有
3	5.3.5.1.3	A Placebo-Controlled, Double-Blind, Parallel-Group, Bayesian Adaptive Randomization Design and Dose Regimen-Finding Study With an Open-Label Extension Phase to Evaluate Safety, Tolerability and Efficacy of BAN2401 in Subjects With Early Alzheimer's Disease (Protocol Number: BAN2401-G000-201 [Open-Label Extension]) – SYNOPTIC CLINICAL STUDY REPORT	2018.12-2021.6 （データカットオフ日）	59施設 （米国，日本等）	外国	評価資料	有
4	5.3.5.1.4	A Placebo-Controlled, Double-Blind, Parallel-Group, 18-Month Study With an Open-Label Extension Phase to Confirm Safety and Efficacy of BAN2401 in Subjects With Early Alzheimer's Disease (Protocol Number: BAN2401-G000-301)	2019.3-2022.8	235施設 （米国，日本等）	外国	評価資料	有
5	5.3.5.1.5	A Placebo-Controlled, Double-Blind, Parallel-Group, 18-Month Study With an Open- Label Extension Phase to Confirm Safety and Efficacy of BAN2401 in Subjects With Early Alzheimer's Disease (Protocol Number: BAN2401-G000-301 [Open-Label Extension Phase]) - SYNOPTIC CLINICAL STUDY REPORT	2019.3*-2022.4 （データカットオフ日） *起点は301試験Core Studyの開始日。Core Studyから継続するOLE期としての開始日は2020.11	184施設 （米国，日本等）	外国	評価資料	有
6	5.3.5.1.6	BAN2401-G000-201 Biomarker Report	2012.12-2018.7	—	外国	評価資料	有

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
7	5.3.5.1.7	BAN2401: Mechanistic Aspects	2019.9	—	外国	参考資料	無
8	5.3.5.1.8	A Placebo-Controlled, Double-Blind, Parallel-Group, Bayesian Adaptive Randomization Design and Dose Regimen-Finding Study With an Open-Label Extension Phase to Evaluate Safety, Tolerability and Efficacy of BAN2401 in Subjects With Early Alzheimer's Disease (Protocol Number: BAN2401-G000-201 [Open-Label Extension]) - SYNOPTIC CLINICAL STUDY REPORT	2018.12-2022.4 （データカットオフ日）	59施設 （米国，日本等）	外国	評価資料	有
9	5.3.5.1.9	Report of the deviations for site 3006 - BAN2401-G000-301	2019.3-2022.8	235施設 （米国，日本等）	外国	評価資料	無

5.3.5.3　複数の試験成績を併せて解析した報告書

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
1	5.3.5.3.1	Integrated Summary of Efficacy	2021.11（報告書作成日）	—	外国	評価資料	無
2	5.3.5.3.2	Integrated Summary of Safety	2021.11（報告書作成日）	—	外国	評価資料	有
3	5.3.5.3.3	Integrated Summary of Immunogenicity	2021.11（報告書作成日）	—	外国	評価資料	有
4	5.3.5.3.4	Analyses in Japanese Population - BAN2401-G000-201 Core	—	—	国内	評価資料	無
5	5.3.5.3.5	Additional Analyses of BAN2401 for Japan CTD	—	—	国内	評価資料	無
6	5.3.5.3.6	Analyses in Japanese Population - BAN2401-G000-301	—	—	国内	評価資料	無
7	5.3.5.3.7	Integrated Summary of Efficacy	2022.12（報告書作成日）	—	外国	参考資料	無
8	5.3.5.3.8	Integrated Summary of Safety	2022.12（報告書作成日）	—	外国	参考資料	無
9	5.3.5.3.9	Integrated Summary of Immunogenicity	2022.12（報告書作成日）	—	外国	参考資料	無

5.3.5.4 その他の試験報告書

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料	申請電子データ提出
1	5.3.5.4.1	Subgroup analyses by PET tracer and PET procedure manuals - BAN2401-G000-301	—	—	国内	参考資料	無

5.3.7　患者データ一覧表及び症例記録

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料
1	5.3.7.1	症例一覧表 （BAN2401-J081-104）	2013.9-2015.3	7施設（日本）	国内	評価資料
2	5.3.7.2	有害事象一覧表 （BAN2401-J081-104）	2013.9-2015.3	7施設（日本）	国内	評価資料
3	5.3.7.3	重篤な有害事象一覧表 （BAN2401-J081-104）	2013.9-2015.3	7施設（日本）	国内	評価資料
4	5.3.7.4	臨床検査異常値一覧表 （BAN2401-J081-104）	2013.9-2015.3	7施設（日本）	国内	評価資料
5	5.3.7.5	症例一覧表 （BAN2401-G000-201）	2012.12-2018.7	149施設（米国，日本等）	外国	評価資料
6	5.3.7.6	有害事象一覧表 （BAN2401-G000-201）	2012.12-2018.7	149施設（米国，日本等）	外国	評価資料
7	5.3.7.7	重篤な有害事象一覧表 （BAN2401-G000-201）	2012.12-2018.7	149施設（米国，日本等）	外国	評価資料
8	5.3.7.8	臨床検査異常値一覧表 （BAN2401-G000-201）	2012.12-2018.7	149施設（米国，日本等）	外国	評価資料
9	5.3.7.9	症例一覧表 （BAN2401-G000-201 [Open-Label Extension]）	2018.12-2022.4（データカットオフ日）	59施設（米国，日本等）	外国	評価資料
10	5.3.7.10	有害事象一覧表 （BAN2401-G000-201 [Open-Label Extension]）	2018.12-2022.4（データカットオフ日）	59施設（米国，日本等）	外国	評価資料
11	5.3.7.11	重篤な有害事象一覧表 （BAN2401-G000-201 [Open-Label Extension]）	2018.12-2022.4（データカットオフ日）	59施設（米国，日本等）	外国	評価資料
12	5.3.7.12	臨床検査異常値一覧表 （BAN2401-G000-201 [Open-Label Extension]）	2018.12-2022.4（データカットオフ日）	59施設（米国，日本等）	外国	評価資料
13	5.3.7.13	症例一覧表 （BAN2401-G000-301）	2019.3-2022.8	235施設（米国，日本等）	外国	評価資料
14	5.3.7.14	有害事象一覧表 （BAN2401-G000-301）	2019.3-2022.8	235施設（米国，日本等）	外国	評価資料

番号	添付資料番号	タイトル	試験実施期間	試験実施場所	報種類	評価資料・参考資料
15	5.3.7.15	重篤な有害事象一覧表 （BAN2401-G000-301）	2019.3-2022.8	235施設 （米国，日本等）	外国	評価資料
16	5.3.7.16	臨床検査異常値一覧表 （BAN2401-G000-301）	2019.3-2022.8	235施設 （米国，日本等）	外国	評価資料
17	5.3.7.17	症例一覧表 （BAN2401-G000-301 [Open-Label Extension]）	2019.3*-2022.4 （データカットオフ日）	184施設 （米国，日本等）	外国	評価資料
18	5.3.7.18	有害事象一覧表 （BAN2401-G000-301 [Open-Label Extension]）	2019.3*-2022.4 （データカットオフ日）	184施設 （米国，日本等）	外国	評価資料
19	5.3.7.19	重篤な有害事象一覧表 （BAN2401-G000-301 [Open-Label Extension]）	2019.3*-2022.4 （データカットオフ日）	184施設 （米国，日本等）	外国	評価資料
20	5.3.7.20	臨床検査異常値一覧表 （BAN2401-G000-301 [Open-Label Extension]）	2019.3*-2022.4 （データカットオフ日）	184施設 （米国，日本等）	外国	評価資料

*起点は301試験Core Studyの開始日。Core Studyから継続するOLE期としての開始日は2020.11

5.4 参考文献

番号	タイトル
1	Abushakra S, Porsteinsson A, Vellas B, Cummings J, Gauthier S, Hey JA, et al. Clinical benefits of tramiprosate in Alzheimer's disease are associated with higher number of APOE4 alleles: The “APOE4 Gene-Dose Effect”. J Prev Alzheimers Dis. 2016;3(4):219-28
2	Aizenstein HJ, Nebes RD, Saxton JA, Price JC, Mathis CA, Tsopelas ND, et al. Frequent amyloid deposition without significant cognitive impairment among the elderly. Arch Neurol. 2008;65(11):1509–17.
3	Alzheimer’s Disease International. World Alzheimer Report 2022: Life after diagnosis: Navigating treatment, care and support. London;Alzheimer's Disease International (ADI). 2022.
4	Alzheimer's Association. 2021 Alzheimer’s disease facts and figures. Alzheimers Dement 2021;17(3).
5	Amadoru S, Dore V, McLean C, Hinton F, Shepherd C, Halliday G et al. Comparison of amyloid PET measured in Centiloid units with neuropathological findings in Alzheimer’s disease. Alzheimer’s Res Ther 12, 22 (2020)
6	Amieva H, Le Goff M, Millet X, Orgogozo J, Peres K, Barberger-Gateau P, et al. Prodromal Alzheimer's disease: successive emergence of the clinical symptoms. Ann Neurol. 2008;64(5): 492-8
7	日本核医学会，日本認知症学会，日本神経学会 編. アミロイド PET イメージング剤の適正使用ガイドライン改訂第2版. 2017.
8	Andrews JS, Desai U, Kirson NY, Zichlin ML, Ball DE, Matthews BR, et al. Disease severity and minimal clinically important differences in clinical outcome assessments for Alzheimer’s disease clinical trials. Alzheimers Dement (N Y). 2019;5:354-63.
9	Bateman R, Mielke M, Hansson O, Blennow K. S1- Ctad 2022 Fluid Biomarker Symposium: Recent Advances in Plasma and CSF Alzheimer Biomarkers to Improve Clinical Practice and Trials. JPAD The Journal of Prevention of Alzheimer’s Disease. 2022;(9S1)S8-9.
10	Berg L, Miller JP, Storandt M, Duchek J, Morris JC, Rubin EH, et al. Mild senile dementia of the Alzheimer type: 2. Longitudinal assessment. Ann Neurol. 1988;23:477-
11	Birks J. Cholinesterase inhibitors for Alzheimer's disease. Cochrane Database Syst Rev. 2006(1)
12	Budd Haeberlein S, Aisen PS, Barkhof F, Chalkias S, Chen T, Cohen S, et al. Two Randomized Phase 3 Studies of Aducanumab in Early Alzheimer's Disease. J Prev Alzheimers Dis. 2022;9(2):197-210.
13	Bullich S, Roe-Vellve N, Marquie M, Landau S, Barthel H, Villemagne V et al. Early detection of amyloid load using 18F-florbetaben PET. Alzheimer’s Res Ther 13, 67
14	Cedarbaum JM, Jaros M, Hernandez C, Coley N, Andrieu S, Grundman M, et al. Rationale for use of the Clinical Dementia Rating Sum of Boxes as a primary outcome measure for Alzheimer's disease clinical trials. Alzheimers Dement. 2013;9:S45-S55.
15	Cohen S, Cummings J, Knox S, Potashman M, Harrison J. Clinical Trial Endpoints and Their Clinical Meaningfulness in Early Stages of Alzheimer's Disease. J Prev Alzheimers Dis. 2022;9(3):507-522.
16	Coric V, Van Dyck CH, Salloway S, Andreason N, Brody M, Richter R et al. Safety and tolerability of the γ-secretase inhibitor avagacestat in a phase 2 study of mild to moderate Alzheimer disease. Arch Neurol. 2012;69(11):1430-40.
17	Cummings J, Lee G, Ritter A, Zhong K. Alzheimer's disease drug development pipeline: 2018. Alzheimer’s Dement (NY). 2018;4:195–214.
18	Delacourte A, Sergeant N, Champain D, Wattez A, Maurage C-A, Lebert F, et al. Nonoverlapping but synergetic tau and APP pathologies in sporadic Alzheimer's disease. Neurology. 2002;59(3):398-407

番号	タイトル
19	DiBenedetti DB, Slota C, Wronski SL, Vradenburg G, Comer M, Callahan LF, et al. Assessing what matters most to patients with or at risk for Alzheimer's and care partners: a qualitative study evaluating symptoms, impacts, and outcomes. Alz Res Therapy. 2020;12(90).
20	Dubois B, Feldman HH, Jacova C, Cummings J, Dekosky S, Barberger-Gateau P, et al. Revising the definition of Alzheimer's disease: a new lexicon. Lancet Neurol. 2010;9(11):1118-27
21	Dubois B, Villain N, Frisoni GB, Rabinovici G, Sabbagh M, Cappa S, et al. Clinical diagnosis of Alzheimer's disease: recommendations of the International Working Group. Lancet Neurol. 2021;20(6):484-96
22	Egan MF, Kost J, Voss T, Mukai Y, Aisen P, Cummings J et al. Randomized Trial of Verubecestat for ProdromaAlzheimer's Disease. The New England journal of medicine. 2019;380(15):1408-1420.
23	Elias-Sonnenschein LS, Viechtbauer W, Ramakers IH, Verhey F, Visser P. Predictive value of APOE-ε4 allele for progression from MCI to AD-type dementia: a meta-analysis. J Neurol Neurosurg Psychiatry. 2011;82(10):1149-56
24	European Medicines Agency. Points to consider on application with 1. Meta-analyses; 2. One pivotal study. CPMP/EWP/2330/99. 2001.
25	European Medicines Agency. Guideline for good clinical practice E6(R2). EMA/CHMP/ICH/135/1995 Rev.2; 2016.
26	European Medicines Agency. Draft guideline on the clinical investigation of medicines for the treatment of Alzheimer's disease and other dementias. EMA/CHMP/539931/2014. 2016.
27	European Medicines Agency. Guideline on the clinical investigation of medicines for the treatment of Alzheimer's disease. CPMP/EWP/553/95 Rev.2; 2018
28	Engler H, Forsberg A, Almkvist O, Blomquist G, Larsson E, Savitcheva I, et al. Two-year follow-up of amyloid deposition in patients with Alzheimer's disease. Brain. 2006;129:2856–66.
29	Englund H, Sehlin D, Johansson AS, Nilsson L, Gellerfors P, Paulie S. Sensitive ELISA detection of amyloid-β protofibrils in biological samples. J Neurochem.
30	FDA Medical Review. Biogen BLA 761178.
31	Food And Drug Administration. Early Alzheimer's Disease: Demonstrating Substantial Evidence of Effectiveness for Human Drug and Biological Products Guidance for Industry; 2019.
32	Food and Drug Administration. Guidance for Industry: Adverse Reactions Section of Labeling for Human Prescription Drug and Biological Products – Content and
33	Food And Drug Administration. Alzheimer's Disease: Developing Drugs for the Treatment of Early Stage Disease Guidance for Industry; 2013
34	Food And Drug Administration. Early Alzheimer's Disease: Developing Drugs for Treatment Guidance for Industry; 2018
35	Fleisher AS, Chen K, Liu X, Roontiva A, Thiyyagura P, Ayutyanont N, et al. Using positron emission tomography and florbetapir F18 to image cortical amyloid in patients with mild cognitive impairment or dementia due to Alzheimer disease. Arch Neurol. 2011 Nov;68(11):1404-11.
36	GBD 2016 Dementia Collaborators. Global, regional, and national burden of Alzheimer's disease and other dementias, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet Neurol. 2019;18:88-106.
37	Gustavsson A, Norton N, Fast T, Frölich L, Georges J, Holzapfel D, et al. Global estimates on the number of persons across the Alzheimer's disease continuum. Alzheimer's & dementia: the journal of the Alzheimer's Association. 2022;10.1002/alz.12694.
38	Hardy J, Selkoe DJ. The amyloid hypothesis of Alzheimer's disease: progress and problems on the road to therapeutics. Science. 2002;297(5580):353-6
39	Hashimoto T, Serrano-Pozo A, Hori Y, Adams K, Takeda S, Banerji A, et al. Apolipoprotein e, especially apolipoprotein e4, increases the oligomerization of amyloid β peptide. J Neuriosci. 2012;32(43):15181-92

番号	タイトル
40	Hori Y, Hashimoto T, Nomoto H, Hyman BT, Iwatsubo T. Role of apolipoprotein e in ß- amyloidogenesis: isoform-specific effects on protofibril to fibril conversion of Aβ in vitro and brain a deposition in vivo. J Biol Chem. 2015;290:15163-74
41	公益財団法人ヒューマンサイエンス振興財団. 平成29年度国内基盤技術調査報告書「アルツハイマー病（アルツハイマー型認知症）に関する医療ニーズ調査」. 2017年度.
42	公益財団法人ヒューマンサイエンス振興財団. 2019年度国内基盤技術調査報告書「60 疾患に関する医療ニーズ調査（第6回目）」. 2019年度.
43	ICH E9 (R1): Addendum on Estimands and Sensitivity Analysis in Clinical Trials to the Guideline on Statistical Principles for Clinical Trials. 2019.
44	稲村圭亮, 繁田雅弘. 認知症—概念と分類, 鑑別診断—. 耳鼻咽喉科展望. 2020;63(1):36–41.
45	Irizarry MC, Jin S, He F, Emond JA, Raman R, Thomas RG, et al. Incidence of new-onset seizures in mild to moderate Alzheimer disease. Arch Neurol. 2012
46	Ising C, Stanley M, Holtzman DM. Current thinking on the mechanistic basis of Alzheimer's and implications for drug development. Clin Pharmacol Ther.
47	Iwatsubo T, Iwata A, Suzuki K, Ihara R, Arai H, Ishii K, et al. Japanese and North American Alzheimer's Disease Neuroimaging Initiative studies: Harmonization for international trials. Alzheimers Dement. 2018;14(8):1077-87.
48	Jack CR, Knopman DS, Jagust WJ, Petersen, RC, Weiner MW, Aisen PS, et al. Tracking pathophysiological processes in Alzheimer's disease: an updated hypothetical model of dynamic biomarkers. Lancet Neurol. 2013;12(2):207-16
49	Jack CR, Bennett DA, Blennow K, Carrillo M, Dunn B, Budd Haeberlein S, et al. NIA-AA research framework: toward a biological definition of Alzheimer's disease. Alzheimers Dement. 2018;14(4):535-62
50	Janelidze S, Mattsson N, Palmqvist S, Smith R, Beach T, Serrano G, et al. Plasma P-tau181 in Alzheimer's disease: relationship to other biomarkers, differential diagnosis, neuropathology and longitudinal progression to Alzheimer's dementia. Nat Med 26, 379–386 (2020).
51	日本神経学会. 認知症疾患診療ガイドライン. 2017.
52	Kaplow JM, Kusnetov G, Mastroeni D, Navia B, Kumar N, Biscaro B, et al. Microglial involvement and amyloid reduction with BAN2401/mAb158, a monoclonal antibody with high selectivity for protofibrils: In vitro and ex vivo analyses. 2013;807-8
53	Karikari TK, Pascoal TA, Ashton NJ, Janelidze S, Benedet AL, Rodriguez JL, et. al. Blood phosphorylated tau 181 as a biomarker for Alzheimer's disease: a diagnostic performance and prediction modelling study using data from four prospective cohorts. Lancet Neurol. 2020;19:422–33.
54	Khalil M, Teunissen C, Otto M, Piehl F, Sormani M, Gattringer T, et al. Neurofilaments as biomarkers in neurological disorders. Nature Reviews, Neurology.
55	Kirmess KM, Meyer MR, Holubasch MS, Knapik SS, Hu Y, Jackson EN, et. al. The PrecivityADTM test: Accurate and reliable LC-MS/MS assays for quantifiying plasma amyloid beta 40 and 42 and apolipoprotein E proteotype for the assessment of brain amyloidosis. Clin Chim Acta. 2021;519:267–75.
56	Koffie RM, Hashimoto T, Tai HC, Kay KR, Serrano-Pozo A, Joyner D, et al. Apolipoprotein e4 effects in Alzheimer's disease are mediated by synaptotoxic oligomeric amyloid-β. Brain. 2012;135(7):2155-68
57	Kvartsberg H, Duits F, Ingelsson M, Andreasen N, Öhrfelt A, Andersson K, et al. Cerebrospinal fluid levels of the synaptic protein neurogranin correlates with cognitive decline in prodromal Alzheimer's disease. Alz&Dementia. 2015;11:1180-90.
58	Lacor PN, Buniel MC, Chang L, Fernandez SJ, Gong Y, Viola KL, et al. Synaptic targeting by Alzheimer's-related amyloid β oligomers. J Neurosci. 2004;24:10191-200.
59	Lacor PN, Buniel MC, Furlow PW, Clemente AS, Velasco PT, Wood M, et al. Aβ oligomer induced aberrations in synapse composition, shape, and density provide a molecular basis for loss of connectivity in Alzheimer's disease. J Neurosci. 2007;27:796-807.
60	Lansdall CJ, McDougall F, Butler LM, Delmar P, Pross N, Qin S, et al. Establishing Clinically Meaningful Change on Outcome Assessments Frequently Used in Trials of Mild Cognitive Impairment Due to Alzheimer's Disease. J Prev Alzheimers Dis (2022). 2022; https://doi.org/10.14283/jpad.2022.102.

番号	タイトル
61	Leonenko G, Shoai M, Bellou E, Sims R, Williams J, Hardy J, et al. The Alzheimer's Disease Neuroimaging Initiative. Genetic risk for Alzheimer disease is distinct from genetic risk for amyloid deposition. Ann Neurol. 2019;86:427–35.
62	Liu KY, Schneider LS, Howard R. The need to show minimum clinically important differences in Alzheimer's disease trials. Lancet Psychiatry. 2021;8(11):1013-6.
63	Mathis CA, Price JC, Klunk WE, Weissfield L, McNamee R, Wolk DA, et al. Longitudinal PIB measures in control, MCI, and AD subjects. J Nucl Med. 2008;49:35P.
64	Mattsson N, Insel PS, Palmqvist S, Portelius E, Zetterberg H, Weiner M, et al. Cerebrospinal fluid tau, neurogranin, and neurofilament light in Alzheimer's disease. EMBO Molecular Medicine 2016;8:1184-96
65	Mattsson N, Andreasson U, Zetterberg H, Blennow K, Alzheimers Disease Neuroimaging Initiative (ADNI). Association of plasma neurofilament light with neurodegeneration in patients with Alzheimer disease. JAMA Neurol. 2017;74(5):557-66
66	Mattsson N, Groot C, Jansen WJ, Landau SM, Villemagne VL, Engelborghs S, et al. Prevalence of the apolipoprotein E ε4 allele in amyloid β positive subjects across the spectrum of Alzheimer's disease. Alzheimers Dement. 2018;14(7):913-24
67	McKhann GM, Knopman DS, Chertkow H, Hyman BT, Jack, Jr. CR, Kawash CH, et al. The diagnosis of dementia due to Alzheimer's disease: Recommendations from the National Institute on Aging and the Alzheimer's Association workgroup on diagnostic guidelines for Alzheimer's disease. Alzheimer's & Dementia. 2011;7(3);263–9.
68	McShane R, Areosa Sastre A, Minakaran N. Memantine for dementia. Cochrane Database Syst Rev. 2006(2):1-80
69	厚生労働科学研究費補助金認知症対策総合研究事業. 都市部における認知症有病率と認知症の生活機能障害への対応. 平成23年度～平成24年度総合研究報告書. 2013.
70	厚生労働省科学研究費研究班. 認知症に関する脳脊髄液・血液バイオマーカーの適正使用指針. 2021;1.
71	Mintun MA, Lo AC, Duggan Evans C, Wessels AM, Ardayfio PA, Andersen SW, et al. Donanemab in Early Alzheimer's Disease. N Engl J Med. 2021;384(18):1691-
72	Morris J. Clinical dementia rating: a reliable and valid diagnostic and staging measure for dementia of the Alzheimer type. Int Psychogeriatr. 1997;9 Suppl 1:173-6;
73	Musiak ES, Holtzman DM. Three dimensions of the amyloid hypothesis: time, space, and "Wingmen". Nat Neurosci. 2015;18:800–6.
74	Nakamura A, Kaneko N, Villemagne VL, Kato T, Doecke J, Dore V, et al. High performance plasma amyloid-β biomarkers for Alzheimer's disease Nature 2018;554:249-
75	Nilsberth C, Westlind-Danielsson A, Eckman CB, Condron MM, Axelman K, Forsel C, et al. 2001. The "arctic" app mutation (E693G) causes Alzheimer's disease by enhanced Aβ protofibril formation. Nat. Neurosci. 2001;4(9):887–93
76	Olsson B, Lautner R, Andreasson U, Öhrfelt A, Portelius E, Bjerke M, et al. CSF and blood biomarkers for the diagnosis of Alzheimer's disease: a systematic review and meta-analysis. Lancet Neurol. 2016;15:673-84.
77	Ono K, Tsuji M. Protofibrils of Amyloid-β are Important Targets of a Disease-Modifying Approach for Alzheimer's Disease. Int J Mol Sci. 2. 2020;21(3):952.
78	A phase III randomized trial of gantenerumab in prodromal Alzheimer's disease.
79	Pascoal TA, Shin M, Kang MS, Chamoun M, Chartrand D, Mathotaarachchi S, et al. In vivo quantification of neurofibrillary tangles with [18F]MK-6240. Alzheimers Res Ther. 2018;10(1):74. doi: 10.1186/s13195-018-0402-y.
80	Rockwood K, Strang D, MacKnight C, Downer R, Morris JC. Interrater reliability of the Clinical Dementia Rating in a multicenter trial. Journal of the American Geriatrics Society. 2000;48(5):558-559.
81	Roé-Vellvé N, Bullich S, Marquie M, Barthel H, Villemagne V, Sanabria A et al. Quantitative thresholds for 18F-florbetaben PET for the detection of low amyloid load. Alzheimer's Dementia 16, (2020).
82	Rogers SL, Farlow MR, Doody RS, Mohs R, Friedhoff LT. A 24-week, double-blind, placebo-controlled trial of donepezil in patients with Alzheimer's disease. Donepezil Study Group. Neurology. 1998;50(1):136–45.

番号	タイトル
83	Rosen WG, Mohs RC, Davis KL. A new rating scale for Alzheimer's disease. Am J Psychiatry. 1984;141(11):1356-64
84	Rowe C, Dore V, Jones G, Baxendale D, Mulligan R, Bullich S et al. 18F-Florbetaben PET beta-amyloid binding expressed in Centiloids. Eur J Nucl Med Mol I 44, 2053–2059 (2017).
85	Rowe C, Amadoru S, Dore V, McLean C, Hinton F, Shepherd C et al. Correlation of amyloid PET expressed in Centiloid unites with neuropathological findings in Alzheimer's disease. Alzheimer's Dementia 14, P634 (2018).
86	Sabbagh M, Van Dyck CH. Response to: Multiple Cerebral Hemorrhages in a Patient Receiving Lecanemab and Treated with t-PA for Stroke. N Engl J Med. 2023 Jan 4; doi: 10.1056/NEJMc2215907.
87	Salloway S, Chalkias S, Barkhof F, Burkett P, Barakos J, Purcell D et al. Amyloid-Related Imaging Abnormalities in 2 Phase 3 Studies Evaluating Aducanumab in Patients With Early Alzheimer Disease. JAMA Neurol. 2021 Nov 22.
88	Salvadó G, Molinuevo JL, Brugulat-Serrat A, Falcon C, Grau-Rivera O, Suarez-Calvet M et al. Centiloid cut-off values for optimal agreement between PET and CSF core AD biomarkers. Alzheimer's Res Ther 11, 27 (2019).
89	Samtani M, Raghavan N, Novak G, Nandy P, Narayan V. Disease progression model for Clinical Dementia Rating–Sum of Boxes in mild cognitive impairment and Alzheimer's subjects from the Alzheimer's Disease Neuroimaging Initiative. Neuropsychiatr. Dis. Treat. 2014;10:929-52.
90	Schindler SE, Bollinger JG, Ovod V, Mawuenyega KG, Li Y, Gordon BA, et al. High-precision plasma β-amyloid 42/40 predicts current and future brain amyloidosis. Neurology. 2019;93(17):e1647-59
91	Selkoe DJ. The therapeutics of Alzheimer's disease: where we stand and where we are heading. Ann Neurol. 2013;74(3):328-36.
92	Shi M, Chu F, Zhu F, Zhu F. Impact of Anti-amyloid-β Monoclonal Antibodies on the Pathology and Clinical Profile of Alzheimer's Disease: A Focus on Aducanumab and Lecanemab. Front Aging Neurosci. 2022;14(870517).
93	下濱俊. アルツハイマー病の新たな診断基準. 日本老年医学会雑誌. 2013;50(1):18.
94	Shughrue PJ, Acton PJ, Breese RS, Zhao W-Q, Chen-Dodson, E, Hepler RW, et al. Anti ADDL antibodies differentially block oligomer binding to hippocampal neurons. Neurobiol Aging. 2010;31(2):189-202.
95	Sperling RA, Aisen P, Becket L, Bennett D, Craft S, Fagan A, et al. Toward defining the preclinical stages of Alzheimer's disease: recommendations from the NIA-AA workgroups on diagnostic guidelines for AD. Alzheimer's & Dementia. 2011;7:280-292.
96	Suzuki K, Hirakawa A, Ihara R, Iwata A, Ishii K, Ikeuchi T, et al. Effect of apolipoprotein E ε4 allele on the progression of cognitive decline in the early stage of Alzheimer's disease. Alzheimers Dement. 2020;6:e12007.
97	Swanson CJ, Kaplow J, Mastroeni D, Rogers J, Waara ER, Navia B et al. Pharmacology of BAN2401: A Monoclonal Antibody Selective for Beta-Amyloid Protofibrils. Alzheimer's Association International Conference. 2013.
98	Swanson CJ, Zhang Y, Dhadda S, Wang J, Kaplow J, Lai RYK, et al. A randomized, double-blind, phase 2b proof-of-concept clinical trial in early Alzheimer's disease with lecanemab, an anti-Aβ protofibril antibody. Alzheimers Res Ther. 2021;13:80.
99	Tahami Monfared AA, Tafazzoli A, Ye W, Chavan A, Zhang Q. Long-Term Health Outcomes of Lecanemab in Patients with Early Alzheimer's Disease Using Simulation Modeling. Neurol Ther. 2022;11(2):863-80.
100	Tahami Monfared AA, Tafazzoli A, Ye W, Chavan A, Deger KA, Zhang Q. A Simulation Model to Evaluate the Potential Impact of Disease-Modifying Treatments on Burden of Illness in Alzheimer's Disease. Neurol Ther. 2022;11(4):1609–23.

番号	タイトル
101	Thijssen EH, La Joie R , Wolf A , Strom A, Wang P, Iaccarino L, et al. Diagnostic value of plasma phosphorylated tau181 in Alzheimer's disease and frontotemporal lobar degeneration Nat Med 2020:26(3):387-97
102	Townsend M, Shankar GM, Mehta T, Walsh DM, Selkoe DJ. Effects of secreted oligomers of amyloid beta-protein on hippocampal synaptic plasticity: a potent role for trimers. J Physiol. 2006;572(2):477-492.
103	Tucker S, Möller C, Tegerstedt K, Lord A, Laudon H, Sjödahl J, et al. The murine version of BAN2401 (mAb158) selectively reduces amyloid-β protofibrils in brain and cerebrospinal fluid of tg-ArcSwe mice. J Alzheimers Dis. 2015;43(2):575-88
104	Vandenberghe R, Van Laere K, Ivanoiu A, Salmon E, Bastin C, Triau E et al. 18F-flutemetamol amyloid imaging in Alzheimer disease and mild cognitive impairment. A Phase 2 trial. Ann Neurol. 2010;68:319-29.
105	Van Dyck CH. Anti-Amyloid-β Monoclonal Antibodies for Alzheimer's Disease: Pitfalls and Promise. Biol Psychiatry. 2018;83:311–9.
106	Van Dyck CH, Swanson CJ, Aisen P, Bateman RJ, Chen C, Gee M, et al. Lecanemab in Early Alzheimer's Disease. N Engl J Med. 2022;29:doi:
107	Villemagne V, Pike K, Chételat G, Ellis K, Mulligan R, Bourgeat P, et al. Longitudinal assessment of Aβ and cognition in aging and Alzheimer disease. Ann Neurol. 2011;69(1):181-92
108	Wang SS, Becerra-Arteaga A, Good TA. Development of a novel diffusion-based method to estimate the size of the aggregated Abeta species responsible for neurotoxicity. Biotechnol Bioeng. 2002;80(1):50-59.
109	Wisniewski T, Goñi F. Immunotherapeutic approaches for Alzheimer's disease. Neuron. 2015;85(6):1162-76.
110	Wang J, Logovinsky V, Hendrix S, Stanworth S, Perdomo C, Xu L, et al. ADCOMS: A Composite Clinical Outcome For Prodromal Alzheimer's Disease Trials. J Neurol Neurosurg Psychiatry. 2016;87(9):993-9.
111	Landau S, Fero A, Baker S, Koeppe R, Mintun M, Chen K, et al. Measurement of longitudinal β-amyloid change with 18F-florbetapir PET and standardized uptake value ratios. J Nucl Med. 2015;56(4):567-74

提出すべき資料がない項目リスト

第3部　品質に関する文書

3.2.R	各極の要求資料
3.3	参考文献

第5部　臨床試験報告書

5.3.5.2	非対照試験報告書
5.3.6	市販後の使用経験に関する報告書