

# Summary of Investigation Results

## Iodinated contrast media, etc.

July 20, 2022

### **Non-proprietary name**

See Attachment

### **Brand name (Marketing authorization holder)**

See Attachment

### **Indications**

See Attachment

### **Summary of revisions**

d. Iopamidol, f. Iohexol, l. Iomeprol

“Acute coronary syndrome accompanying allergic reaction” should be added to the Clinically Significant Adverse Reactions section.

### **Investigation results and background of the revision**

Cases of acute coronary syndrome accompanying allergic reaction reported in Japan for iodinated contrast media or preparations containing the same active ingredients were evaluated. Cases for which a causal relationship between the drug and event was reasonably possible have been reported in Japan. As a result of consultation with expert advisors, MHLW/PMDA concluded that revision of Precautions of Iopamidol, Iohexol, and Iomeprol was necessary. On the other hand, based on the status of data collection, etc., revision of Precautions of the other products was concluded to be unnecessary since no evidence exists to support the necessity of uniform precautions for all the iodinated contrast media, etc.



**Number of cases and patient mortalities of acute coronary syndrome associated with allergic reaction reported in Japan during the previous 3 fiscal years\***

a. Sodium amidotrizoate and meglumine amidotrizoate

No cases have been reported to date.

b. Sodium amidotrizoate and meglumine amidotrizoate

No cases have been reported to date.

c. Iotrolan

No cases have been reported to date.

d. Iopamidol

A total of 14 cases have been reported to date (including 2 cases for which a causal relationship between the drug and event was reasonably possible).

A total of 2 patient mortalities have been reported to date. (A causal relationship between the drug and death subsequent to the event could not be established for any of these cases.)

e. Meglumine iotroxate

No cases have been reported to date.

f. Iohexol

A total of 6 cases have been reported to date (including 4 cases for which a causal relationship between the drug and event was reasonably possible).

No patient mortalities have been reported to date.

g. Iodixanol

No cases have been reported to date.

h. Ioversol

A total of 2 cases have been reported to date. (A causal relationship between the drug and event could not be established for any of these cases.)

No patient mortalities have been reported to date.

i. Ethyl ester of iodinated poppy-seed oil fatty acid

1 case has been reported to date. (A causal relationship between the drug and event could not be established for this case.)

1 instance of patient mortality has been reported to date. (A causal relationship between the drug and death subsequent to the event could not be established for this case.)

j. Iodine addition products of the ethylesters of the fatty acids obtained from poppyseed oil

No cases have been reported to date.

k. Iopromide

1 case has been reported to date. (A causal relationship between the drug and event could not be established for this case.)

No patient mortalities have been reported to date.

l. Iomeprol

A total of 2 cases have been reported to date. (A causal relationship between the drug and event was reasonably possible for these cases.)

No patient mortalities have been reported to date.

\*Serious cases identified as involving MedDRA SMQ “Ischaemic heart disease (SMQ)” (broad) reported to PMDA and non-serious cases identified as involving MedDRA SMQ “Ischaemic heart disease (SMQ)” (broad) informed by MAHs were added up. The possibility of a causal relationship with the drugs was evaluated for those cases in which both the hypersensitivity symptoms at the onset of adverse reactions and information on the evaluation of coronary arteries could be confirmed by the clinical courses.

The expert advisors present at the Expert Discussion regarding the current investigation were nominated based on their conflict of interest declarations concerning the relevant products, pursuant to the “Rules for Convening Expert Discussions, etc., by the Pharmaceuticals and Medical Devices Agency” (PMDA Administrative Rule No. 20-8, dated December 25, 2008).

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Attachment

	Non-proprietary name	Brand name	Marketing authorization holder	Indications
a.	Sodium amidotrizoate and meglumine amidotrizoate	Urografin Injection 60%	Bayer Yakuhin Ltd.	Retrograde urography, endoscopic retrograde cholangiopancreatography, percutaneous transhepatic cholangiography, arthrography
		Urografin Injection 76%		Sialography
b.		Gastrografin for oral/enema use	Bayer Yakuhin Ltd.	Contrastography of the gastrointestinal tract Contrastography of gastrointestinal tract in the following conditions Suspected stenosis Acute haemorrhage Risk of perforation (gastrointestinal ulcer, diverticulum) Any other acute symptoms that

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
				require surgery Post operation of gastric and intestinal resection (risk of perforation, risk of anastomotic leakage) Contrastography of foreign bodies and ulcer before endoscopy Gastrointestinal fistulography Contrastography of upper GI in computer-assisted tomography
c.	Iotrolan	Isovist injection 240	Bayer Yakuhin Ltd.	Myelography Ventriculography, cisternography, myelography in computer-assisted tomography Arthrography
		Isovist injection 300		Hysterosalpingography Arthrography

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
d.	lopamidol	lopamiron injection 150, and the others	Bayer Yakuhin Ltd., and the others	Arteriography by digital X-ray method, computer-assisted tomography, intravenous urography, retrograde urography
		lopamiron injection 300, and the others		Cerebral angiography, aortography, selective angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method, computer-assisted tomography, intravenous urography, retrograde urography
		lopamiron injection 370, and the others		Angiocardiography (including pulmonary arteriography), aortography, selective angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
				method, computer-assisted tomography, intravenous urography
		lopamiron injection 300 syringes, and the others		Cerebral angiography, aortography, selective angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method, computer-assisted tomography, intravenous urography, retrograde urography
		lopamiron injection 370 syringes, and the others		Angiocardiography (including pulmonary arteriography), aortography, selective angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method, computer-assisted tomography, intravenous urography

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
e.	Meglumine iotroxate	Biliscopin DIC 50	Bayer Yakuhin Ltd.	Cholecystography/cholangiography
f.	Iohexol (for urinary tract, blood vessel)	Omnipaque 140 Injection 50 mL, 220 mL, and the others	GE Healthcare Pharma Co., Ltd., and the others	Arteriography by digital X-ray method, computer-assisted tomography
		Omnipaque 240 Injection 20 mL, 50 mL, 100 mL, and the others		Extremities angiography, computer- assisted tomography, intravenous urography
		Omnipaque 300 Injection 20 mL, 50 mL, 100 mL, 150 mL, and the others		Cerebral angiography, selective angiography, extremities angiography, arteriography by digital X-ray method, venography by digital X-ray method, computer-assisted tomography, intravenous urography
		Omnipaque 350 Injection 20 mL, 50 mL, 100 mL, and the others		Angiocardiography (including pulmonary arteriography), aortography, selective angiography,

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
				extremities angiography, venography by digital X-ray method, computer-assisted tomography, intravenous urography, angiocardiology of pediatrics (including pulmonary arteriography)
	Iohexol (for cistern, spinal cord)	Omnipaque 180 Injection 10 mL, and the others		Cisternography by computer-assisted tomography, myelography by computer-assisted tomography Lumbar myelography
		Omnipaque 240 Injection 10 mL, and the others		Cisternography by computer-assisted tomography, myelography by computer-assisted tomography Cervical myelography, thoracic myelography, lumbar myelography

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
		Omnipaque 300 Injection 10 mL, and the others		Myelography by computer-assisted tomography Cervical myelography
	Iohexol (for urinary tract,	Omnipaque 240 Injection Syringe 100 mL, and the others		Extremities angiography, computer-assisted tomography, intravenous urography

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	blood vessel, CT)	Omnipaque 300 Injection Syringe 50 mL, 80 mL, 100 mL, 110 mL, 125 mL, 150 mL, and the others		Cerebral angiography, selective angiography, extremities angiography, arteriography by digital X-ray method, venography by digital X-ray method, computer-assisted tomography, intravenous urography
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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
		Omnipaque 350 Injection Syringe 45 mL, 70 mL, 100 mL, and the others		Angiocardiology (including pulmonary arteriography), aortography, selective angiography, extremities angiography, venography by digital X-ray method, computer-assisted tomography, intravenous urography, angiocardiology of pediatrics (including pulmonary arteriography)
g.	Iodixanol	Visipaque 270 Injection 20 mL, 50 mL, 100 mL	GE Healthcare Pharma Co., Ltd., and the others	Cerebral angiography, extremities angiography, retrograde urography, endoscopic retrograde cholangiopancreatography
		Visipaque 320 Injection 50 mL, 100 mL		Extremities angiography

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h.	loversol	Optiray 240 Injection Syringe 100 mL	Guerbet Japan KK	Computer-assisted tomography
		Optiray 320 Injection Syringe 75 mL, 100 mL,		Cerebral angiography, aortography, selective angiography, extremities angiography, arteriography by digital X-ray method, venography by digital X-ray method, computer-assisted tomography, intravenous urography
		Optiray 350 Injection Syringe 100 mL		Angiocardiography, aortography, selective angiography, abdominal computer-assisted tomography
		Optiray 350 Injection Syringe 135 mL		Abdominal computer-assisted tomography
		Optiray 320 Injection 20 mL, 50 mL, 100 mL		Cerebral angiography, aortography, selective angiography, extremities angiography, arteriography by digital X-ray method, venography by digital

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
		Optiray 350 Injection 20 mL, 50 mL, 100 mL		X-ray method, computer-assisted tomography, intravenous urography Angiocardiography, aortography, selective angiography, abdominal computer-assisted tomography
i.	Ethyl ester of iodinated poppy-seed oil fatty acid	Lipiodol 480 inj. 10 mL	Guerbet Japan KK	Lymphangiography, hysterosalpingography, preparation of drugs or medical devices
j.	Iodine addition products of the ethylesters of the fatty acids obtained from poppyseed oil	Miripla Suspension Vehicle 4 mL	Sumitomo Pharma Co., Ltd.	Suspension of Miripla for Intra-arterial Injection 70 mg

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
k.	Iopromide	Proscope 300 Syringe 50 mL, 80 mL, 100 mL, and the others	Alfresa Pharma Corporation, and the others	Cerebral angiography, thoracic angiography, abdominal angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method, computer- assisted tomography, intravenous urography
		Proscope 370 Syringe 50 mL, 80 mL, 100 mL, and the others		Angiocardiography, thoracic angiography, abdominal angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method, computer- assisted tomography, intravenous urography

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		Proscope 300 Injection 20 mL, 50 mL, 100 mL, and the others		Cerebral angiography, thoracic angiography, abdominal angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method, computer-assisted tomography, intravenous urography
		Proscope 370 Injection 20 mL, 50 mL, 100 mL and the others		Angiocardiography, thoracic angiography, abdominal angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method, computer-assisted tomography, intravenous urography

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
I.	lomeprol	lomeron 300 injection 20 mL, 50 mL, 100 mL, and the others	Bracco-Eisai Co.,Ltd.	Cerebral angiography, thoracic angiography, abdominal angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method, computer-assisted tomography, intravenous urography
		lomeron 350 injection 20 mL, 50 mL, 100 mL		Angio cardiography, thoracic angiography, abdominal angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method, computer-assisted tomography, intravenous urography

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	Non-proprietary name	Brand name	Marketing authorization holder	Indications
		lomeron 400 injection 50 mL, 100 mL		Angio cardiography, thoracic angiography, abdominal angiography, intravenous urography
		lomeron 300 syringe 50 mL, 75 mL, 100 mL		Computer-assisted tomography, intravenous urography, cerebral angiography, thoracic angiography, abdominal angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method
		lomeron 350 syringe 50 mL, 75 mL, 100 mL, 135 mL		Computer-assisted tomography, intravenous urography, angio cardiography, thoracic angiography, abdominal angiography, extremities angiography, venography by digital X-ray method, arteriography by digital X-ray method

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