

Revised: September 2009 (12th version)

Standard Commodity Classification No. of Japan

877219

- Nonionic contrast medium -

**Iomeron<sup>®</sup>** 300 Injection 20mL  
**Iomeron<sup>®</sup>** 300 Injection 50mL  
**Iomeron<sup>®</sup>** 300 Injection 100mL  
**Iomeron<sup>®</sup>** 350 Injection 20mL  
**Iomeron<sup>®</sup>** 350 Injection 50mL  
**Iomeron<sup>®</sup>** 350 Injection 100mL  
**Iomeron<sup>®</sup>** 400 Injection 20mL  
**Iomeron<sup>®</sup>** 400 Injection 50mL  
**Iomeron<sup>®</sup>** 400 Injection 100mL

&lt;Iomeprol injections&gt;

Prescription drug

**Storage**

IOMERON should be stored at room temperature.  
 IOMERON should be protected from light after opening package.

**Expiration date**

IOMERON should be used before the expiration date indicated on the package or label.

**Caution:** Use only as directed by a physician.**WARNINGS**

1. Serious adverse reactions such as shock may occur.
2. Never use IOMERON for cisternography or myelography, because its injection into the brain and spinal canal may cause serious adverse reactions.

**CONTRAINDICATIONS (IOMERON is contraindicated in the following patients.)**

1. Patients with a history of hypersensitivity to iodine or iodine contrast media
2. Patients with serious thyroopathy  
 [Symptoms may be aggravated due to changes in thyroid gland function because the iodine concentration may increase in the thyroid gland.]

**RELATIVE CONTRAINDICATIONS (As a general rule, IOMERON is contraindicated in the following patients. If the use of IOMERON is considered essential, it should be administered with care.)**

1. Patients with an extremely poor general condition
2. Patients with bronchial asthma  
 [It has been reported that patients with bronchial asthma have a higher risk of adverse reactions than those without bronchial asthma.]
3. Patients with serious cardiac function disorder  
 [Cardiac function may be impaired due to deterioration in hemodynamics.]
4. Patients with serious hepatic function disorders

[Symptoms may be aggravated.]

5. Patients with serious renal function disorders  
 [Contrast media are excreted mainly through the kidneys. Excretion may be delayed and renal function may be impaired.]
6. Patients with acute pancreatitis  
 [Symptoms may be aggravated.]
7. Patients with macroglobulinemia  
 [Deaths due to the formation of gels in the blood have been reported with analogue compounds.]
8. Patients with multiple myeloma  
 [Obstruction of renal tubules due to conjugation with urinary protein has been reported with analogue compounds.]
9. Patients with tetany  
 [Symptoms may be aggravated due to decrease in the blood calcium.]
10. Patients with known or suspected pheochromocytoma  
 [Adrenal venography should be avoided because paroxysmal increase in blood pressure, tachycardia, arrhythmias or other symptoms may occur. When the patients is given an examination, if necessary, intravenous access should be maintained, and appropriate measures such as preparing a sufficient amount of an  $\alpha$ -adrenergic blocking agent, such as phentolamine mesylate, etc. or  $\beta$ -adrenergic blocking agent, such as propranolol hydrochloride etc., taken and then IOMERON administered with care.]

Iomeron 300 Injection			
	20mL	50mL	100mL
Approval No.	22100AMX00721000	22100AMX00722000	22100AMX00723000
Date of listing in the NHI reimbursement price	Sep 2009		
Date of initial marketing in Japan	May 1994		
Date of latest reexamination	Mar 2004		
International birth date	Dec 1992		

Iomeron 350 Injection			
	20mL	50mL	100mL
Approval No.	22100AMX00696000	22100AMX00694000	22100AMX00695000
Date of listing in the NHI reimbursement price	Sep 2009		
Date of initial marketing in Japan	May 1994		
Date of latest reexamination	Mar 2004		
International birth date	Dec 1992		

Iomeron 400 Injection			
	20mL	50mL	100mL
Approval No.	22100AMX00697000	22100AMX00698000	22100AMX00699000
Date of listing in the NHI reimbursement price	Sep 2009		
Date of initial marketing in Japan	May 1994		
Date of latest reexamination	Mar 2004		
International birth date	Dec 1992		

## DESCRIPTION

### IOMERON 300 Injection:

Each mL of IOMERON contains 612.4 mg (equivalent to 300 mg of iodine) of iomeprol.

### IOMERON 350 Injection:

Each mL of IOMERON contains 714.4 mg (equivalent to 350 mg of iodine) of iomeprol.

### IOMERON 400 Injection:

Each mL of this product contains 816.5 mg (equivalent to 400 mg of iodine) of iomeprol.

		IOMERON 300 Injection			IOMERON 350 Injection			IOMERON 400 Injection		
Iodine content (mg/mL)		300			350			400		
Content (mL)		20	50	100	20	50	100	20	50	100
Active ingredient	Iomeprol content (g)	12.25	30.62	61.24	14.29	35.72	71.44	16.33	40.82	81.65
	(Iodine content (g))	(6)	(15)	(30)	(7)	(17.5)	(35)	(8)	(20)	(40)
Inactive ingredients	Trometamol content (mg)	20	50	100	20	50	100	20	50	100
	Hydrochloric acid	q.s.								
Appearance		Colorless and clear liquid								
pH		6.5 - 7.5			6.5 - 7.5			6.5 - 7.5		
Osmotic pressure (ratio relative to isotonic sodium chloride solution)		approx. 2			approx. 2			approx. 3		
Viscosity (37°C, mPa · s)		4.3			7.0			13.6		

## INDICATIONS

### IOMERON 300 Injection:

Cerebral angiography, thoracic angiography, abdominal angiography, peripheral angiography, intravenous digital subtraction angiography, intraarterial digital subtraction angiography, visualization in computed tomography and intravenous urography

### IOMERON 350 Injection:

Angiocardiology, thoracic angiography, abdominal angiography, peripheral angiography, intravenous digital subtraction angiography, intraarterial digital subtraction angiography, visualization in computed tomography and intravenous urography

### IOMERON 400 Injection:

Angiocardiology, thoracic angiography, abdominal angiography and intravenous urography

## DOSAGE AND ADMINISTRATION

The usual adult doses are as indicated below. The dosage may be adjusted depending on the patient's age, body weight, symptoms and purpose of use. In the case of multiple-dose administration, a total dosage of 250 mL should not be exceeded.

Radiological examination		IOMERON 300 Injection	IOMERON 350 Injection	IOMERON 400 Injection
Cerebral angiography		5 - 15 mL	—	—
Angiocardiology	Intracardiac	—	20 - 50 mL	20 - 40 mL
	Coronary arteries	—	3 - 10 mL	3 - 8 mL
Thoracic angiography		5 - 50 mL	5 - 50 mL	5 - 50 mL
Abdominal angiography		5 - 60 mL	5 - 60 mL	5 - 60 mL
Peripheral angiography		10 - 80 mL	10 - 80 mL	—
Intravenous digital subtraction angiography		10 - 50 mL	10 - 50 mL	—
Intraarterial digital subtraction angiography		3 - 40 mL	3 - 40 mL	—

Radiological examination	IOMERON 300 Injection	IOMERON 350 Injection	IOMERON 400 Injection
Visualization in computed tomography	40 - 100 mL	40 - 100 mL	—
	Given by intravenous drip infusion or other suitable method.	Given by intravenous drip infusion or other suitable method. In the case of visualization in dynamic computed tomography of hepatic region, 1.8mL/kg dose may be administered intravenously depending on body weight (Maximal dosage is 135mL).	—
Intravenous urography	40 - 100 mL	30 - 100 mL	50 mL
	Given by intravenous drip infusion or other suitable method.	Given by intravenous drip infusion or other suitable method.	Given by intravenous injection.

The dosage according to body weight of IOMERON 350 Injection is referred to “<precaution>”.

### <Precaution>

The dosage (IOMERON 350 Injection) according to body weight for the case of visualization in dynamic computed tomography of hepatic region is referred to the following table.

Body Weight (kg)	Dosage (mL)
<56	40 ~ 100
The maximum dosage for 56 ~ 75kg body weight is 1.8mL/kg	
60	108(1.8mL/kg body weight)
65	117(1.8mL/kg body weight)
70	126(1.8mL/kg body weight)
75	135(1.8mL/kg body weight)
75<	135

## PRECAUTIONS

### 1. Careful Administration (IOMERON should be administered with care in the following patients.)

- (1) Patients with a personal or familial predisposition to allergic reactions, such as bronchial asthma, rash or urticaria, etc.
- (2) Patients with a history of drug hypersensitivity
- (3) Patients with symptoms of dehydration  
[Symptoms of dehydration may be aggravated.]
- (4) Patients with hypertension  
[Hemodynamics may be adversely affected.]
- (5) Patients with arteriosclerosis  
[Hemodynamics may be adversely affected.]
- (6) Patients with diabetes mellitus  
[Renal functions may be impaired.]
- (7) Patients with thyropathy  
[Symptoms may be aggravated due to changes in thyroid gland function because the blood iodine concentration may increase in the thyroid gland.]
- (8) Patients with impaired hepatic functions  
[Hepatic functions may be further impaired. See “Relative Contraindications” section.]
- (9) Patients with impaired renal functions

[Renal functions may be further impaired. See “Relative Contraindications” section.]

- (10) Patients with myasthenia gravis  
[Symptoms may be aggravated. Cardiopulmonary arrest has been reported.]
- (11) Patients with central nerve system disorders  
[Cerebrovascular disorder or convulsions, etc. may occur.]
- (12) The elderly  
[See “Use in the Elderly” section.]
- (13) Infants and pediatric patients  
[See “Pediatric Use” section.]

## 2. Important Precautions

- (1) Patients should be carefully interviewed to prepare for shock or any other emergency.
- (2) Hypersensitive reactions may occur after administering IOMERON, regardless of dose or route of administration. Shock or other serious adverse reactions resulting from its use are not always due to hypersensitive reactions to iodine, and, there is no reliable method of predicting them. IOMERON should be administered under emergency measures on standby.
- (3) Patients should be carefully observed for hypersensitive reactions since it begins to administer IOMERON. In the event of abnormal symptoms, administration should be discontinued immediately and appropriate measures taken.
- (4) During and after the injection of IOMERON, the patient’s condition should be carefully observed, because **serious delayed adverse reactions (including shock)**, etc. may occur.
- (5) When IOMERON is administered to **outpatients, it should be explained that delayed adverse reactions** may occur 1 hr to several days after administration. They should be advised to contact their physician immediately, if symptoms such as nausea, chest pain, back pain, fever, eruptions, itching, etc. which appear to be adverse reactions to IOMERON, occur.  
[See “Clinical studies” section.]

## 3. Drug Interactions

Precautions for coadministration (IOMERON should be administered with care when coadministered with the following drugs.)

Drugs	Signs, Symptoms, and Treatment	Mechanism and Risk Factors
Biguanide antidiabetic agents Metformin hydrochloride Buformin hydrochloride, etc.	Lactic acidosis has been reported after iodine contrast media coadministration with biguanide antidiabetic agents. When using IOMERON, appropriate measures, such as temporary discontinuation of biguanide antidiabetic agents, should be taken.	Blood concentration of biguanide antidiabetic agents may increase due to a decrease in their renal excretion.

## 4. Adverse Reactions

Adverse reactions were reported in 398 of 7,820 patients (5.09%). (At the end of reexamination period and at the time of

additional approval of dosage and administration on visualization in dynamic computed tomography of hepatic region)

### (1) Clinically significant adverse reactions

#### 1) Shock

Syncope, unconsciousness, dyspnea, respiratory arrest, cardiac arrest or other symptoms due to shock (including delayed reactions) (<0.1%) may occur. Patients should be carefully observed, since even mild hypersensitivity symptoms may develop into serious symptoms. In the event of such symptoms, appropriate measures should be taken immediately.

#### 2) Anaphylactoid reactions

Anaphylactoid reactions (including delayed reactions) (<0.1%) such as dyspnea or pharyngolaryngeal edema may occur. Patients should be carefully observed. In the event of such symptoms, appropriate measures should be taken immediately.

#### 3) Pulmonary edema

Pulmonary edema (<0.1%) may occur. In the event of such symptoms, appropriate measures should be taken immediately.

#### 4) Adult respiratory stress syndrome

Adult respiratory stress syndrome (incidence unknown) may occur. In the event of such symptoms, appropriate measures should be taken immediately.

#### 5) Ventricular fibrillation and coronary artery spasm

Ventricular fibrillation (incidence unknown) or coronary artery spasm (incidence unknown) may occur. In the event of such symptoms, appropriate measures should be taken immediately.

#### 6) Hepatic function disorders and jaundice

Hepatic function disorders (<0.1%) such as elevation of AST (GOT), ALT (GPT) or  $\gamma$ -GTP, or jaundice (incidence unknown) may occur. In the event of such abnormal findings, appropriate measures should be taken immediately.

#### 7) Cerebrovascular disorders

Ischemic or permanent cerebral circulatory failure (cerebral ischemia) (incidence unknown) may occur. In the event of such abnormal findings, appropriate measures should be taken immediately.

#### 8) Convulsive seizure

Convulsive seizure (<0.1%) may occur. In the event of such symptoms, appropriate measures should be taken immediately.

#### 9) Disturbed consciousness and syncope

Disturbed consciousness (incidence unknown) and syncope (incidence unknown) without shock may occur. Patients should be carefully observed, and if symptoms such as decreased consciousness occur, appropriate measures should be taken immediately.

#### 10) Paralysis

Paralysis (incidence unknown) during cerebral angiography has been reported. Patients should be carefully observed. In the event of such symptoms, appropriate measures should be taken immediately.

**11) Renal failure**

Acute renal failure (<0.1%) may occur. Patients should be carefully observed. In the event of such symptoms, appropriate measures should be taken immediately.

**12) Thrombocytopenia**

Thrombocytopenia (incidence unknown) may occur. Patients should be carefully observed. In the event of such symptoms, appropriate measures should be taken immediately.

**13) Dermatologic disorders**

Oculo-muco-cutaneous syndrome (Stevens-Johnson syndrome) (incidence unknown) may occur. Patients should be carefully observed, and if symptoms such as fever, erythema, itching, eye hyperemia, stomatitis, etc. occur, appropriate measures should be taken immediately.

**(2) Other adverse reactions**

	5%> ≥0.1%	<0.1%	Incidence unknown
Hypersensitivity <small>(note)</small>	Rash, redness, itching, urticaria and wheals		
Psychoneurologic	Headache	Photophobic sensation, dizziness, tremor, feeling of light-headedness, sleepiness (somnolence) and aphasia	Visual disturbance such as transient blindness, weakness, amnesia, speech disorder and anxiety (unrest)
Gastrointestinal	Nausea and vomiting	Thirst, abdominal pain, increase in saliva and diarrhea	Oral cavity discomfort, stomatitis and anorexia
Cardiovascular	Decrease in blood pressure	Bradycardia, extrasystoles, increase in blood pressure, ST depression, tachycardia and palpitations	Facial pallor, heart failure, cyanosis and arrhythmia
Respiratory	Sneezing and coughing	Dyspnoea, rhinitis, stridor and abnormal pharyngo-laryngeal sensation	Hoarseness
Others	Fever, malaise and feeling of warmth	Chest pain, increased sweating, elevation of BUN and serum potassium, rigors, back pain, numbness, conjunctivitis, edema, facial hot flushes, vascular pain, elevation of serum creatinine, taste abnormality and dysosmia	Hiccups, lacrimation, anuria and eye abnormalities

Note) In the event of such symptoms, treatment should be discontinued and appropriate measures taken.

**5. Use in the Elderly**

IOMERON is excreted mainly through the kidneys. As renal functions are often lower in the elderly, there is a tendency for the blood concentration will remain high. IOMERON should be administered carefully to the elderly, observing their condition.

**6. Use during Pregnancy, Delivery or Lactation**

(1) IOMERON should only be used in pregnant women or women suspected of being pregnant provided that the expected diagnostic benefits are evaluated to outweigh the possible risk of treatment.

[The safety of IOMERON in pregnant women has not been established, and it is used in combination with X rays.]

(2) Nursing mothers should discontinue breast feeding temporarily during treatment.

[In animal studies (rats, i.v.), it has been reported that IOMERON is excreted in breast milk.]

**7. Pediatric Use**

The safety in low birth weight infants, neonates, nursing infants, infants and children has not been established (insufficient clinical experience).

**8. Effects on Laboratory Tests**

When it is necessary to carry out a diagnostic procedure using radioactive iodine such as thyroid gland function testing, it should be done before administering IOMERON. In addition, no testing with radioactive iodine should be done within one month of using IOMERON. (It may influence the test results.)

**9. Precautions concerning Use****(1) Route of administration**

Never use IOMERON for cisternography or myelography.

**(2) Rate of administration**

In IOMERON 350 Injection, rate of administration is up to 5.0mL/second in the case of visualization in dynamic computed tomography of hepatic region. The safety in rate of administration more than 5.0mL/second has not been established.

**(3) Preparatory measures**

- 1) Heat IOMERON to body temperature before use.
- 2) Do not restrict patients' water intake before use.
- 3) In urography, gas should be eliminated from the intestines beforehand and the patients should be fasted until the radiographic procedure has been completed.

**(4) Administration**

- 1) Vascular pain may occur after intravenous administration of IOMERON.
- 2) In an *in vitro* study, nonionic contrast media have a weaker blood coagulation inhibiting effect than ionic contrast media. Therefore, prior to angiography, thoroughly flush out the catheter. When injecting IOMERON, avoid leaving it in contact with blood in a syringe or a catheter for long periods of time.
- 3) If IOMERON is mixed with antihistamines or adrenocortical hormone preparations, this may cause changes of compatibility. Therefore, they should be administered separately when used concomitantly.
- 4) Since redness, swelling, blister, vascular pain or other symptoms may occur when contrast media leak out of a vascular vessel, they should be administered carefully.

**(5) Post-administration**

Post-administration, let patients take enough water to aid the excretion of the contrast medium.

## (6) Opening package

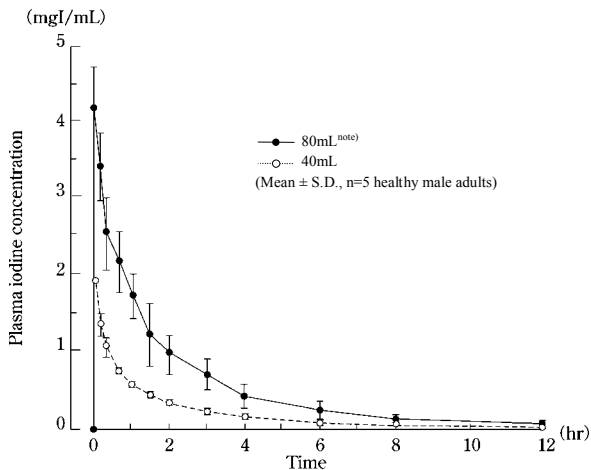
IOMERON should be used promptly after opening package.

**PHARMACOKINETICS****1. Blood concentration and urinary excretion**

In 10 healthy adult male volunteers who were administered intravenously iomeprol 400 mgI/mL at a single dose of 40 or 80 mL <sup>note</sup> at a rate of 10 mL/min, changes in the plasma iodine concentration were practically in proportion to the dose and, after administration, the plasma iodine concentration declined in a biphasic manner. The elimination half-life in plasma was 22.3 min for  $t_{1/2\alpha}$  (distribution phase) and 1.95 hr for  $t_{1/2\beta}$  (excretion phase). The volume of central compartment (Vc) was 0.11 L/kg and total plasma clearance was 99.0 mL/min.

Further, the urinary excretion rate of the unchanged drug was 80.0 % of dosage up to 4 hrs and 97.5 % up to 24 hrs after administration. <sup>1)</sup>

Note) A single dose of 80mL of iomeprol 400mgI/mL is unapproved.

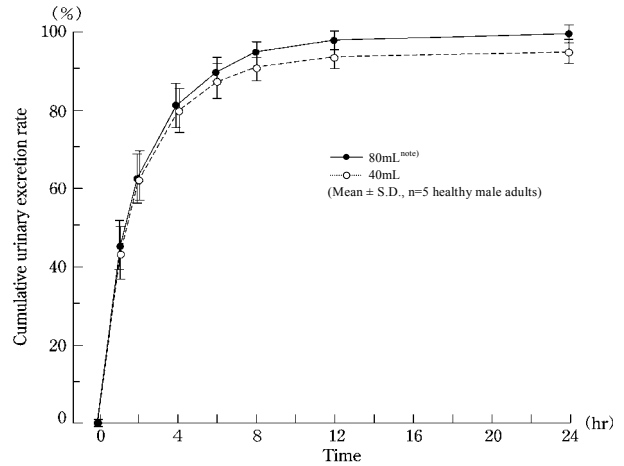


Time course in mean plasma iodine concentrations after administration at a single doses of 40mL and 80mL <sup>note</sup> of iomeprol 400mgI/mL

**Pharmacokinetic parameters after intravenous administration at a single dose of iomeprol 400 mg I/mL**

$t_{1/2\alpha}$ (min)	$t_{1/2\beta}$ (hr)	Vc (L/kg)	Vd (L/kg)	CL (mL/min)
22.33±6.79	1.95±0.15	0.11±0.02	0.24±0.05	99.03±21.22

(Mean±S.D., n=10 healthy adult male volunteers)



Cumulative urinary excretion rate after administration at a single doses of 40mL and 80mL <sup>note</sup> of iomeprol 400mgI/mL

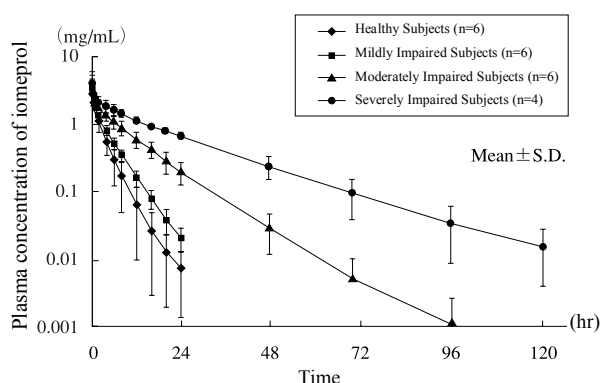
**2. Blood concentration at the time of renal function disorder and urinary excretion**

(Data from outside Japan)

Iomeprol 400 mgI/mL was administered intravenously at a single dose of 50 mL to six healthy volunteers with normal renal function ( $GFR^{note} > 100 \text{ mL/min/1.73m}^2$ ), six patients with mild renal failure ( $GFR^{note} 51-75 \text{ mL/min/1.73m}^2$ ), six patients with moderate renal failure ( $GFR^{note} 26-50 \text{ mL/min/1.73m}^2$ ), and four patients with severe renal failure ( $GFR^{note} < 25 \text{ mL/min/1.73m}^2$ ), iomeprol concentration in plasma and urine were determined.

Time course in mean iomeprol plasma concentration after single intravenous administration of iomeprol and pharmacokinetic parameters were referred to the following. In patients with renal impairment, the elimination half-time ( $t_{1/2\beta}$ ) increased with increasing renal impairment, the renal clearance and glomerular filtration rate decreased with increasing renal impairment, compared with healthy volunteers. The rate of urinary excretion within 120 hr after administration showed a similar decrease with increasing renal impairment, decrease by 68.3% in severe renal failure compared to 93.5% in healthy volunteers. The rate of urinary excretion mild and moderate renal failure was 90.4% and 85.1% respectively, did not vary significant decrease like severe renal failure. <sup>2)</sup>

Note) Inulin clearance measurement method.



Time course of plasma concentration after intravenous administration at a single doses of 50mL of iomeprol 400 mgI/mL

Pharmacokinetic parameters of iomeprol in healthy volunteers and renal function disorders

PK parameter	Normal (n=6)	Severity of renal function disorder		
		Mild (n=6)	Moderate (n=6)	Severe (n=4)
$t_{1/2\beta}$ (hr)	2.34±0.44	3.67±0.46	6.9±1.6	15.1±4.3
AUC <sub>0</sub> (hr)	7.7±2.6	10.3±1.2	22.1±4.5	46.4±3.1
Vd (L)	8.3±1.7	8.7±0.9	8.2±2.5	10.7±3.3
CL (mL/min)	95±25	66.8±8.2	31.8±6.5	14.7±0.9
CLR (mL/min)	88.3±30 <sup>note1)</sup>	60.5±8.1	27.3±7.5	10.1±1.8
GFR <sup>note2)</sup> (mL/min)	120±30	72±9.8	38.3±6.8	20.0±3.16
FE (%)	93.5±5.5 <sup>note1)</sup>	90.4±4.6	85.1±9.0	68.3±10.6

Note 1) n=5 Note 2) Inulin clearance measurement method.

## CLINICAL STUDIES

### 1. Effectiveness

#### (1) Computed tomography and urography

The radiographic efficacy in 1,925 patients (those included in radiographic efficacy evaluation) reported in comparative clinical trials and open labeled clinical trials was 98.2% (1,891 patients).

#### (2) Visualization in dynamic computed tomography of hepatic region (IOMERON 350 Injection and IOMERON 350 Injection Syringe)

In phase II / phase III clinical trial in 173 patients with hepatic tumors, were evaluated by independent 3 assessors on radiographic efficacy of tumor mass in fixed contrast dose of 100 mL, 1.5 mL and 1.8 mL per kg bodyweight. Rate of subjects who judged "excellent" or "good" was 98.3% ~ 100% except for 1 patient of fixed contrast dose of 100 mL. Rate of subjects who judged "excellent" was 63.8% in fixed contrast dose of 100 mL, 57.9% in 1.5 mL per kg bodyweight and 84.5% in 1.8mL per kg bodyweight. In radiographic efficacy of tumor mass, when IOMERON was compared fixed contrast dose of 100 mL with 1.8 mL per kg bodyweight, 1.8 mL per kg bodyweight was significantly superior to fixed contrast dose of 100 mL. When IOMERON was compared 1.5 mL per kg bodyweight with 1.8 mL per kg bodyweight, 1.8 mL per kg bodyweight was significantly superior to 1.5 mL per kg bodyweight.<sup>3)</sup>

## 2. Delayed adverse reactions

(1) A breakdown by time of occurrence of delayed adverse reactions which occurred 1 hr after the injection of IOMERON 300 Injection, 350 Injection, 400 Injection (vial) and IOMERON 300 Injection Syringe, 350 Injection Syringe or thereafter in clinical trial at approval is shown in the table below.<sup>4, 5, 6)</sup>

No. of patients assessed	Within 1 hr	Within 3 hr	Within 6 hr	Within 12 hr	Within 24hr	After 24 hr	Total No. of events
2,147	114 (70.4)	20 (12.3)	8 (4.9)	4 (2.5)	7 (4.3)	9 (5.6)	162 (100.0)

\* Except for abnormal in laboratory test values

Tables in parentheses indicate % of total ( ): %

(2) A breakdown by time of occurrence of delayed adverse reactions which occurred 1 hr after the injection of IOMERON 350 Injection (vial) and IOMERON 350 Injection Syringe or thereafter in clinical trial at approval of dosage and administration on visualization in dynamic computed tomography of hepatic region is shown in the table below.

No. of patients assessed	Within 1 hr	Within 3 hr	Within 6 hr	Within 12 hr	Within 24hr	After 24 hr	Total No. of events
173	6 (46.2)	0	1 (7.7)	0	0	6 (4.2)	13 (100.0)

\* Except for abnormal in laboratory test values

Tables in parentheses indicate % of total ( ): %

Adverse reactions which occurred 1 hr after the injection of IOMERON were itching in 1 patient, rash in 1 patient, malaise in 1 patient, feeling of discomfort in 1 patient, increase in blood pressure in 1 patient, bronchitis in 1 patient and epistaxis in 1 patient.

In clinical trial, laboratory test values were determined within 3 days. Abnormal in laboratory test values which occurred 1 day after the injection of IOMERON were 5 patients (leucopenia in 2 patients, leukocytosis in blood bilirubin increase 1 patient, in 1 patient, elevation of ALT (GPT) in 1 patient).<sup>3)</sup>

## PHYSICOCHEMISTRY

**Nonproprietary name:** Iomeprol (JAN, INN)

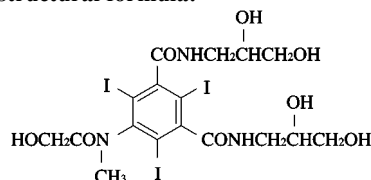
**Chemical name:**

diastereomeric mixture of *N, N'*-bis (2,3-dihydroxypropyl)-5-[(hydroxyacetyl) methylamino]-2,4,6- triiodo-1,3-benzenedicarboxamide

**Molecular formula:** C<sub>17</sub>H<sub>22</sub>I<sub>3</sub>N<sub>3</sub>O<sub>8</sub>

**Molecular weight:** 777.09

**Structural formula:**



### Description:

Iomeprol occurs as a white crystalline powder.

It is odorless. It is very soluble in water, soluble in methanol, slightly soluble in ethanol (99.5), and practically insoluble in chloroform and in diethylether.

An aqueous solution (1 in 10) shows no optical rotation.

**Partition coefficient:**  $2.972 \times 10^{-3}$  (water: 1-octanol)

#### **PACKAGING**

**Imeron 300 Injection 20mL:** Boxes of 5 vials  
**Imeron 300 Injection 50mL:** Boxes of 5 vials  
**Imeron 300 Injection 100mL:** Boxes of 5 vials  
**Imeron 350 Injection 20mL:** Boxes of 5 vials  
**Imeron 350 Injection 50mL:** Boxes of 5 vials  
**Imeron 350 Injection 100mL:** Boxes of 5 vials  
**Imeron 400 Injection 20mL:** Boxes of 5 vials  
**Imeron 400 Injection 50mL:** Boxes of 5 vials  
**Imeron 400 Injection 100mL:** Boxes of 5 vials

#### **REFERENCES**

- 1) Nakashima M. et al.: J. Clin. Ther. Med., **8**, 19, 1992.
- 2) Lorusso, V. et al.: Invest. Radiol., **36**, 309, 2001.
- 3) Awai K. et al.: J. Clin. Ther. Med., **24**, 575, 2008.
- 4) Katayama H. et al.: Eur. J. Radiol., **18**(S.1), 115, 1994.
- 5) Hiramatsu Y. et al.: Prog. Med., **15**, 340, 1995.
- 6) Hiramatsu Y. et al.: Prog. Med., **15**, 349, 1995.

#### **REQUEST FOR LITERATURE SHOULD BE MADE TO:**

Safety Management Department  
Fax: 03-3811-2710  
Eisai Co., Ltd.

#### **REQUEST FOR PRODUCT INFORMATION SHOULD BE MADE TO:**

Customer Information Service  
Free Dial: 0120-419-497  
Eisai Co., Ltd.

#### **Manufactured and marketed by:**

Bracco Eisai Co., Ltd.  
11-6, Otsuka 3-chome, Bunkyo-ku, Tokyo, 112-0012

#### **Marketed by:**

Eisai Co., Ltd.  
6-10, Koishikawa 4-chome, Bunkyo-ku, Tokyo, 112-8088

#### **Licensed by:**

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