Iopromide *(BAN, USAN, rINN)*

Iopromida; Iopromidum; Jopromid; Jopromidi; ZK-35760. *N,N′*-Bis(2,3-dihydroxypropyl)-2,4,6-tri-iodo-5-(2-methoxyacetamido)-*N*-methylisophthalamide.

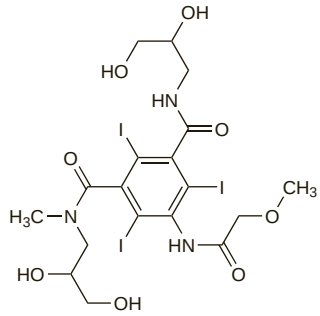
Йопромид

$C_{18}H_{24}I_3N_3O_8$ = 791.1.

CAS — 73334-07-3.

ATC — V08AB05.

ATC Vet — QV08AB05.



Description. Iopromide contains about 48.1% of I.

Pharmacopoeias. In *US*.

USP 31 (Iopromide). A white to slightly yellow powder. Freely soluble in water and in dimethyl sulfoxide; practically insoluble in alcohol, in acetone, and in ether. Protect from light.

Adverse Effects, Treatment, and Precautions

See under the amidotrizoates, p.1475.

Pharmacokinetics

On intravascular use, iopromide is rapidly distributed in the extracellular fluid. It is not metabolised and is eliminated unchanged in the urine; about 2% of a dose is excreted in faeces. An elimination half-life of about 2 hours has been reported; about 60% of a dose is excreted in urine within 3 hours and about 92% within 24 hours. Iopromide is not significantly bound to plasma proteins.

Uses and Administration

Iopromide is a nonionic monomeric iodinated radiographic contrast medium (see p.1474). It may be given intravenously, intra-arterially, or by instillation into body cavities, and is used in procedures including angiography, arthrography, hysterosalpingography, urography, and assessment of dialysis shunt patency. It is also used for contrast enhancement during computed tomography.

Iopromide is usually available as solutions containing 31.2 to 76.9% of iopromide (equivalent to 150 to 370 mg/mL of iodine) and the dose and strength used vary according to the procedure and route.

Preparations

USP 31: Iopromide Injection.

Proprietary Preparations (details are given in Part 3)

Arg.: Clarograf; ***Austral.:*** Ultravist; ***Austria:*** Ultravist; ***Belg.:*** Ultravist; ***Canad.:*** Ultravist†; ***Cz.:*** Ultravist; ***Denm.:*** Ultravist; ***Fin.:*** Ultravist; ***Fr.:*** Ultravist; ***Ger.:*** Ultravist; ***Gr.:*** Ultravist; ***Hung.:*** Ultravist; ***Israel:*** Ultravist; ***Ital.:*** Ultravist; ***Jpn:*** Proscope; ***Neth.:*** Ultravist; ***Norw.:*** Ultravist; ***NZ:*** Ultravist; ***Port.:*** Ultravist; ***Rus.:*** Ultravist (Ультравист); ***S.Afr.:*** Ultravist; ***Spain:*** Clarograf; Ultravist; ***Swed.:*** Ultravist; ***Switz.:*** Ultravist; ***UK:*** Ultravist; ***USA:*** Ultravist.

Iopydol *(BAN, USAN, pINN)*

Iopidol; Iopydolum; Jopydol; Jopydoli. 1-(2,3-Dihydroxypropyl)-3,5-di-iodo-4-pyridone.

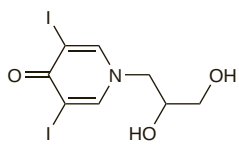
Йопидол

$C_8H_9I_2NO_3$ = 421.0.

CAS — 5579-92-0.

ATC — V08AD02.

ATC Vet — QV08AD02.



Description. Iopydol contains about 60.3% of I.

Profile

Iopydol is an iodinated radiographic contrast medium (p.1474) that has been used with iopydone for bronchography.

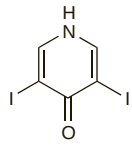
Iopydone *(BAN, USAN, rINN)*

Iopidona; Iopydonum. 3,5-Di-iodo-4-pyridone.

Йопидон

$C_5H_3I_2NO$ = 346.9.

CAS — 5579-93-1.



Description. Iopydone contains about 73.2% of I.

Profile

Iopydone is an iodinated radiographic contrast medium (p.1474) that has been used with iopydol for bronchography.

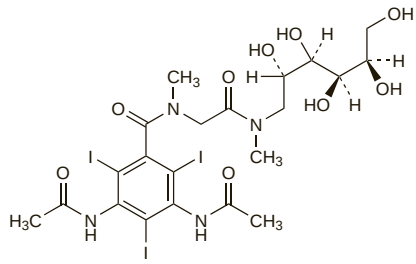
Iosarcol *(pINN)*

Iosarcolum. 3,5-Diacetamido-2,4,6-triiodo-*N*-methyl-*N*-{[methyl(D-*gluco*-2,3,4,5,6-pentahydroxyhexyl)carbamoyl]methyl}-benzamide.

Йозаркол

$C_{21}H_{29}I_3N_4O_9$ = 862.2.

CAS — 97702-82-4.



Description. Iosarcol contains about 44.2% of I.

Profile

Iosarcol is an iodinated nonionic monomeric contrast medium used for a wide range of radiographic imaging procedures.

Preparations

Proprietary Preparations (details are given in Part 3)

Austria: Melitrast; ***Ger.:*** Melitrast.

Iotalamic Acid *(BAN, rINN)*

Acide iotalamique; Ácido iotalámico; Acidum iotalamicum; Iothalamic Acid *(USAN)*; Jotalaamihappo; Jotalaminsav; Jotalamo rūgštis; Jotalamsyra; Kyselina jotalamová; Methalamic Acid; MI-216. 5-Acetamido-2,4,6-tri-iodo-*N*-methylisophthalamic acid.

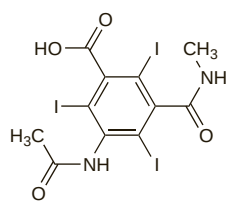
Йоталамовая Кислота

$C_{11}H_9I_3N_2O_4$ = 613.9.

CAS — 2276-90-6.

ATC — V08AA04.

ATC Vet — QV08AA04.



Description. Iotalamic acid contains about 62% of I.

Pharmacopoeias. In *Chin.*, *Eur.* (see p.vii), *Jpn*, and *US*.

Ph. Eur. 6.2 (Iotalamic Acid). A white or almost white powder. Slightly soluble in water and in alcohol; dissolves in dilute solutions of alkali hydroxides. Protect from light.

USP 31 (Iothalamic Acid). A white, odourless, powder. Slightly soluble in water and in alcohol; soluble in solutions of alkali hydroxides. Store at a temperature of 25°, excursions permitted between 15° and 30°.

Meglumine Iotalamate *(BANM, rINNM)*

Iotalamate de Méglumine; Iotalamato de meglumina; Iothalamate Meglumine; Meglumine Iothalamate; Meglumini Iotalamas. The *N*-methylglucamine salt of iotalamic acid.

Меглумина Йоталамат

$C_{11}H_9I_3N_2O_4$,$C_7H_{17}NO_5$ = 809.1.

CAS — 13087-53-1.

ATC — V08AA04.

ATC Vet — QV08AA04.

Description. Meglumine iotalamate contains about 47.1% of I.

Pharmacopoeias. *US* includes only as various injections.

Sodium Iotalamate *(BANM, rINNM)*

Iotalamate de Sodium; Iotalamato de sodico; Iotalamato de sodio; Iothalamate Sodium; Natrii Iotalamas; Sodium Iothalamate.

Натрий Йоталамат

$C_{11}H_8I_3N_2NaO_4$ = 635.9.

CAS — 17692-74-9; 1225-20-3.

ATC — V08AA04.

ATC Vet — QV08AA04.

Description. Sodium iotalamate contains about 59.9% of I.

Pharmacopoeias. *US* includes only as various injections.

Adverse Effects, Treatment, and Precautions

As for the amidotrizoates, p.1475.

Incidence of adverse effects. In 40 patients who underwent phlebography with 60% meglumine iotalamate minor adverse reactions were common despite the use of saline flushing and muscle contraction to clear the veins after examination.[1] The commonest effect was pain at the site of injection, or in the calf and foot; 15 patients of those who had pain in the calf or foot were found to have venous thrombosis. Major complications of phlebography appear to be rare but can cause serious morbidity; examination of 200 case notes and a retrospective study involving 3060 patients revealed 4 cases of necrosis in the skin of the foot and gangrene of the foot in 2.

1. Thomas ML, MacDonald LM. Complications of ascending phlebography of the leg. *BMJ* 1978; **ii:** 317–18.

Pharmacokinetics

On intravascular use the iotalamates are rapidly distributed; suitable concentrations for urography reach the urinary tract within 3 to 8 minutes of a bolus intravenous injection. Protein binding is reported to be low. The iotalamates are eliminated by the kidneys. In patients with normal renal function more than 90% of the dose injected is excreted in urine within 24 hours; an elimination half-life of about 90 minutes has been reported. Small amounts are reported to be excreted via the bile in the faeces. The iotalamates are removed by peritoneal dialysis and haemodialysis.

Uses and Administration

Iotalamic acid is an ionic monomeric iodinated radiographic contrast medium (p.1474) with actions similar to the amidotrizoates (p.1477). It may be given intravenously, intra-arterially, or by instillation into the bladder or uterus, and is used in procedures including angiography, arthrography, cholangiography, urography and hysterosalpingography. It is also used for contrast enhancement in computed tomography. Iotalamates have also been given orally or rectally for imaging of the gastrointestinal tract.

Iotalamic acid is usually available as solutions containing up to 66.8% of sodium iotalamate or up to 60% of meglumine iotalamate. The dose and strength used vary according to the procedure and route. A mixture of the two salts has been given to minimise adverse effects.

Preparations

USP 31: Iothalamate Meglumine and Iothalamate Sodium Injection; Iothalamate Meglumine Injection; Iothalamate Sodium Injection.

Proprietary Preparations (details are given in Part 3)

Arg.: Conray; Cysto-Conray; ***Austral.:*** Conray 280; ***Canad.:*** Conray; Cysto-Conray; ***Ger.:*** Conray 30†; Conray 60†; ***Ital.:*** Conray†; ***UK:*** Conray; ***USA:*** Conray; Cysto-Conray.