## VISIPAQUE EIRE abbreviated prescribing information

## PRESCRIBING INFORMATION VISIPAQUE™ (iodixanol)

Please refer to full national Summary of Product Characteristics (SPC) before prescribing

**PRESENTATION** An isotonic, aqueous solution containing iodixanol, a non-ionic, dimeric contrast medium, available in two strengths containing either 270 mg or 320 mg iodine per ml.

**INDICATIONS** X-ray contrast medium for use in adults for cerebral angiography (conventional), peripheral angiography (conventional), abdominal angiography (i.a. DSA), urography, venography, CT enhancement, studies of the gastrointestinal tract, lumbar, thoracic and cervical myelography. Arthrography and hysterosalpingography (HSG). In children for cardioangiography, urography, CT enhancement and studies of the gastrointestinal tract

**DOSAGE AND ADMINISTRATION** Adults and children: Dosage varies depending on the type of examination, age, weight, cardiac output, general condition of patient and the technique used (see SPC and package leaflet).

CONTRAINDICATIONS Hypersensitivity to the active substance or to any of the excipients. Manifest thyrotoxicosis.

WARNINGS AND PRECAUTIONS A positive history of allergy, asthma, or reaction to iodinated contrast media indicates need for special caution. Premedication with corticosteroids or H1 and H2 antagonists might be considered in these cases. Although the risk of serious reactions with VISIPAQUE is regarded as minor, iodinated contrast media may provoke serious life-threatening hypersensitivity reactions, including fatal anaphylactic/anaphylactoid reactions. Therefore, the necessary drugs and equipment must be available for immediate treatment. It is advisable always to use an indwelling cannula or catheter for quick intravenous access throughout the entire X-ray procedure. Patients should be observed for at least 30 minutes following administration of contrast medium, since the majority of serious side effects occur within this time. However delayed reactions may occur. Patients using beta blockers may be at risk of anaphylactoid reactions and may present with atypical symptoms of hypersensitivity which may be misinterpreted as a vagal reaction.

Non-ionic iodinated contrast media inhibit blood coagulation in vitro, less than to ionic contrast media. When performing vascular catheterization procedures, one should pay meticulous attention to the angiographic technique and flush the catheter frequently (e.g. with heparinised saline) so as to minimize the risk of procedure-related thrombosis and embolism. Serious, rarely fatal, thromboembolic events causing, myocardial infarction and stroke have been reported during angio-cardiographic procedures with both ionic and nonionic contrast media. Advanced life support facilities should be readily available. There is a risk of thromboembolism in patients with homocystinuria. Ensure adequate hydration before and after examination especially in patients with multiple myeloma, renal dysfunction, diabetes mellitus, paraproteinemias, the elderly, children and infants. Care should be taken in patients with serious cardiac disease and pulmonary hypertension as they may develop hemodynamic changes or arrhythmias. Severe life-threatening reactions and fatalities of cardiovascular origin such as cardiac-, cardiorespiratory arrest and myocardial infarction have rarely occurred. In intravascular application, care should be taken in patients with acute stroke, or acute intracranial bleeding, in patients with altered blood brain barrier, cerebral oedema or acute demyelinisation. A major risk factor for contrast medium-induced nephropathy is underlying renal dysfunction. Diabetes mellitus and the volume of iodinated contrast medium administered are contributing factors in the presence of renal dysfunction. Additional concerns are dehydration, advanced arteriosclerosis, poor renal perfusion and the presence of other factors that may be nephrotoxic, such as certain medications or major surgery. Iodinated contrast agents can be used by patients on haemodialysis as the agents are removed by the dialysis process. Particular care is required in patients with severe disturbance of both renal and hepatic function as they may have significantly delayed contrast medium clearance. In diabetic patients' metformin should be stopped for at least 48 hours when contrast media are used. The timing of this should be amended based upon serum creatine/renal function levels (refer to SPC). Special care should also be taken in patients with hyperthyroidism, serious cardiac disease, pulmonary hypertension, arteriosclerosis, patients predisposed to seizures (acute cerebral pathology, tumours, epilepsy, alcoholics and drug addicts), and patients with myasthenia gravis or phaeochromocytoma. One should also be aware of the possibility of inducing transient hypothyroidism in premature infants receiving contrast media.

All iodinated contrast media may interfere with laboratory tests for thyroid function, bilirubin, proteins, or inorganic substances (e.g. iron, copper, calcium, and phosphate). An increased risk of delayed reactions (flu-like or skin reactions) has been associated with patients treated with interleukin-2 up to two weeks previously. Following myelography the patient should rest with the head and thorax elevated by 20° for one hour. Thereafter he/she may ambulate carefully but bending down must be avoided. The head and thorax should be kept elevated for the first 6 hours if remaining in bed. Patients suspected of having a low seizure threshold should be observed during this period. Outpatients should not be completely alone for the first 24 hours.

**PREGNANCY AND LACTATION** The safety of VISIPAQUE in pregnancy has not been established. The product should not be used in pregnancy unless benefit outweighs risk and it is considered essential by the physician. The degree of excretion into human milk is not known. Thyroid function should be checked in neonates during the first week of life, following administration of iodinated contrast agents to the mother during pregnancy and repeat testing of thyroid function is recommended at 2 to 6 weeks of age, particularly in low birth weight newborn or premature newborn. Contrast media are poorly excreted in human breast milk and minimal amounts are absorbed by the intestine. Breast feeding may be continued normally when iodinated contrast media are given to the mother

**UNDESIRABLE EFFECTS** Undesirable effects associated with VISIPAQUE are usually mild to moderate and transient in nature. Serious reactions as well as fatalities are only seen on very rare occasions. Serious reactions as well as fatalities are only seen on very rare occasions, these may include acute-on-chronic renal failure, acute renal failure, anaphylactic or anaphylactoid shock, hypersensitivity reaction followed by cardiac reactions (Kounis' syndrome), cardiac or cardio-respiratory arrest and myocardial infarction. Hypersensitivity reactions may present as respiratory or cutaneous symptoms like dyspnoea, rash, erythema, urticaria, pruritus, severe skin reactions, angioneurotic oedema, hypotension, fever, laryngeal oedema, bronchospasm or pulmonary oedema. In patients with autoimmune diseases cases of vasculitis and Steven- Johnson like syndrome were observed. They may appear either immediately after the injection or up to a few days later. Hypersensitivity reactions may occur irrespectively of the dose and mode of administration and mild symptoms may represent the first signs of a serious anaphylactoid reaction/shock. Administration of the contrast medium must be discontinued immediately and, if necessary, specific therapy instituted via the vascular access. Patients using beta blockers may present with atypical symptoms of hypersensitivity which may be misinterpreted as a vagal reaction. A minor transient increase in serum creatinine is common after iodinated contrast media, but is usually of no clinical relevance. Intravascular administration: Blood and lymphatic system disorders: Not known: Thrombocytopenia. Immune system disorders: Uncommon: Hypersensitivity. Not known: Anaphylactoid reaction, anaphylactoid shock. Psychiatric disorders: Very rare: Agitation, anxiety. Not known: Confusional state. Nervous system disorders: Uncommon: Headache, Rare: Dizziness. Very rare: Cerebrovascular accident, sensory abnormalities including taste, paraesthesia, amnesia, syncope. Not known: Coma motor dysfunction, disturbance in consciousness, convulsion, transient contrast-induced encephalopathy (including hallucination), tremor. Eye disorders: Very rare: Transient cortical blindness, visual impairment. Cardiac disorders: Rare: Arrhythmia (including bradycardia, tachycardia), myocardial infarction. Very rare: Cardiac arrest. Not known: Cardiac failure, ventricular hypokinesia, spasms of coronary arteries, cardio-respiratory arrest, conduction abnormalities, coronary artery thrombosis, angina pectoris. Vascular disorders: Uncommon: Flushing, Rare: Hypotension. Very rare: Hypertension, ischaemia. Not known: Arterial spasm, thrombosis, thrombophlebitis, shock. Respiratory, thoracic and mediastinal disorders: Rare: Cough. Very rare: Dyspnoea. Not known: Pulmonary oedema, respiratory arrest, respiratory failure. Gastrointestinal disorders: Uncommon: Nausea, vomiting. Very rare: Abdominal pain/discomfort. Not known: Acute pancreatitis, pancreatitis aggravated, salivary gland enlargement. Skin and subcutaneous system disorders: Uncommon: Rash, pruritus, urticaria. Very rare: angioedema, erythema. Not known: Bullous dermatitis, Stevens-Johnson syndrome, erythema multiforme, toxic epidermal necrolysis, acute generalised exanthematous pustulosis, drug rash with eosinophilia and systemic symptoms, drug eruption, dermatitis allergic, skin exfoliation. Musculoskeletal and connective tissue disorders: Very rare: Back pain, muscle spasm. Not known: Arthralgia. Renal and urinary disorders: Very rare: Impairment of renal function including acute renal failure. General disorders and administration site conditions: Uncommon: Feeling hot, chest pain. Rare: Pain, discomfort, shivering (chills), pyrexia, administration site reactions including extravasation. Very rare: Feeling cold, asthenic conditions (e.g. malaise, fatigue). Injury, poisoning and procedural complications: Not known: lodism.

Intrathecal administration: Undesirable effects following intrathecal use may be delayed and present some hours or even days after the procedure. The frequency is similar to lumbar puncture alone. Meningeal irritation giving photophobia and meningism and frank chemical meningitis have been observed with other non-ionic contrast media. The possibility of an infective meningitis should also be considered. Immune system disorders: Not known: Hypersensitivity, including anaphylactic/ anaphylactoid reactions. <u>Nervous system disorders</u>: Uncommon: Headache (may be severe and lasting), Not known: Dizziness, transient contrast-induced encephalopathy (including amnesia, hallucinations, confusion). <u>Gastrointestinal disorders</u>: Uncommon: Vomiting. Not known: Nausea. <u>Musculoskeletal and connective tissue disorders</u>: Not known: Muscle spasm. <u>General disorders</u>: Not known: Hypersensitivity. <u>Nervous system disorders</u>: common: Headache. <u>Gastrointestinal disorders</u>: Very common: Abdominal pain, Common: Nausea. Not known: Vomiting. <u>Reproductive system and breast disorders</u>: Very common: Vaginal haemorrhage. <u>General disorders and administration site conditions</u>: Common: Pyrexia. Not known: Shivering, injection site reaction.

Arthrography: Immune system disorders: Not known: Hypersensitivity, including anaphylactic/ anaphylactoid reactions. <u>General</u> disorders and administration site conditions: Common: Injection site pain. Not known: Shivering.

**Examination of the GI tract:** Immune system disorders: Not known: Hypersensitivity, including anaphylactic/ anaphylactoid reactions. <u>Gastrointestinal disorders</u>: Common: Diarrhoea, abdominal pain, nausea, Uncommon: Vomiting. <u>General disorders and administration</u> <u>site reaction</u>: Not known: Shivering.

**PHARMACODYNAMIC PROPERTIES** In diabetic patients with serum creatinine levels of 1.3-3.5 mg/dl, VISIPAQUE use resulted in 3% of patients experiencing a rise in creatinine of  $\geq$  0.5 mg/dl and 0% of patients with a rise of  $\geq$  1.0 mg/dl. The release of enzymes (alkaline phosphatase and N-acetyl- $\beta$ -glucosaminidase) from the proximal tubular cells is less than after injections of non-ionic monomeric contrast media and the same trend is seen compared to ionic dimeric contrast media. VISIPAQUE is also well tolerated by the kidney.

**INSTRUCTIONS FOR USE AND HANDLING** Like all parenteral products, VISIPAQUE should be inspected visually for particulate contamination, discolouration and the integrity of the container prior to use. The product should be drawn into the syringe immediately before use. Containers are intended for single use only; any unused portions must be discarded. VISIPAQUE may be warmed to body temperature (37°C) before administration.

MARKETING AUTHORISATION HOLDER GE Healthcare AS, Nycoveien 1-2, Postboks 4220 Nydalen, NO-0401 Oslo, Norway.

CLASSIFICATION FOR SUPPLY Subject to medical prescription (POM).

MARKETING AUTHORISATION NUMBER PA 735/9/3,7,12,13.

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Reporting suspected adverse reactions is important. Any suspected adverse reactions should be reported to:

HPRA Pharmacovigilance Earlsfort Terrace IRL - Dublin 2

Tel: +353 1 6764971 Fax: +353 1 6762517

Website: www.hpra.ie e-mail: medsafety@hpra.ie.