

# A NEW SYRINGE — IN PLASTIC



A plastic Dotarem®  
pre-filled syringe



Lighter while  
being more  
resistant



Less fragile  
and more  
secure

A new pushrod



More  
ergonomic



More  
performant

AVAILABLE IN  
ALL FORMATS

10 ml

15 ml

20 ml

## TECHNICAL INFORMATION

PRODUCT DESCRIPTION	CODE
PFS Plastic syringe 10 ml	XXXX
PFS Plastic syringe 15 ml	XXXX
PFS Plastic syringe 20 ml	XXXX
StarClip Kit	XXXX

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### CONTACT:

If you need more informations, feel free to contact your sales representative

Optistar Elite Contrast Delivery System is a medical device intended for use by qualified healthcare professionals. It is intended to inject MR contrast media and flushing solutions into a patient's vascular system to obtain diagnostic images when used in conjunction with Magnetic Resonance (MR) imaging equipment. For complete information about precautions and optimal usage conditions, we recommend consulting the instruction for use supplied with the device or by your local Guerbet representative(s). For use only in countries with applicable health authority registrations - Class IIb/CE - TÜV SÜD 0123 - Manufacturer: Liebel-Flarsheim Company LLC - EC Rep: Guerbet

DOTAREM 0.5 mmol/mL, solution for injection. **Composition:** For 100 mL of solution: active ingredient: Gadoteric Acid 27.932 g corresponding to: DOTA 20.246 g corresponding to gadolinium oxide 9.062 g. **Indications (\*):** Medicinal product for diagnostic use only: Magnetic Resonance Imaging for cerebral and spinal disease, diseases of the vertebral column, and other whole-body pathologies (including angiography). Dotarem should be used only when diagnostic information is essential and not available with unenhanced magnetic resonance imaging (MRI). **Posology and method of administration:** The recommended dose is 0.1 mmol/kg, i.e. 0.2 mL/kg in adults and children. The lowest dose that provides sufficient enhancement for diagnostic purposes should be used. The dose should be calculated based on the patient's body weight, and should not exceed the recommended dose per kilogram of body weight detailed in this section. In angiography, depending on the results of the examination being performed, a second injection may be administered during the same session if necessary. Angiography with Gadoteric acid is not recommended in children (0-18 years). In Encephalic and spinal MRI, in some exceptional cases, as in the confirmation of isolated metastasis or the detection of leptomeningeal tumours, a second injection of 0.2 mmol/kg may improve tumor characterisation and facilitate therapeutic decision making. For patients with impaired renal function and paediatric population (0-18 years) more than one dose should not be used during a scan, injections should not be repeated unless the interval between injections is at least 7 days. The product must be administered by strict intravenous injection. Depending on the amount of gadoteric acid to be given to the child, it is preferable to use gadoteric acid vials with a single use syringe of a volume adapted to this amount in order to have a better precision of the injected volume. In neonates and infants the required dose should be administered by hand. **Contraindications:** Hypersensitivity to gadoteric acid, to meglumine or to any medicinal products containing gadolinium. **Special warnings and precautions for use:** Dotarem must not be administered by subarachnoid (or epidural) injection. The usual precaution measures for MRI examination should be taken such as exclusion of patients with pacemakers, ferromagnetic vascular clips, infusion pumps, nerve stimulators, cochlear implants or suspected intracorporeal metallic foreign bodies, particularly in the eye. **General particulars corresponding to all gadolinium contrast agents:** All gadolinium based contrast media can cause minor or major hypersensitivity reactions that can be life-threatening. These can occur immediately (within 60 minutes) or be delayed (within 7 days) and are often unpredictable. Because of the risk of major reactions, emergency resuscitation equipment should be available for immediate use. Hypersensitivity reactions can be aggravated in patients on betablockers and particularly in the presence of bronchial asthma. These patients may be refractory to standard treatment of hypersensitivity reactions with beta agonists. Impaired renal function: Prior to administration of gadoteric acid, it is recommended that all patients are screened for renal dysfunction by obtaining laboratory tests. There have been reports of Nephrogenic Systemic Fibrosis (NSF) associated with use of some gadolinium-containing contrast agents in patients with severe renal impairment (GFR < 30 mL/min/1.73 m<sup>2</sup>). As there is a possibility that NSF may occur with Dotarem, it should only be used in these patients after careful consideration. CNS disorders: As with other contrast agents containing gadolinium, special precautions should be taken in patients with a low seizure threshold. Precautionary measures, e.g. close monitoring, should be taken. All equipment and drugs necessary to counter any convulsions which may occur must be made ready for use beforehand. **Interactions with other medicinal products and other forms of interaction:** No interactions with other medicinal products have been observed. Formal drug interaction studies have not been carried out. **Fertility, pregnancy and lactation:** Gadoteric acid should not be used during pregnancy unless the clinical condition of the woman requires use of gadoteric acid. Continuing or discontinuing breast feeding for a period of 24 hours after administration of gadoteric acid, should be at the discretion of the doctor and lactating mother. **Effects on ability to drive and use machines:** No studies on the effects on the ability to drive and use machines have been performed. Ambulant patients while driving vehicles or operating machinery should take into account that nausea may incidentally occur. **Undesirable effects:** Uncommon (≥1/1000 to <1/100): hypersensitivity, headache, dysgeusia, dizziness, somnolence, paraesthesia (including burning sensation), hypotension, hypertension, nausea, abdominal pain, rash, feeling hot, feeling cold, asthma, injection site reactions (extravasation, pain, discomfort, oedema, inflammation, coldness). Rare (≥1/10 000 to <1/1 000): anxiety, presyncope, eyelid edema, palpitations, sneezing, throat tightness, vomiting, diarrhoea, salivary hypersecretion, urticaria, pruritus, hyperhidrosis, chest pain, chills. Very rare (<1/10 000): anaphylactic reaction, anaphylactoid reaction, agitation, coma, convulsion, syncope, tremor, parosmia, conjunctivitis, ocular hyperaemia, vision blurred, lacrimation increased, tachycardia, cardiac arrest, arrhythmia, bradycardia, flushing, pallor, vasodilatation, hot flush, cough, dyspnoea, nasal congestion, respiratory arrest, bronchospasm, throat irritation, laryngospasm, pharyngeal oedema, dry throat, pulmonary oedema, erythema, angioedema, eczema, muscle cramps, muscular weakness, back pain, arthralgia, malaise, chest discomfort, pyrexia, face oedema, injection site necrosis (in case of extravasation), phlebitis superficial, decreased oxygen saturation. Not known: nephrogenic systemic fibrosis. **Overdose:** Gadoteric acid can be removed by haemodialysis. However there is no evidence that haemodialysis is suitable for prevention of nephrogenic systemic fibrosis. **Please note:** The peel-off tracking label on the vials or syringes should be stuck onto the patient record to enable accurate recording of the gadolinium contrast agent used. The dose used should also be recorded. If electronic patient records are used, the name of the product, the batch number and the dose should be entered into the patient record. **Pharmacological properties:** Pharmacotherapeutic group: paramagnetic contrast media for MRI, ATC code: V08CA02. **Presentation (\*):** 5, 10, 15, 20, 60 & 100 mL in vial (glass) and 10, 15 & 20 mL in a pre-filled syringe (glass). **Marketing authorization holder: (\*)** Information: Guerbet - BP 57400 - F-95943 Roissy Cdg cedex - FRANCE. Tel: 33 (0) 1 45 91 50 00. **Date of revision of this document:** February 2018

For current and complete prescribing information refer to the package insert and/or contact your local Guerbet organization.

(\*) Indications, presentations and marketing authorization holder may differ from country to country.

Reporting of suspected adverse reactions is important as it helps to continuously assess the benefit-risk balance. Therefore, Guerbet encourages you to report any adverse reactions to your health authorities or to our local Guerbet representative.

Guerbet |

# DOTAREM®

Gadoteric acid

Discover the **NEW**  
plastic Dotarem®  
pre-filled syringe  
and StarClip\*

\* adaptor to be used on  
OptiStar® Elite injector



Guerbet |

COMMITTED



## A LEADING CONTRAST AGENT WORLDWIDE

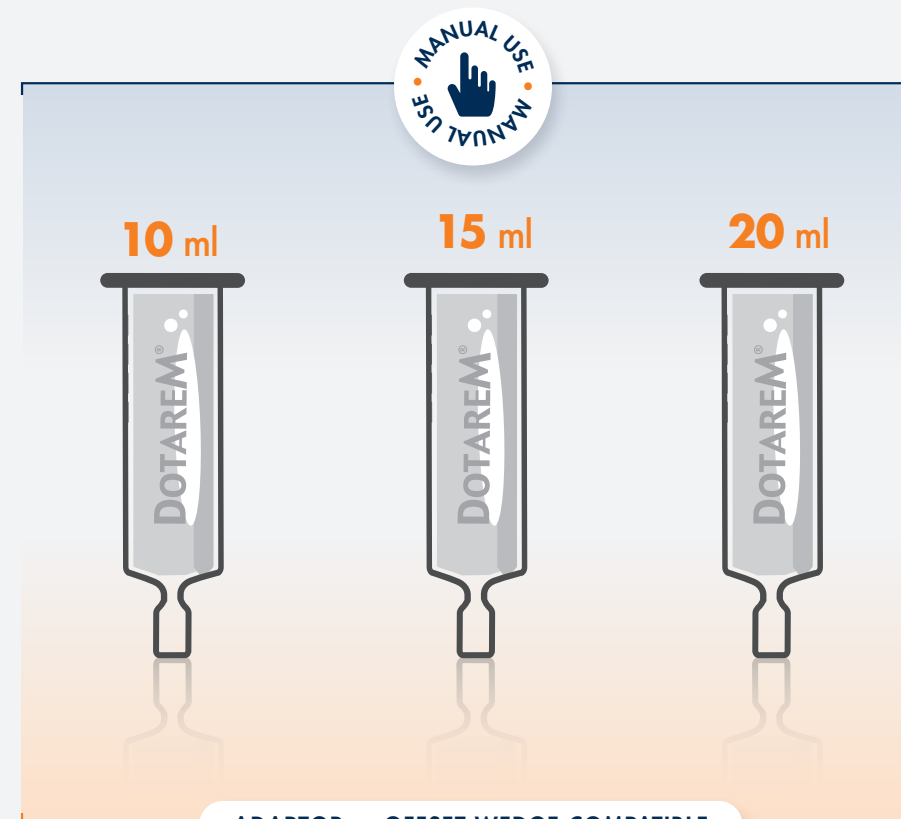
- The **first high stability** macrocyclic in the market
- No confirmed unfounded cases** of Nephrogenic Systemic Fibrosis <sup>(3,4,5)</sup>
- Very high stability** induced by macrocyclic structure <sup>(1)</sup>
- Low rate** of acute adverse events <sup>(6)</sup>
- No visible brain hyperintensities** related to dechelated Gd following repeated injections <sup>(2)</sup>
- Optimal performance** in adults and children diagnosis <sup>(7)</sup>

MORE THAN **100** MILLION OF DOSES INJECTED\*

**AVAILABLE** IN MORE THAN **70** COUNTRIES

1. Mark Port et al. *Biomaterials* (2008) 21:465-490. 2. Radbruch A et al. *Radiology*. 2017 Jun;283(3):828-836. 3. USA PI as of August 2018. [https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2013/204781s000lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2013/204781s000lbl.pdf) 4. de Kerviler E et al. *Invest Radiol*. 2016 Sep;51(9):544-51. 5. Attari H, Cao Y, Elmholdt T, Zhao Y et al. A Systematic Review of 639 Patients with Biopsy-confirmed Nephrogenic Systemic Fibrosis. *Radiology* 2019; 00:1-11. 6. Dotarem® SmPc. 7. Martin Maurer et al. *European Journal of Radiology* 81 (2012) 885-890/Csilla Balassy et al. *Pediatr Radiol* (2015) 45:1831-1841. 8. Data on file

## 3 NEW SOLUTIONS — TO HELP YOU IN YOUR DAILY JOB



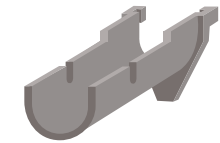
ADAPTOR + OFFSET WEDGE COMPATIBLE



## A NEW TECHNOLOGY STARCLIP — OPTIMIZED FOR THE NEW PLASTIC SYRINGE

### StarClip Kit =

#### ADAPTOR



A studied syringe adaptor



Offset wedge that offer reliability during the injection

A recognizable color

#### OFFSET WEDGE

to use with the 10 mL, 15 mL and 20 mL syringes on OptiStar® Elite

