

- **PREGNANCY** Toxicity in *animal* studies, but treatment should not be withheld.
- **BREAST FEEDING** Manufacturer advises avoid—no information available.
- **MONITORING REQUIREMENTS**
  - ▶ Monitor closely if cardiac dysfunction.
  - ▶ Monitor closely if respiratory dysfunction.
  - ▶ Monitor immunoglobulin G (IgG) antibody concentration.
- **DIRECTIONS FOR ADMINISTRATION** For *intravenous infusion*, reconstitute 50 mg with 10.3 mL water for injections to produce 5 mg/mL solution; gently rotate vial without shaking; dilute requisite dose with Sodium Chloride 0.9% to give a final concentration of 0.5–4 mg/mL; give through a low protein-binding in-line filter (0.2 micron) at an initial rate of 1 mg/kg/hour increased by 2 mg/kg/hour every 30 minutes to max. 7 mg/kg/hour.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

**Powder for solution for infusion**

- ▶ **Myozyme** (Genzyme Therapeutics Ltd)

**Alglucosidase alfa 50 mg** Myozyme 50mg powder for concentrate for solution for infusion vials | 1 vial [PoM] £356.06 (Hospital only)

## 3.12 Tyrosinaemia type I

### ENZYME INHIBITORS > 4-HYDROXYPHENYLPIRUVATE DIOXYGENASE INHIBITORS

#### Nitisinone

(NTBC)

**● INDICATIONS AND DOSE**

**Hereditary tyrosinaemia type I (in combination with dietary restriction of tyrosine and phenylalanine) (specialist use only)**

- ▶ BY MOUTH

- ▶ Neonate: Initially 500 micrograms/kg twice daily, adjusted according to response; maximum 2 mg/kg per day.
- ▶ Child: Initially 500 micrograms/kg twice daily, adjusted according to response; maximum 2 mg/kg per day

- **INTERACTIONS** → Appendix 1: nitisinone
- **SIDE-EFFECTS**
  - ▶ Common or very common Corneal opacity · eye inflammation · eye pain · granulocytopenia · leucopenia · photophobia · thrombocytopenia
  - ▶ Uncommon Leucocytosis · skin reactions
- **PREGNANCY** Manufacturer advises avoid unless potential benefit outweighs risk—toxicity in *animal* studies.
- **BREAST FEEDING** Manufacturer advises avoid—adverse effects in *animal* studies.
- **PRE-TREATMENT SCREENING** Slit-lamp examination of eyes recommended before treatment.
- **MONITORING REQUIREMENTS**
  - ▶ Monitor liver function regularly.
  - ▶ Monitor platelet and white blood cell count every 6 months.
- **DIRECTIONS FOR ADMINISTRATION** Capsules can be opened and the contents suspended in a small amount of water or formula diet and taken immediately.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

**Oral suspension**

- ▶ **Orfadin** (Swedish Orphan Biovitrum Ltd)

**Nitisinone 4 mg per 1 ml** Orfadin 4mg/1ml oral suspension sugar-free | 90 ml [PoM] £1,692.00 DT = £1,692.00

**Capsule**

- ▶ **Nitisinone (Non-proprietary)**

**Nitisinone 2 mg** Nitisinone 2mg capsules | 60 capsule [PoM] £423.00

**Nitisinone 5 mg** Nitisinone 5mg capsules | 60 capsule [PoM] £845.25

**Nitisinone 10 mg** Nitisinone 10mg capsules | 60 capsule [PoM] £1,546.50

- ▶ **Orfadin** (Swedish Orphan Biovitrum Ltd)

**Nitisinone 2 mg** Orfadin 2mg capsules | 60 capsule [PoM] £564.00

**Nitisinone 5 mg** Orfadin 5mg capsules | 60 capsule [PoM] £1,127.00

**Nitisinone 10 mg** Orfadin 10mg capsules | 60 capsule [PoM] £2,062.00

**Nitisinone 20 mg** Orfadin 20mg capsules | 60 capsule [PoM] £4,512.00 DT = £4,512.00

## 3.13 Urea cycle disorders

### AMINO ACIDS AND DERIVATIVES

#### Arginine

03-Mar-2020

**● INDICATIONS AND DOSE**

**Acute hyperammonaemia in carbamylphosphate synthetase deficiency (specialist use only) | Acute hyperammonaemia in ornithine transcarbamylase deficiency (specialist use only)**

- ▶ BY INTRAVENOUS INFUSION

- ▶ Neonate: 6 mg/kg/hour.

- ▶ Child (body-weight up to 40 kg): 6 mg/kg/hour
- ▶ Child (body-weight 40 kg and above): 4 mg/kg/hour

**Maintenance treatment of hyperammonaemia in carbamylphosphate synthetase deficiency (specialist use only) | Maintenance treatment of hyperammonaemia in ornithine transcarbamylase deficiency (specialist use only)**

- ▶ BY MOUTH

- ▶ Neonate: 100–200 mg/kg daily in 3–4 divided doses, dose to be taken with feeds.

- ▶ Child (body-weight up to 20 kg): 100–200 mg/kg daily in 3–4 divided doses, dose to be given with feeds or meals
- ▶ Child (body-weight 20 kg and above): 2.5–6 g/m<sup>2</sup> daily in 3–4 divided doses, dose to be taken with meals; maximum 6 g per day

**Acute hyperammonaemia in citrullinaemia (specialist use only) | Acute hyperammonaemia in argininosuccinic aciduria (specialist use only)**

- ▶ BY INTRAVENOUS INFUSION

- ▶ Neonate: Initially 300 mg/kg, to be administered over 90 minutes, followed by 12.5 mg/kg/hour, to be administered over 24 hours (maximum 25 mg/kg/hour thereafter).

- ▶ Child (body-weight up to 40 kg): Initially 300 mg/kg, to be administered over 90 minutes, followed by 12.5 mg/kg/hour, to be administered over 24 hours (maximum 25 mg/kg/hour thereafter)
- ▶ Child (body-weight 40 kg and above): 21 mg/kg/hour