Severe cyclic neutropenia, or idiopathic neutropenia and history of severe or recurrent infections (distinguish carefully from other haematological disorders) (specialist use only)

▸ BY SUBCUTANEOUS INJECTION

- Child: Initially 5 micrograms/kg daily, adjusted according to response, can be given in single or divided doses, consult product literature and local protocol

Persistent neutropenia in HIV infection (specialist use only)

▸ BY SUBCUTANEOUS INJECTION

- Child: Initially 1 microgram/kg daily, subsequent doses increased as necessary until neutrophil count in normal range, then adjusted to maintain neutrophil count in normal range—consult product literature; maximum 4 micrograms/kg per day

Neonatal neutropenia (specialist use only)

▸ BY SUBCUTANEOUS INJECTION

- Neonate: 10 micrograms/kg daily, to be discontinued if white cell count exceeds 50×10^9/litre.

Glycogen storage disease type 1b (specialist use only)

▸ BY SUBCUTANEOUS INJECTION

- Child: Initially 5 micrograms/kg daily, dose to be adjusted as necessary

- **UNLICENSED USE** Not licensed for treatment of glycogen storage disease or neonatal neutropenia.
- **CONTRA-INDICATIONS** Severe congenital neutropenia (Kostmann's syndrome) with abnormal cytogenetics
- **CAUTIONS** Osteoporotic bone disease (monitor bone density if given for more than 6 months) · secondary acute myeloid leukaemia
- **SIDE-EFFECTS**

▸ **Common or very common** Anaemia · diarrhoea · dysuria · haemorrhage · hepatomegaly · hyperuricaemia · hypotension · osteoporosis · rash

▸ **Uncommon** Fluid imbalance · graft versus host disease · peripheral vascular disease · pseudogout · rheumatoid arthritis aggravated · urine abnormalities

- **MONITORING REQUIREMENTS** Regular morphological and cytogenetic bone-marrow examinations recommended in severe congenital neutropenia (possible risk of myelodysplastic syndromes or leukaemia).
- **DIRECTIONS FOR ADMINISTRATION** For *subcutaneous* or *intravenous infusion*, dilute with Glucose 5% to a concentration of not less than 15 micrograms/mL; to dilute to a concentration of 2–15 micrograms/mL, add albumin solution (human albumin solution) to produce a final albumin solution of 2 mg/mL; not compatible with Sodium Chloride solutions.
- **PRESCRIBING AND DISPENSING INFORMATION** Filgrastim is a biological medicine. Biological medicines must be prescribed and dispensed by brand name, see *Biological medicines* and *Biosimilar medicines*, under Guidance on prescribing p. 1.

1 million units of filgrastim solution for injection contains 10 micrograms filgrastim.

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

Solution for injection

▸ **Accofil** (Accord Healthcare Ltd) ▼

Filgrastim 60 mega u per 1 ml Accofil 30million units/0.5ml solution for injection pre-filled syringes | 5 pre-filled disposable injection PoM £284.20

Filgrastim 96 mega u per 1 ml Accofil 48million units/0.5ml solution for injection pre-filled syringes | 5 pre-filled disposable injection PoM £455.70

▸ **Neupogen** (Amgen Ltd)

Filgrastim 30 mega u per 1 ml Neupogen 30million units/1ml solution for injection vials | 5 vial PoM £263.52

▸ **Neupogen Singleject** (Amgen Ltd)

Filgrastim 60 mega u per 1 ml Neupogen Singleject 30million units/0.5ml solution for injection pre-filled syringes | 1 pre-filled disposable injection PoM £52.70

Filgrastim 96 mega u per 1 ml Neupogen Singleject 48million units/0.5ml solution for injection pre-filled syringes | 1 pre-filled disposable injection PoM £84.06

▸ **Nivestim** (Pfizer Ltd)

Filgrastim 60 mega u per 1 ml Nivestim 30million units/0.5ml solution for injection pre-filled syringes | 5 pre-filled disposable injection PoM £246.50

Nivestim 12million units/0.2ml solution for injection pre-filled syringes | 5 pre-filled disposable injection PoM £153.00

Filgrastim 96 mega u per 1 ml Nivestim 48million units/0.5ml solution for injection pre-filled syringes | 5 pre-filled disposable injection PoM £395.25

▸ **Zarzio** (Sandoz Ltd)

Filgrastim 60 mega u per 1 ml Zarzio 30million units/0.5ml solution for injection pre-filled syringes | 5 pre-filled disposable injection PoM £250.75

Filgrastim 96 mega u per 1 ml Zarzio 48million units/0.5ml solution for injection pre-filled syringes | 5 pre-filled disposable injection PoM £399.50

599

Lenograstim

(Recombinant human granulocyte-colony stimulating factor; rHuG-CSF)

- **INDICATIONS AND DOSE**

Reduction in the duration of neutropenia and associated complications following bone-marrow transplantation for non-myeloid malignancy (specialist use only) | **Reduction in the duration of neutropenia and associated complications following peripheral stem cells transplantation for non-myeloid malignancy (specialist use only)**

▸ BY INTRAVENOUS INFUSION, OR BY SUBCUTANEOUS INJECTION

- Child 2–17 years: 150 micrograms/m^2 daily until neutrophil count stable in acceptable range (max. 28 days), to be started the day after transplantation. Intravenous infusion to be given over 30 minutes

Reduction in the duration of neutropenia and associated complications following treatment with cytotoxic chemotherapy associated with a significant incidence of febrile neutropenia (specialist use only)

▸ BY SUBCUTANEOUS INJECTION

- Child 2–17 years: 150 micrograms/m^2 daily until neutrophil count stable in acceptable range (max. 28 days), to be started on the day after completion of chemotherapy

Mobilisation of peripheral blood progenitor cells for harvesting and subsequent infusion, used alone (specialist use only)

▸ BY SUBCUTANEOUS INJECTION

- Child 2–17 years: 10 micrograms/kg daily for 4–6 days (5–6 days in healthy donors)

Mobilisation of peripheral blood progenitor cells, used following adjunctive myelosuppressive chemotherapy (to improve yield) (specialist use only)

▸ BY SUBCUTANEOUS INJECTION

- Child 2–17 years: 150 micrograms/m^2 daily until neutrophil count stable in acceptable range, to be started 1–5 days after completion of chemotherapy, for timing of leucopheresis, consult product literature

- **UNLICENSED USE** Not licensed for use in children for cytotoxic-induced neutropenia, mobilisation of peripheral blood progenitor cells (monotherapy or adjunctive therapy), or following peripheral stem cells transplantation.
- **SIDE-EFFECTS**

▸ **Common or very common** Abdominal pain · asthenia