

Pegfilgrastim

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Neulasta

Brand name: Neulasta®

IUPAC: (2R,4S,5R,6R)-2-[[[(2R,3R,4R,5R,6S)-5-acetamido-6-[(1S,2R)-1-amino-1-carboxypropan-2-yl]oxy-3,4-dihydroxyoxan-2-yl]methoxy]-4-hydroxy-5-[[2-(2-methoxyethoxycarbonylamino)acetyl]amino]-6-[(1R,2R)-1,2,3-trihydroxypropyl]oxane-2-carboxylic acid

FDA approval: Yes

[Enlace del fabricante](#)

Usage:

Pegfilgrastim comes as a solution (liquid) to inject subcutaneously (under the skin). It is usually given as a single dose for each chemotherapy cycle, no sooner than 24 hours after the last dose of chemotherapy of the cycle is given and more than 14 days before beginning the next chemotherapy cycle. Your doctor will tell you exactly when you should use pegfilgrastim.

Pegfilgrastim is a growth factor that stimulates the production, maturation and activation of neutrophils. Pegfilgrastim also stimulates the release of neutrophils (a type of white blood cell) from the bone marrow. In patients receiving chemotherapy, pegfilgrastim can accelerate the recovery of neutrophils, reducing the neutropenic phase (the time in which people are susceptible to infections). Pegfilgrastim is a long-acting version of filgrastim. Pegfilgrastim is filgrastim with a substance called polyethylene glycol (PEG) attached to it. The attachment process is called pegylation, and is used to allow active substances (the filgrastim) to stay in the body longer before they are broken down and eliminated.

Mechanism:

Pegfilgrastim is a colony-stimulating factor that acts on hematopoietic cells by binding to specific cell surface receptors, thereby stimulating proliferation, differentiation, commitment, and end cell functional activation.

Side effects:

Side effects include chills , cough , fever , sore throat , ulcers , sores , or white spots in the mouth.