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Pegylated Granulocyte Colony Stimulating Factor MAXY-G34

National Cancer Institute

Source

National Cancer Institute. *Pegylated Granulocyte Colony Stimulating Factor MAXY-G34*.
NCI Thesaurus. Code C71718.

A long-acting, pegylated recombinant variant of human granulocyte colony-stimulating factor (G-CSF) with immunomodulating activity. Pegylated granulocyte colony stimulating factor MAXY-G34 contains multiple non-naturally occurring lysines that have been introduced into alpha helixes of wild type human G-CSF as pegylation sites; other naturally occurring lysine residues have been removed to prevent pegylation and the variant G-CSF is pegylated with methoxypolyethylene glycol succinimidyl propionate (mPEG SPA) at three amino acid residues. Similar to endogenous G-CSF, this agent binds to and activates specific cell surface receptors, stimulating neutrophil progenitor proliferation and differentiation and selected neutrophil functions. A difference in the degree of pegylation may account for the extended half-life of this agent compared to pegfilgrastim which is pegylated at only one amino acid residue.