Neulasta Fulphila Udenyca Ziextenzo

Description

Neulasta, Neulasta Onpro (pegfilgrastim), **Fulphila** (pegfilgrastim-jmdb), **Udenyca** (pegfilgrastim-cbqv), Ziextenzo* (pegfilgrastim-bmez)

Bolded medications are the preferred products

*This medication is currently pending tier determination and may not be available at this time

Background

Neutropenia (<500 neutrophils/mcl or <1,000 neutrophils/mcl and a predicted decline to < 500/mcl over the next 48 hours) and resulting febrile neutropenia (≥ 38.3°C orally or ≥38.0°C over 1 hour) can be induced by myelosuppressive chemotherapy. Febrile neutropenia is a major dose-limiting toxicity of chemotherapy. Major infections, hospitalizations, dose reductions or treatment delays are resultant serious complications (1).

Neulasta (pegfilgrastim) and its biosimilars are granulocyte colony-stimulating factors (G-CSF) that act on hematopoietic cells by binding to specific cell surface receptors, thereby stimulating proliferation, differentiation, commitment, and end cell functional activation. The product is a covalent conjugate of recombinant methionyl human G-CSF (filgrastim) and monomethoxypolyethylene glycol. Fulphila, Udenyca, and Ziextenzo are biosimilars to Neulasta (1-5).

Regulatory Status
FDA-approved indication:

Neulasta and its biosimilars are leukocyte growth factors indicated: (2-5)
   • To decrease the incidence of infection, as manifested by febrile neutropenia, in patients with non-myeloid malignancies receiving myelosuppressive anti-cancer drugs associated with a clinically significant incidence of febrile neutropenia

Neulasta is indicated: (2)
   • To increase survival in patients acutely exposed to myelosuppressive doses of radiation

Neulasta and its biosimilars are not indicated for the mobilization of peripheral blood progenitor cells for hematopoietic stem cell transplantation (2-5).

The FDA defines biosimilar as a biological product that is highly similar to and has no clinically meaningful differences from an existing FDA-approved reference product. A manufacturer developing a proposed biosimilar demonstrates that its product is highly similar to the reference product by extensively analyzing the structure and function of both the reference product and the proposed biosimilar. Minor differences between the reference product and the proposed biosimilar in clinically inactive components are acceptable. Manufacturers must also demonstrate that its proposed biosimilar has no clinically meaningful differences from the reference product in terms of safety, purity, and potency (safety and effectiveness) (6).

Related policies
Leukine, Neupogen Granix Nivestym Zarxio

Policy
This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Neulasta and its biosimilars may be considered medically necessary for the prophylaxis or treatment of chemotherapy induced febrile neutropenia and acute radiation syndrome and if the conditions indicated below are met.

Neulasta and its biosimilars may be considered investigational for all other indications.
Prior-Approval Requirements

Diagnoses

Patient must have ONE the following:

1. Prophylaxis for chemotherapy induced febrile neutropenia
2. Treatment of chemotherapy induced febrile neutropenia
3. Acute radiation syndrome

AND the following for ALL diagnoses:

a. NOT used in combination with another granulocyte colony-stimulating factor (G-CSF)
b. Neulasta and Neulasta Onpro only: Patient MUST have tried ALL preferred products (Fulphila and Udenyca) unless the patient has a valid medical exception (e.g. inadequate treatment response, intolerance, contraindication)

Prior – Approval Renewal Requirements
Same as above

Policy Guidelines
Pre - PA Allowance
None

Prior - Approval Limits
Duration 6 months

Prior – Approval Renewal Limits
Same as above

Rationale
Summary
Neutropenia (<500 neutrophils/mcl or <1,000 neutrophils/mcl and a predicted decline to ≤ 500/mcl over the next 48 hours) and resulting febrile neutropenia (≥ 38.3°C orally or ≥38.0°C over 1 hour) can be induced by myelosuppressive chemotherapy. Neulasta (pegfilgrastim) and
its biosimilars are granulocyte colony-stimulating factors (G-CSF) that act on hematopoietic cells by binding to specific cell surface receptors, thereby stimulating proliferation, differentiation, commitment, and end cell functional activation (1-5).

Prior authorization is required to ensure the safe, clinically appropriate and cost effective use of Neulasta and its biosimilars while maintaining optimal therapeutic outcomes.

References
   https://www.fda.gov/Drugs/DevelopmentApprovalProcess/HowDrugsareDevelopedandApproved/ApprovalApplications/TherapeuticBiologicApplications/Biosimilars/ucm580419.htm#generic

Policy History

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<tr>
<th>Date</th>
<th>Reason</th>
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<td>July 2010</td>
<td>ICD-9 code was removed for myelosuppressive chemotherapy, to decrease the incidence of infection as manifested by febrile neutropenia (various), bone marrow transplantation (996.85), peripheral blood progenitor cell collection (various), acceleration of myeloid recovery in patients with non-Hodgkin’s lymphoma, ALL or Hodgkin’s disease undergoing bone marrow transplantation (various), induction chemotherapy in acute myelogenous leukemia (various), mobilization and following transplantation of autologous PBPC (various), myeloid reconstitution after allogeneic bone marrow transplantation (various), severe chronic neutropenia (various) and bone marrow transplantation failure or engraftment delay (996.0-996.5). ICD-9 code was updated for bone marrow transplantation failure or engraftment delay (996.82). ICD-10 code was added for bone marrow transplantation failure or engraftment delay (T86.02).</td>
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November 2010  
Separation of colony stimulating factors to improve functionality and workflow; remove non-FDA approved indications (including ICD-9 and 10 codes) as follows: Myelodysplastic Syndrome (MDS), Myeloid engraftment following bone marrow transplantation, Myeloid engraftment following hematopoietic stem cell transplantation, Congenital, Cyclic, or Idiopathic Neutropenia, Neutropenia associated with AIDS treatment, and Peripheral progenitor cell yield.

September 2011  
Separation of the colony stimulating agents’ criterion; Neulasta is not FDA approved for the same indications as Leukine and Neupogen. Removal of ICD-9 and 10 codes due to lack of specificity.

December 2011  
Aligned with Medical Policy

December 2012  
Annual Review-editorial updates

March 2014  
Annual review and decreased approval and renewal limits to 6 months

March 2015  
Annual editorial review and reference update
Addition of not used in combination with another granulocyte colony-stimulating factor (G-CSF)

December 2015  
Addition of new indication acute radiation syndrome

March 2016  
Annual editorial review
Policy number changed from 5.10.09 to 5.85.09

December 2016  
Annual editorial review and reference update

September 2017  
Annual review and reference update

July 2018  
Addition of Fulphila biosimilar to criteria

September 2018  
Annual review
Addition of off-label indications to Fulphila per SME

November 2018  
Annual review and reference update. Addition of Udenyca biosimilar to criteria

March 2019  
Annual review. Revised regulatory status section to separate indications based on medication per SME

December 2019  
Annual review. Addition of requirement to trial preferred products. Addition of Ziextenzo biosimilar to criteria. Renamed policy Neulasta Fulphila Udenyca Ziextenzo

**Keywords**

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on December 6, 2019 and is effective on January 1, 2020.