Show

# BlueCross BlueShield of Tennessee Medical Policy Manual

## Pegfilgrastim Biosimilar Products

**NDC CODE(S)**

67457-0833-XX FULPHILA 6MG/0.6ML Solution Prefilled Syringe (MYLAN INSTITUTIONAL)
70114-0101-XX UDENYCA 6MG/0.6ML Solution Prefilled Syringe (COHERUS BIOSCIENCES)
61314-0866-XX ZIEXTENZO 6MG/0.6ML Solution Prefilled Syringe (SANDOZ)

**DESCRIPTION**

Pegfilgrastim is a covalent conjugate of recombinant methionyl human G-CSF and monomethoxypolyethylene glycol. Recombinant methionyl human G-CSF is obtained from the bacterial fermentation of a strain of *E coli* transformed with a genetically engineered plasmid containing the human G-CSF gene. Pegfilgrastim products are colony-stimulating factors that act on hematopoietic cells and act as growth factors, stimulating neutrophils and their precursors in the bone marrow and affecting neutrophil progenitor proliferation, differentiation, commitment, and end-cell functional activation.

Biosimilar products are biological products that are highly similar to an existing FDA-approved innovator product and have no clinically meaningful differences from the innovator product. The differences in the biosimilars must be proven to be in the clinically inactive components of the biosimilars, e.g., stabilizers or buffers.

At present, the FDA has approved three products biosimilar to pegfilgrastim: Pegfilgrastim-cbqv (Udenyca™), Pegfilgrastim-jmdb (Fulphila™) and Pegfilgrastim-bmez (Ziextenzo™)

**POLICY**

- Pegfilgrastim-biosimilar products for the treatment or prevention of neutropenia are considered ***medically necessary*** if the medical appropriateness criteria are met. **(See Medical Appropriateness below.)**
- Pegfilgrastim-biosimilar products for the treatment/prevention of other conditions/diseases are considered ***investigational.***

**SEE also: Pegfilgrastim**

**MEDICAL APPROPRIATENESS**

**INITIAL APPROVAL**

- Pegfilgrastim biosimilar products are is considered **medically appropriate** for the treatment or prevention of neutropenia from **ANY ONE** of the following:
    - Prophylactic use in individuals with non-myeloid malignancy for **ANY ONE** of the following:
        - Individual is undergoing myelosuppressive chemotherapy with an expected incidence of febrile neutropenia* of 20% or greater**
        - Individual is undergoing myelosuppressive chemotherapy with an expected incidence of febrile neutropenia* of 10% or greater** and **ANY ONE** of the following co-morbidities:
            - Age ≥65 years receiving full dose intensity
            - History of recurrent febrile neutropenia from chemotherapy
            - Extensive prior exposure to chemotherapy
            - Previous exposure of pelvis, or other areas of large amounts of bone marrow, to radiation
            - Persistent neutropenia (ANC ≤ 1000/$mm^3$)
            - Bone marrow involvement by tumor
            - Individual has a condition that can potentially increase the risk of serious infection (i.e. HIV/AIDS with low CD4 counts)
            - Recent surgery and/or open wounds
            - Poor performance status
            - Renal dysfunction (creatinine clearance <50 mL/min) )
            - Liver dysfunction (elevated bilirubin >2.0 mg/dL)
            - Chronic immunosuppression in the post-transplant setting including organ transplant

    Note: Dose-dense therapy, in general, requires growth factor support to maintain dose intensity and schedule. In the palliative setting, consideration should be given to dose reduction or change in regimen

- Individual who experienced a neutropenic complication from a prior cycle of the same chemotherapy**
- Note: Dose-dense therapy, in general, requires growth factor support to maintain dose intensity and schedule. In the palliative setting, consideration should be given to dose reduction or change in regimen
- Individual acutely exposed to myelosuppressive doses of radiation (Hematopoietic Acute Radiation Syndrome [H-ARS])
- Bone marrow transplantation (BMT) failure or engraftment delay
- Peripheral blood progenitor cell (PBPC) mobilization and transplant

*Febrile neutropenia is defined as:
- a single temperature ≥38.3 °C orally or ≥38.0 °C over 1 hour; AND
- neutropenia <500 neutrophils/mcL or <1,000 neutrophils/mcL and a predicted decline to ≤500 neutrophils/mcL over the next 48 hours

**Expected incidence of febrile neutropenia percentages for myelosuppressive chemotherapy regimens can be found in the NCCN Myeloid Growth Factors Clinical Practice Guideline at NCCN.org.

**RENEWAL CRITERIA**

- Pegfilgrastim-biosimilar products are considered medically appropriate for renewal if **ALL** of the following criteria are met:
  - Individual continues to meet initial approval criteria
  - Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: splenic rupture, acute respiratory distress syndrome (ARDS), serious allergic reactions/anaphylaxis, sickle cell crisis, glomerulonephritis, leukocytosis, capillary leak syndrome, potential for tumor growth stimulation of malignant cells, aortitis, etc.
- Pegfilgrastim Biosimilar Products are **NOT** medically appropriate for renewal for use in BMT failure or engraftment delay or PBPC mobilization and transplant

| INDICATION(S) | DOSAGE & ADMINISTRATION |
|---|---|
| Prophylactic use in patients with non-myeloid malignancy<br><br>Patient who experienced a neutropenic complication from a prior cycle of the same chemotherapy | • 6 mg subcutaneously once per chemotherapy cycle and dosed no more frequently than every 14 days<br>• For pediatric patients weighing <45 kg:<br>◦ <10 kg = 0.1 mg/kg<br>◦ 10-20 kg = 1.5 mg<br>◦ 21-30 kg = 2.5 mg<br>◦ 31-44 kg = 4 mg |
| Acute Radiation Exposure (Hematopoietic Acute Radiation Syndrome) | • 6 mg subcutaneously weekly x 2 doses<br>• For pediatric patients weighing <45 kg:<br>◦ <10 kg = 0.1 mg/kg<br>◦ 10-20 kg = 1.5 mg<br>◦ 21-30 kg = 2.5 mg<br>◦ 31-44 kg = 4 mg |
| BMT failure or engraftment delay PBPC mobilization and transplant | 6 mg subcutaneously for 1 dose only |
| **NOTE:*** Do not administer within 14 days before and 24 hours after administration of a cytotoxic chemotherapy | |

**LENGTH OF AUTHORIZATION**

- Bone marrow transplantation (BMT) failure or engraftment delay: Coverage will be provided for 1 dose only and may not be renewed.
- Peripheral blood progenitor cell (PBPC) mobilization and transplant: Coverage will be provided for 1 dose only and may not be renewed.
- All other indications: Coverage will be provided for four months and may be renewed unless otherwise specified.

Refer to **DOSAGE LIMITS** below

**APPLICABLE TENNESSEE STATE MANDATE REQUIREMENTS**

BlueCross BlueShield of Tennessee's Medical Policy complies with Tennessee Code Annotated Section 56-7-2352 regarding coverage of off-label indications of Food and Drug Administration (FDA) approved drugs when the off-label use is recognized in one of the statutorily recognized standard reference compendia or in the published peer-reviewed medical literature.

**IMPORTANT REMINDER**

We develop Medical Policies to provide guidance to Members and Providers. This Medical Policy relates only to the services or supplies described in it. The existence of a Medical Policy is not an authorization, certification, explanation of benefits or a contract for the service (or supply) that is referenced in the Medical Policy. For a determination of the benefits that a Member is entitled to receive under his or her health plan, the Member's health plan must be reviewed. If there is a conflict between the Medical Policy and a health plan, the express terms of the health plan will govern.

**ADDITIONAL INFORMATION**

For appropriate chemotherapy regimens, dosage information, contraindications, precautions, warnings, and monitoring information, please refer to one of the standard reference compendia (e.g., the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) published by the National Comprehensive Cancer Network®, Drugdex Evaluations of Micromedex Solutions at Truven Health, or The American Hospital Formulary Service Drug Information).

**SOURCES**

MICROMEDEX Healthcare Series. Drugdex Drug Evaluations. (2020, January). *Pegfilgrastim-bmez Pegfilgrastim-cbqv*. *Pegfilgrastim-jmdb.* Retrieved July 6, 2020 from MICROMEDEX Healthcare Series.

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U. S. Food and Drug Administration. (2020, February). Center for Drug Evaluation and Research. *Udenyca™*, p*egfilgrastim-cbqv injection, for subcutaneous use.* Retrieved July 6, 2020 from https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/761039s000lbl.pdf

U. S. Food and Drug Administration. (2019, November). Center for Drug Evaluation and Research. *Zietenzo™*, p*egfilgrastim-bmez injection, for subcutaneous use.* Retrieved July 6, 2020 from https://www.accessdata.fda.gov/drugsatfda_docs/label/2019/761045lbl.pdf

**ORIGINAL EFFECTIVE DATE:** 12/31/2019

**MOST RECENT REVIEW DATE:** 8/11/2020

ID_MRx



**DOSAGE LIMITS**

Maximum billable units per dose and over time by indication as a Medical Benefit

Pegfilgrastim-cbqv (Udenyca™) 1 billable unit = 0.5 mg
Pegfilgrastim-jmbd (Fulphilia™) 1 billable unit = 0.5 mg
Pegfilgrastim-bmez (Ziextenzo™) 1 billable unit =0.5 mg;

| **DIAGNOSIS** | **MAXIMUM UNITS** Pegfilgrastim-cbqv Udenyca™ | **MAXIMUM UNITS** Pegfilgrastim-jmbd Fulphilia™ | **MAXIMUM UNITS** Pegfilgrastim-bmez Ziextenzo™ |
|---|---|---|---|
| Acute Radiation Exposure | 12 billable units weekly x 2 doses | 12 billable units weekly x 2 doses | 12 billable units weekly x 2 doses |
| BMT failure or engraftment delay/ PBPC mobilization and transplant | 12 billable units x 1 dose | 12 billable units x 1 dose | 12 billable units x 1 dose |
| All other indications | 12 billable units per 14 days | 12 billable units per 14 days | 12 billable units per 14 days |