

Clinical Policy: Pegfilgrastim/Biosimilars, Eflapegrastim, Efbemalenograstim

Reference Number: CP.PHAR.296 Effective Date: 12.01.16 Last Review Date: 05.24 Line of Business: Commercial, HIM, Medicaid

Coding Implications Revision Log

See <u>Important Reminder</u> at the end of this policy for important regulatory and legal information.

Description

Pegfilgrastim (Neulasta[®], Neulasta[®] Onpro[®]) and its biosimilars, pegfilgrastim-jmdb (Fulphila[™]), pegfilgrastim-pbbk (Fylnetra[®]), pegfilgrastim-apgf (Nyvepria[™]), eflapegrastim-xnst (Rolvedon[™]), efbemalenograstim alfa-vuxw (Ryzneuta[®]), pegfilgrastim-fpgk (Stimufend[®]), pegfilgrastim-cbqv (Udenyca[®], Udenyca[®] Autoinjector, Udenyca Onbody[™]), and pegfilgrastim-bmez (Ziextenzo[®]), are leukocyte growth factors.

FDA Approved Indication(s)

Neulasta, Neulasta Onpro, Fulphila, Fylnetra, Nyvepria, Stimufend, Rolvedon, Ryzneuta, Udenyca, Udenyca Autoinjector, Udenyca Onbody, and Ziextenzo are indicated 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 (FN).

Neulasta, Stimufend, Udenyca (*Autoinjector and syringe only*), and Ziextenzo are also indicated to increase survival in patients acutely exposed to myelosuppressive doses of radiation (hematopoietic subsyndrome of acute radiation syndrome).

Limitation(s) of use: Neulasta, Fulphila, Fylnetra, Nyvepria, Rolvedon, Ryzneuta, Stimufend, Udenyca products, and Ziextenzo are not indicated for the mobilization of peripheral blood progenitor cells for hematopoietic stem cell transplantation.

Policy/Criteria

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation[®] that Neulasta, Neulasta Onpro, Fulphila, Fylnetra, Nyvepria, Rolvedon, Ryzneuta, Stimufend, Udenyca, Udenyca Autoinjector, Udenyca Onbody, and Ziextenzo are **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

- A. Chemotherapy-Induced Neutropenia (must meet all):
 - 1. Diagnosis of non-myeloid malignancy (i.e., solid tumor and lymphoid malignancies);
 - 2. Prescribed for use following myelosuppressive chemotherapy;



- 3. One of the following (a or b):
 - a. Request is for treatment associated with cancer for a State with regulations against step therapy in certain oncology settings *(see Appendix E)*;
 - b. Both of the following (i and ii):
 - i. Failure of Zarxio, unless one of the following (1, 2, or 3):
 - 1) Member has intolerance or contraindication to Zarxio;
 - 2) Documentation of member's inability to self-administer Zarxio due to both of the following (a and b):
 - a) Lack of caregiver or support system for assistance with administration;
 - b) Inadequate access to healthcare facility or home care interventions;
 - 3) Member requires ≥ 10 doses of Zarxio; *Prior authorization may be required for Zarxio
 - ii. One of the following (1, 2, or 3):
 - 1) Request is for Ziextenzo or Udenyca[^];
 - If request is for a biosimilar pegfilgrastim product other than Ziextenzo or Udenyca[^] (i.e., Fulphila, Fylnetra, Nyvepria, Stimufend), member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - 3) If request is for Neulasta, Neulasta Onpro, Rolvedon, or Ryzneuta, both of the following (a and b):
 - a) Member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - b) If member is unable to use Udenyca[^] member must use biosimilar pegfilgrastim products, unless clinically significant adverse effects are experienced or all are contraindicated;

*Prior authorization may be required for Udenyca^ ^ Udenyca refers to all formulations (prefilled syringe, autoinjector, and on-body

injector)

- 4. Member meets one of the following (a or b):
 - a. For pegfilgrastim: Confirmation that there are at least 12 days between dose and the next cycle of chemotherapy;
 - b. For eflapegrastim-xnst or efbemalenograstim alfa-vuxw: Confirmation that there are at least 14 days between dose and the next cycle of chemotherapy;
- 5. The requested medication will not be prescribed concurrently with other colony stimulating factors (e.g., filgrastim, Leukine[®]) within any chemotherapy cycle;
- 6. For members receiving palliative chemotherapy, provider attestation that chemotherapy dose reduction has been considered;
- 7. Dose does not exceed one of the following (a, b, or c):
 - a. For pegfilgrastim: 6 mg (1 syringe) per chemotherapy cycle;
 - b. For eflapegrastim-xnst: 13.2 mg (1 syringe) per chemotherapy cycle;
 - c. For efbemalenograstim alfa-vuxw: 20 mg (1 syringe) per chemotherapy cycle.

Approval duration:

Medicaid/HIM – 6 months

Commercial - 6 months or to the member's renewal date, whichever is longer

i.



B. Acute Radiation Syndrome (must meet all):

- 1. Prescribed for use following suspected or confirmed acute exposure to myelosuppressive doses of radiation;
- 2. Request is not for Neulasta Onpro or Udenyca Onbody;
- 3. One of the following (a or b):
 - a. Request is for treatment associated with cancer for a State with regulations against step therapy in certain oncology settings *(see Appendix E)*;
 - b. Both of the following (i and ii):
 - Failure of Zarxio, unless one of the following (1, 2, or 3):
 - 1) Member has intolerance or contraindication to Zarxio;
 - 2) Documentation of member's inability to self-administer Zarxio due to both of the following (a and b):
 - a) Lack of caregiver or support system for assistance with administration;
 - b) Inadequate access to healthcare facility or home care interventions;
 - 3) Member requires ≥ 10 doses of Zarxio; *Prior authorization may be required for Zarxio
 - ii. One of the following (1, 2, or 3):
 - 1) Request is for Ziextenzo or Udenyca[^];
 - If request is for a biosimilar pegfilgrastim product other than Ziextenzo or Udenyca[^] (i.e., Fulphila, Fylnetra, Nyvepria, Stimufend), member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - 3) If request is for Neulasta, Rolvedon, or Ryzneuta, both of the following (a and b):
 - a) Member must use Udenyca[^], unless contraindicated or clinically significant adverse effects are experienced;
 - b) If member is unable to use Udenyca[^], member must use biosimilar pegfilgrastim products, unless clinically significant adverse effects are experienced or all are contraindicated;
 - *Prior authorization may be required for Udenyca^
 - ^ Udenyca refers to prefilled syringe and autoinjector formulations
- 4. The requested medication will not be prescribed concurrently with other colony stimulating factors (e.g., filgrastim, Leukine) within any chemotherapy cycle;
- 5. Dose does not exceed one of the following (a or b):
 - a. For pegfilgrastim: two 6 mg doses administered one week apart;
 - b. For eflapegrastim-xnst or efbemalenograstim alfa-vuxw: dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use *(prescriber must submit supporting evidence).*

Approval duration:

Medicaid/HIM - 6 months

Commercial - 6 months or to the member's renewal date, whichever is longer

C. Bone Marrow Transplantation (off-label) (must meet all):

- 1. Prescribed for mobilization of peripheral-blood progenitor cells prior to autologous transplantation;
- 2. Request is not for Rolvedon or Ryzneuta;
- 3. Prescribed in combination with Mozobil[®];



- 4. Failure of Leukine, unless contraindicated, clinically significant adverse effects are experienced, or request is for treatment associated with cancer for a State with regulations against step therapy in certain oncology settings (see Appendix E); **Prior authorization may be required for Leukine*
- 5. One of the following (a or b):
 - a. Request is for treatment associated with cancer for a State with regulations against step therapy in certain oncology settings *(see Appendix E)*;
 - b. Both of the following (i and ii):
 - i. Failure of Zarxio, unless one of the following (1, 2, or 3):
 - 1) Member has intolerance or contraindication to Zarxio;
 - 2) Documentation of member's inability to self-administer Zarxio due to both of the following (a and b):
 - a) Lack of caregiver or support system for assistance with administration;
 - b) Inadequate access to healthcare facility or home care interventions;
 - 3) Member requires ≥ 10 doses of Zarxio; *Prior authorization may be required for Zarxio
 - ii. One of the following (1, 2, or 3):
 - 1) Request is for Ziextenzo or Udenyca[^];
 - If request is for a biosimilar pegfilgrastim product other than Ziextenzo or Udenyca[^] (i.e., Fulphila, Fylnetra, Nyvepria, Stimufend), member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - 3) If request is for Neulasta or Neulasta Onpro, both of the following (a and b):
 - a) Member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - b) If member is unable to use Udenyca[^] member must use biosimilar pegfilgrastim products, unless clinically significant adverse effects are experienced or all are contraindicated;

*Prior authorization may be required for Udenyca^

^ Udenyca refers to all formulations (prefilled syringe, autoinjector, and on-body injector)

- 6. The requested medication will not be prescribed concurrently with other colony stimulating factors (e.g., filgrastim, Leukine) within any chemotherapy cycle;
- 7. Request meets one of the following (a or b):
 - a. Dose does not exceed 6 mg (1 syringe) per dose;
 - b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration:

Medicaid/HIM – 6 months

Commercial – 6 months or to the member's renewal date, whichever is longer

D. Wilms Tumor (off-label) (must meet all):

- 1. Diagnosis of Wilms tumor (nephroblastoma);
- 2. Request is not for Rolvedon or Ryzneuta;



- 3. Request is for supportive care for member receiving a regimen of cyclophosphamide and etoposide, or cyclophosphamide, doxorubicin, and vincristine in Regimen M and Regimen I (*see Appendix D*);
- 4. One of the following (a or b):
 - a. Request is for treatment associated with cancer for a State with regulations against step therapy in certain oncology settings *(see Appendix E)*;
 - b. Both of the following (i and ii):
 - i. Failure of Zarxio, unless one of the following (1, 2, or 3):
 - 1) Member has intolerance or contraindication to Zarxio;
 - 2) Documentation of member's inability to self-administer Zarxio due to both of the following (a and b):
 - a) Lack of caregiver or support system for assistance with administration;
 - b) Inadequate access to healthcare facility or home care interventions;
 - 3) Member requires ≥ 10 doses of Zarxio; *Prior authorization may be required for Zarxio
 - ii. One of the following (1, 2, or 3):
 - 1) Request is for Ziextenzo or Udenyca[^];
 - If request is for a biosimilar pegfilgrastim product other than Ziextenzo or Udenyca[^] (i.e., Fulphila, Fylnetra, Nyvepria, Stimufend), member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - 3) If request is for Neulasta or Neulasta Onpro, both of the following (a and b):
 - a) Member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - b) If member is unable to use Udenyca[^] member must use biosimilar pegfilgrastim products, unless clinically significant adverse effects are experienced or all are contraindicated;

*Prior authorization may be required for Udenyca^

^ Udenyca refers to all formulations (prefilled syringe, autoinjector, and on-body injector)

- 5. The requested medication will not be prescribed concurrently with other colony stimulating factors (e.g., filgrastim, Leukine) within any chemotherapy cycle;
- 6. Request meets one of the following (a or b):
 - a. Dose does not exceed 6 mg (1 syringe) per chemotherapy cycle;
 - b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approved duration:

Medicaid/HIM - 6 months

Commercial – 6 months or to the member's renewal date, whichever is longer

E. Other diagnoses/indications (must meet 1 and 2):

- 1. One of the following (a or b):
 - a. Request is for treatment associated with cancer for a State with regulations against step therapy in certain oncology settings *(see Appendix E)*;
 - b. Both of the following (i and ii):
 - i. Failure of Zarxio, unless one of the following (1, 2, or 3):



- 1) Member has intolerance or contraindication to Zarxio;
- 2) Documentation of member's inability to self-administer Zarxio due to both of the following (a and b):
 - a) Lack of caregiver or support system for assistance with administration;
 - b) Inadequate access to healthcare facility or home care interventions;
- 3) Member requires ≥ 10 doses of Zarxio; *Prior authorization may be required for Zarxio
- ii. One of the following (1, 2, or 3):
 - 1) Request is for Ziextenzo or Udenyca[^];
 - If request is for a biosimilar pegfilgrastim product other than Ziextenzo or Udenyca[^] (i.e., Fulphila, Fylnetra, Nyvepria, Stimufend), member must use Udenyca[^], unless contraindicated or clinically significant adverse effects are experienced;
 - 3) If request is for Neulasta, Neulasta Onpro, Rolvedon, or Ryzneuta, both of the following (a and b):
 - a) Member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - b) If member is unable to use Udenyca[^] member must use biosimilar pegfilgrastim products, unless clinically significant adverse effects are experienced or all are contraindicated;

*Prior authorization may be required for Udenyca[^] [^] Udenyca refers to all formulations (prefilled syringe, autoinjector, and on-body injector)

- 2. One of the following (a or b):
 - a. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (i or ii):
 - i. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or
 - ii. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or
 - b. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 2a above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

II. Continued Therapy

- A. All Indications in Section I (must meet all):
 - 1. Member meets one of the following (a or b):
 - a. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;

i.



- b. Member is currently receiving medication and is enrolled in a state and product with continuity of care regulations (*refer to state specific addendums for CC.PHARM.03A and CC.PHARM.03B*);
- 2. Member is responding positively to therapy;
- 3. One of the following (a or b):
 - a. Request is for treatment associated with cancer for a State with regulations against step therapy in certain oncology settings *(see Appendix E)*;
 - b. Both of the following (i and ii):
 - Failure of Zarxio, unless one of the following (1, 2, or 3):
 - 1) Member has intolerance or contraindication to Zarxio;
 - 2) Documentation of member's inability to self-administer Zarxio due to both of the following (a and b):
 - a) Lack of caregiver or support system for assistance with administration;
 - b) Inadequate access to healthcare facility or home care interventions;
 - 3) Member requires ≥ 10 doses of Zarxio; *Prior authorization may be required for Zarxio
 - ii. One of the following (1, 2, or 3):
 - 1) Request is for Ziextenzo or Udenyca[^];
 - If request is for a biosimilar pegfilgrastim product other than Ziextenzo or Udenyca[^] (i.e., Fulphila, Fylnetra, Nyvepria, Stimufend), member must use Udenyca[^], unless contraindicated or clinically significant adverse effects are experienced;
 - 3) If request is for Neulasta, Neulasta Onpro, Rolvedon, or Ryzneuta, both of the following (a and b):
 - a) Member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - b) If member is unable to use Udenyca[^] member must use biosimilar pegfilgrastim products, unless clinically significant adverse effects are experienced or all are contraindicated;

*Prior authorization may be required for Udenyca^

^ Udenyca refers to all formulations (prefilled syringe, autoinjector, and on-body injector)

- 4. The requested medication will not be prescribed concurrently with other colony stimulating factors (e.g., filgrastim, Leukine) within any chemotherapy cycle;
- 5. If request is for a dose increase, new dose does not exceed one of the following (a, b, c, or d):
 - a. Chemotherapy-induced neutropenia (i, ii, or iii):
 - i. For pegfilgrastim: 6 mg (1 syringe) per chemotherapy cycle;
 - ii. For eflapegrastim: 13.2 mg (1 syringe) per chemotherapy cycle;
 - iii. For efbemalenograstim alfa-vuxw: 20 mg (1 syringe) per chemotherapy cycle;
 - b. Acute radiation syndrome (i or ii):
 - i. For pegfilgrastim: two 6 mg doses administered one week apart;
 - ii. For eflapegrastim-xnst or efbemalenograstim alfa-vuxw: dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*);



c. Bone marrow transplantation: 6 mg (1 syringe) per dose, or dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*);

d. Wilms tumor: 6 mg (1 syringe) administered once per chemotherapy cycle. **Approval duration:**

Medicaid/HIM – 6 months

Commercial - 6 months or to the member's renewal date, whichever is longer

B. Other diagnoses/indications (must meet 1 and 2):

- 1. One of the following (a or b):
 - a. Request is for treatment associated with cancer for a State with regulations against step therapy in certain oncology settings *(see Appendix E)*;
 - b. Both of the following (i and ii):
 - i. Failure of Zarxio, unless one of the following (1, 2, or 3):
 - 1) Member has intolerance or contraindication to Zarxio;
 - 2) Documentation of member's inability to self-administer Zarxio due to both of the following (a and b):
 - a) Lack of caregiver or support system for assistance with administration;
 - b) Inadequate access to healthcare facility or home care interventions;
 - 3) Member requires ≥ 10 doses of Zarxio; *Prior authorization may be required for Zarxio
 - ii. One of the following (1, 2, or 3):
 - 1) Request is for Ziextenzo or Udenyca[^];
 - If request is for a biosimilar pegfilgrastim product other than Ziextenzo or Udenyca[^] (i.e., Fulphila, Fylnetra, Nyvepria, Stimufend), member must use Udenyca[^], unless contraindicated or clinically significant adverse effects are experienced;
 - 3) If request is for Neulasta, Neulasta Onpro, Rolvedon, or Ryzneuta, both of the following (a and b):
 - a) Member must use Udenyca[^] unless contraindicated or clinically significant adverse effects are experienced;
 - b) If member is unable to use Udenyca[^] member must use biosimilar pegfilgrastim products, unless clinically significant adverse effects are experienced or all are contraindicated;

*Prior authorization may be required for Udenyca^

^ Udenyca refers to all formulations (prefilled syringe, autoinjector, and on-body injector)

- 2. One of the following (a or b):
 - a. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (i or ii):
 - i. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or
 - ii. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business:



CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or

b. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

III. Diagnoses/Indications for which coverage is NO T authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid, or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key	
ANC: absolute neutrophil count	FDA: Food and Drug Administration
ASCO: American Society of Clinical	FN: febrile neutropenia
Oncology	NCCN: National Comprehensive Cancer
CSFs: colony-stimulating factors	Network

Appendix B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/
<u> </u>		Maximum Dose
Neupogen®	Supportive care post autologous hematopoietic	10 mcg/kg/day
(filgrastim),	cell transplantation	
Granix [®]	10 mcg/kg IV or SC infusion QD	
(tbo-filgrastim),		
Nivestym [®]	Mobilization of peripheral-blood progenitor	10 mcg/kg/day
(filgrastim-aafi),	cells prior to autologous transplantation	
Releuko®	10 mcg/kg SC bolus or continuous infusion QD	
(filgrastim-ayow)		
Zarxio [®]		
(filgrastim-sndz),		
Leukine®	Supportive care post autologous hematopoietic	500 mcg/m ² /day
(sargramostim)	cell transplantation	
	250 mcg/m ² /day IV	
	Mobilization of peripheral-blood progenitor	250 mcg/m ² /day
	cells prior to autologous transplantation	
	250 mcg/m ² /day IV or SC QD	

Therapeutic alternatives are listed as Brand name[®] (generic) when the drug is available by brand name only and generic (Brand name[®]) when the drug is available by both brand and generic.



Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): history of serious allergic reactions to human granulocyte colonystimulating factors such as efbemalenograstim alfa-vuxw (*Ryzneuta only*), eflapegrastim (*Rolvedon only*), pegfilgrastim, or filgrastim products
- Boxed warning(s): none reported

Appendix D: General Information

- Neutropenia is defined as an absolute neutrophil count (ANC) of < 500 neutrophils/mcL or an ANC of < 1,000 neutrophils/mcL and a predicted decline to ≤ 500 neutrophils/mcL over the next 48 hours. Neutropenia can progress to FN, defined as a single temperature of ≥ 38.8 C orally or ≥ 38.0 C over 1 hour.
- The development of FN is a common dose-limiting toxicity of many chemotherapy regimens. This risk is directly related to the intensity of the chemotherapy regimen. Chemotherapy regimens that have an incidence of FN greater than 20% in clinical trials in chemotherapy naïve patients are considered by the National Comprehensive Cancer Network (NCCN) panel at high risk. Prophylaxis with myeloid growth factors is recommended at this level of risk (category 1 recommendation). NCCN Compendium recommend prophylaxis be considered in intermediate-risk (10-20% overall risk of FN) patients (category 2A recommendation). In addition to chemotherapy regimens, other risk factors such as: treatment-related, patient related, cancer-related, and co-morbidities have also been associated with an increased risk of FN. Therefore, the type of chemotherapy regimen is only one component of the risk assessment.
- Harvesting of peripheral blood stem cells prior to autologous stem-cell transplantation has a recommendation of Class IIa in DRUGDEX. The NCCN Compendium recommends pegfilgrastim and its biosimilars for hematopoietic cell mobilization for autologous donors in combination with plerixafor, category 2A recommendation.
- According to the ASCO, 2006 Clinical Practice Guideline for the Use of White Blood Cell Growth Factors, dose reduction or delay remains an appropriate strategy for the palliative treatment of cancer, as there is no evidence that dose maintenance or escalation improves clinically important outcomes in this setting. The 2015 updates to this guideline found no new data supporting the use of colony-stimulating factors (CSFs) to maintain dose-intensity in the treatment of metastatic disease, and the review found no demonstrable benefit in the use of myeloid growth factors to in patients with metastatic lung, small-cell lung, colorectal, hormone-refractory prostate, or breast cancer. To date, there have been no improvements in disease-free or OS reported for any common cancer with the use of CSFs to maintain dose-intensity, instead of dose reduction. The ASCO Panel recognizes that there may be individual patients who will not tolerate effective doses of chemotherapy without CSFs. Medical Oncologists making the decision to use prophylactic MGFs, or not, may need to consider not only the optimal chemotherapy regimen, but also the individual member risk factors and the intention of treatment; that is, curative, prolongation of life, or symptom control and palliation.
- Chemotherapy regimens used in the treatment of Wilms Tumor for which filgrastim supportive care may be considered:
 - Regimen M: 9 doses of vincristine, 5 doses of dactinomycin, 5 doses of doxorubicin (cumulative dose 150 mg/m2), 4 courses of 5 daily doses of cyclophosphamide, and 4



courses of 5 daily doses of etoposide over 24 weeks. Dactinomycin and doxorubicin are given together, and cyclophosphamide and etoposide are given together.

Regimen I: 9 doses of vincristine, 4 doses of doxorubicin (cumulative dose 180 mg/m2), 7 courses of 3 to 5 daily doses of cyclophosphamide, and 3 courses of 5 daily doses of etoposide. Doxorubicin and 3 daily doses of cyclophosphamide are given together, and 5 daily doses of cyclophosphamide and etoposide are given together.

State	Step Therapy Prohibited?	Notes	
FL	Yes	For stage 4 metastatic cancer and associated conditions.	
GA	Yes	For stage 4 metastatic cancer. Redirection does not refer to	
		review of medical necessity or clinical appropriateness.	
IA	Yes	For standard of care stage 4 cancer drug use, supported by peer-	
		reviewed, evidence-based literature, and approved by FDA.	
LA	Yes	For stage 4 advanced, metastatic cancer or associated conditions.	
		Exception if "clinically equivalent therapy, contains identical	
		active ingredient(s), and proven to have same efficacy.	
MS	Yes	*Applies to HIM requests only*	
		For advanced metastatic cancer and associated conditions	
NV	Yes	Stage 3 and stage 4 cancer patients for a prescription drug to treat	
		the cancer or any symptom thereof of the covered person	
OH	Yes	*Applies to Commercial and HIM requests only*	
		For stage 4 metastatic cancer and associated conditions	
OK	Yes	*Applies to HIM requests only*	
		For advanced metastatic cancer and associated conditions	
PA	Yes	For stage 4 advanced, metastatic cancer	
TN	Yes	For advanced metastatic cancer and associated conditions	
TX	Yes	For stage 4 advanced, metastatic cancer and associated conditions	

Appendix E: States with Regulations against Redirections in Cancer



V. Dosage and Administration

Dosage and Administr Drug Name	Indication	Dosing Regimen	Maximum Dose
Pegfilgrastim (Neulasta), pegfilgrastim-jmdb (Fulphila), pegfilgrastim-pbbk (Fylnetra), pegfilgrastin-apgf (Nyvepria), pegfilgrastim-fpgk (Stimufend), pegfilgrastim-cbqv (Udenyca), pegfilgrastim-bmez (Ziextenzo)	Myelosuppressive chemotherapy	6 mg administered SC once per chemotherapy cycle. Do not administer between 14 days before and 24 hours after administration of cytotoxic chemotherapy. Weight based dosing for pediatric patients < 45 kg	6 mg/dose
Pegfilgrastim (Neulasta), pegfilgrastim-fpgk (Stimufend), pegfilgrastim-cbqv (Udenyca), pegfilgrastim-bmez (Ziextenzo)	Members acutely exposed to myelosuppressive doses of radiation	Two doses, 6 mg each, administered SC one week apart. Administer the first dose as soon as possible after suspected or confirmed exposure to myelosuppressive doses of radiation, and a second dose one week after Weight based dosing for pediatric patients < 45 kg	6 mg/dose
Eflapegrastim-xnst (Rolvedon)	Myelosuppressive chemotherapy	13.2 mg administered SC once per chemotherapy cycle. Do not administer between 14 days before and 24 hours after administration of cytotoxic chemotherapy.	13.2 mg/dose
Efbemalenograstim alfa-vuxw (Ryzneuta)	Myelosuppressive chemotherapy	20 mg administered SC once per chemotherapy cycle at least 24 hours after cytotoxic chemotherapy. Do not administer within 14 days before and < 24 hours after administration of cytotoxic chemotherapy.	20 mg/dose



VI. Product Availability

Drug Name	Availability
Pegfilgrastim (Neulasta)	 Injection: 6 mg/0.6 mL solution in a single-dose prefilled syringe for manual use only Injection: 6 mg/0.6 mL solution in a single-dose prefilled syringe co-packaged with the on-body injector
Pegfilgrastim-jmdb (Fulphila)	 Injection: 6 mg/0.6 mL solution in a single-dose prefilled syringe for manual use only
Pegfilgrastim-pbbk (Fylnetra)	• Injection: 6 mg/0.6 mL solution in a single-dose prefilled syringe for manual use only
Pegfilgrastin-apgf (Nyvepria)	• Injection: 6 mg/0.6 mL solution in a single-dose prefilled syringe for manual use only
Pegfilgrastim-fpgk (Stimufend)	• Injection: 6 mg/0.6 mL solution in a single-dose prefilled syringe for manual use only
Pegfilgrastim-cbqv (Udenyca)	 Injection: 6 mg/0.6 mL solution in a single-dose prefilled syringe for manual use only Injection: 6 mg/0.6 mL solution in a single-dose prefilled syringe co-packaged with the on-body injector Injection: 0.6 mg/0.6 mL solution in a single-dose prefilled
Pegfilgrastim- bmez (Ziextenzo)	 autoinjector (not for use in pediatric patients < 45 kg) Injection: 6 mg/0.6 mL solution in a single-dose prefilled syringe for manual use only
Eflapegrastim-xnst (Rolvedon)	• Injection: 13.2 mg/0.6 mL solution in a single-dose prefilled syringe for manual use only
Efbemalenograstim alfa-vuxw (Ryzneuta)	• Injection: 20 mg/mL solution in a single-dose prefilled syringe for manual use only

VII. References

- 1. Neulasta Prescribing Information. Thousand Oaks, CA: Amgen, Inc.; February 2021. Available at www.neulasta.com. Accessed October 23, 2023.
- 2. Fulphila Prescribing Information. Zurich, Switzerland: Mylan GmbH; June 2023. Available at: www.fulphila.com. Accessed October 23, 2023.
- 3. Fylnetra Prescribing Information. Piscataway, NJ: Kashiv BioSciences, LLC; May 2022. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/761084s000lbl.pdf. Accessed October 23, 2023.
- 4. Nyvepria Prescribing Information. Lake Forest, IL: Hospira, Inc.; April 2021. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2021/761111s004lbl.pdf. Accessed October 23, 2023.
- 5. Rolvedon Prescribing Information. Irvine, CA: Spectrum Pharmaceuticals, Inc.; June 2023. Available at: www.rolvedon.com. Accessed October 23, 2023.
- Ryzneuta Prescribing Information. Gateway West, Singapore: Evive Biotechnology, PTE LTD.; November 2023. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2023/761134s000lbl.pdf. Accessed December 13, 2023.



- 7. Stimufend Prescribing Information. Lake Zurich, IL: Fresenius Kabi, LLC; September 2023. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2023/761173s002lbl.pdf. Accessed October 23, 2023.
- 8. Udenyca Prescribing Information. Redwood City, CA: Coherus BioSciences, Inc.; December 2023. Available at: www.udenyca.com. Accessed March 12, 2024.
- 9. Ziextenzo Prescribing Information. Princeton, NJ: Sandoz Inc.; February 2024. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2024/761045Orig1s014lbl.pdf. Accessed March 12, 2024.
- 10. Pegfilgrastim. In: National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at NCCN.org. Accessed October 23, 2023.
- 11. DRUGDEX[®] System [Internet database]. Greenwood Village, Colo: Thomson Healthcare. Updated periodically. Accessed May 8, 2023.
- 12. Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2020. Available at: http://www.clinicalpharmacology-ip.com/. Accessed May 8, 2023.
- 13. National Comprehensive Cancer Network. Hematopoietic Growth Factors Version 2.2024. Available at: https://www.nccn.org/professionals/physician_gls/pdf/growthfactors.pdf. Accessed December 13, 2023.
- 14. National Comprehensive Cancer Network. Wilms Tumor (Nephroblastoma) 1.2023. Available at: https://www.nccn.org/professionals/physician_gls/pdf/wilms_tumor.pdf. Accessed May 8, 2023.
- National Comprehensive Cancer Network. Hematopoietic Cell Transplantation (HCT) 1.2023. Available at: https://www.nccn.org/professionals/physician_gls/pdf/hct.pdf. Accessed May 8, 2023.
- Smith TJ, Khatcheressian J, Lyman GH, et al. 2006 Update of recommendations for the use of white blood cell growth factors: an evidence-based clinical practice guideline. JCO 2006 July. 24(19): 3187-3205.
- 17. Smith TJ, Bohlke K, Lyman GH, et al. Recommendations for the use of WBC growth factors: American Society of Clinical Oncology clinical practice guideline update. 2015 October. JCO 33(28): 3199-3212.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-todate sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS	Description
Codes	
J2506	Injection, pegfilgrastim, excludes biosimilar, 0.5 mg
Q5111	Injection, pegfilgrastim-cbqv, biosimilar, (Udenyca), 0.5 mg
Q5108	Injection, pegfilgrastim-jmdb, biosimilar, (Fulphila), 0.5 mg
Q5120	Injection, pegfilgrastim-bmez, biosimilar, (Ziextenzo), 0.5 mg
Q5122	Injection, pegfilgrastim-apgf, biosimilar, (Nyvepria), 0.5 mg
Q5127	Injection, pegfilgrastim-fpgk (Stimufend), biosimilar, 0.5 mg
Q5130	Injection, pegfilgrastim-pbbk (Fylnetra), biosimilar, 0.5 mg
J1449	Injection, eflapegrastim-xnst, 0.1 mg
J9361	Injection, efbemalenograstim alfa-vuxw, 0.5 mg



Reviews, Revisions, and Approvals	Date	Р&Т
		Approval
		Date
3Q 2019 annual review: added Nivestym to list of filgrastim products	05.15.19	08.19
required for bone marrow transplant indication, updated HCPCS		
coding table to include biosimilar products; references reviewed and		
updated.	10.00.10	11.10
For chemotherapy-induced neutropenia and acute radiation syndrome,	10.08.19	11.19
added redirection to Zarxio; For bone marrow transplant narrowed		
previous redirection to Neupogen, Zarxio, Granix, or Nivestym to Zarxio only. For Zarxio redirection added the following scenarios		
where redirection is not required: a. Member has intolerance or		
contraindication to Zarxio; b. Documentation of member's inability to		
self-administer Zarxio due to both of the following (i and ii): i. Lack		
of caregiver or support system for assistance with administration; ii.		
Inadequate access to healthcare facility or home care interventions; c.		
Member requires ≥ 10 doses of Zarxio. For chemotherapy-induced		
neutropenia added requirement for members receiving palliative		
chemotherapy, provider's attestation that chemotherapy dose		
reduction has been considered. Appendix D updated to include ASCO		
recommendations related to consideration of chemotherapy dose		
reduction.		
RT4: added Ziextenzo to policy.	02.12.20	
Added requirement for redirection to Zarxio to Section II for	04.20.20	05.20
continued therapy requests; allowed by-passing of redirection if state		
regulations do not allow step therapy in Stage IV or metastatic cancer		
settings.		
Added redirection to a biosimilar pegfilgrastim if member is unable to	07.30.20	
use Zarxio; revised 11.19 update revision log to remove that		
redirection change to Zarxio came from SDC.		
3Q 2020 annual review: no significant changes; references reviewed	04.30.20	08.20
and updated.	00.00.00	
RT4: added new biosimilar Nyvepria to policy; added redirection to a	08.20.20	
biosimilar pegfilgrastim for all indications if member is unable to use		
Zarxio, including Section II continued therapy	09.21.20	
Per September SDC and prior clinical guidance, added redirection to Ziextenxo for Fulphila, Neulasta, Nyvepria, or Udenyca requests.	09.21.20	
Removed AR from appendix E ("For metastatic cancer, unless the	11.16.20	
preferred drug is consistent with "best practices" (1) used for	11.10.20	
treatment under (A) FDA-approved indication, or (B) National		
Comprehensive Cancer Network Drugs & Biologics Compendium; or		
(2) using evidence-based, peer-reviewed, recognized medical		
literature.		
Note – may not require step therapy a second time for same Rx drug")		
to minimize misinterpretation.	1	



Reviews, Revisions, and Approvals	Date	Р&Т
		Approval
		Date
Clarified that redirections to Ziextenzo apply to Neulasta, Neulasta	01.26.21	
Onpro, and all non-preferred pegfilgrastim products.		
Add requirement for confirmation that there is at least 12 days	10.26.20	02.21
between pegfilgrastim dose and the next cycle of chemotherapy;		
references to HIM.PHAR.21 revised to HIM.PA.154.		
Updated appendix E to include Ohio.	02.08.21	
Clarified redirection language to indicate Zarxio must be used,	03.02.21	
followed by Ziextenzo, followed by other pegfilgrastim biosimilars,		
followed by Neulasta or Neulasta Onpro.		
Updated GA language in appendix E.		
Ad Hoc update: applied redirection language to other	03.15.21	
diagnoses/indications		
Other diagnoses/indications: modified redirect language to align with	05.04.21	
criteria sets by indication that include redirection bypass per state		
regulations and requirements for age <18; clarified both redirection		
and criteria for off-label use are required.		
3Q 2021 annual review: added NCCN compendium supported off-	05.05.21	08.21
label use in Wilms tumor; added HCPCS code for Nyvepria;		
references reviewed and updated.		
Added Nevada to Appendix E.	08.03.21	
Updated HCPCS code for Neulasta; removed general description of	01.19.22	
"stage IV or metastatic" cancer for states with regulations against		
redirections.		
3Q 2022 annual review: added requirement that requested medication	04.27.22	08.22
will not be prescribed concurrently with other colony stimulating		
factors (e.g., pegfilgrastim, Leukine) within any chemotherapy cycle;		
clarified non-myeloid malignancy refers to solid tumor and lymphoid		
malignancies; for bone marrow transplantation redirection to Leukine		
added bypass option if request is for a state with regulations against		
redirection in certain oncology settings; retire WCG.CP.PHAR.296;		
RT4: added new biosimilar Fylnetra to policy; reference reviewed and		
updated.		
RT4: added Stimufend and Rolvedon to policy; template changes	11.08.22	
applied to other diagnoses/indications and continued therapy section.		
RT4: added new indication of hematopoietic subsyndrome of acute	12.14.22	
radiation syndrome to Udenyca; added that request is not for Neulasta		
OnPro for acute radiation syndrome.		
RT4: added new formulation of Udenyca prefilled auto-injector.	03.14.23	
Per February SDC and prior clinical guidance, added Udenyca as step	02.21.23	05.23
through requirement to co-prefer with Ziextenzo.		
3Q 2023 annual review: added HCPCS codes Q5127 for Stimufend,	04.14.23	08.23
Q5130 for Fylnetra, and J1449 for Rolvedon; removed HCPCS code		
J3590; for bone marrow transplantation removed off-label use in		



Reviews, Revisions, and Approvals	Date	P&T Approval Date
supportive care post autologous hematopoietic cell transplantation as this is no longer NCCN Compendium supported, updated Appendix D for consistency; for mobilization of peripheral-blood progenitor cells prior to autologous transplantation added requirement for being prescribed in combination with Mozobil per NCCN Compendium;		
references reviewed and updated; updated Appendix E to include Oklahoma.		
Per August SDC, removed redirection to Ziextenzo.	08.22.23	11.23
RT4: for Stimufend, added new indication of hematopoietic subsyndrome of acute radiation syndrome to FDA approved indication section and section V; RT4: added newly FDA approved Ryzneuta; for acute radiation syndrome, removed "request is not for Rolvedon" as off-label use is supported on NCCN compendium and added standard off-label dosing language for Rolvedon and Ryzneuta; added Neulasta OnPro, Rolvedon, and Ryzneuta redirection to Udenyca where applicable.	10.23.23	
RT4: added new formulation for Udenyca prefilled syringe for use with the on-body injector; for Acute Radiation Syndrome, added "Request is not for Udenyca Onbody".	01.25.24	
Per March SDC, added clarification that redirection to Udenyca refers to all formulations (prefilled syringe, autoinjector, and on-body injector); RT4: for Ziextenzo, added new indication for hematopoietic subsyndrome of acute radiation syndrome.	03.12.24	05.24
Added HCPCS code [J9361]; Added Mississippi to Appendix E.	06.05.24	

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

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