



Colony Stimulating Factors – Short Acting [Granix® (tbo-filgrastim), Neupogen® (filgrastim), Nivestym™ (filgrastim-aafi), Zarxio® (filgrastim-sndz), Releuko (filgrastim-ayow)]		
MEDICAL POLICY NUMBER	MED_Clin_Ops_047b	
ORIGINAL EFFECTIVE DATE	7/1/2021	
CURRENT VERSION NUMBER	3	
CURRENT VERSION EFFECTIVE DATE	1/1/2024	
APPLICABLE PRODUCT AND MARKET	Medicare Advantage: ALL*	

<sup>\*</sup>BND members subject to step therapy

**IMPORTANT INFORMATION** — **PLEASE READ BEFORE USING THIS POLICY**: These services may or may not be covered by all Brand New Day/Central Health Medicare Plan. Please refer to the member's plan document for specific coverage information.

Brand New Day/Central Health Medicare Plan may use tools developed by third parties, such as MCG<sup>™</sup> Care Guidelines and the ASAM Criteria to assist in administering health benefits. Brand New Day/Central Health Medicare Plan Medical Policies, MCG<sup>™</sup> Care Guidelines, and the ASAM Criteria to a rot intended to be used without the independent clinical judgment of a qualified health care provider considering the individual circumstances of each member's case. The treating health care providers are solely responsible for diagnosis, treatment, and medical advice.

Members may contact Brand New Day/Central Health Medicare Plan Customer Service at the phone number listed on their member identification card to discuss their benefits more specifically. Providers with questions about this Brand New Day/ Central Health Medicare Plan policy may contact the Health Plan.

Before using this policy, please check the member benefit plan document and any federal or state mandates, if applicable. Brand New Day/Central Health Medicare Plan policies and practices are compliant with all federal and state requirements, including mental health parity laws.

#### **PURPOSE**

To promote consistency between reviewers in clinical coverage decision-making by providing the criteria that generally determine the medical necessity of Short Acting Colony Stimulating Factors therapy.

### **POLICY/CRITERA**

### Prior Authorization and Medical Review is required.

Coverage will be provided for 6 months and may be renewed.

Neupogen, Nivestym, Granix, and Releuko are Non-Preferred products.

The Preferred product is Zarxio.

Neupogen, Nivestym, Granix, and Releuko may be considered medically necessary if:

- The patient has a contraindication or severe intolerance to Zarxio; OR
- The dose required necessitates use of a vial and cannot be met with the fixed-dose 300 mcg or 480 mcg prefilled syringes





Coverage for Granix® (tbo-filgrastim), Neupogen® (filgrastim), Nivestym™ (filgrastim-aafi), Releuko (filgrastim-ayow) or Zarxio® (filgrastim-sndz) is provided in the following conditions:

- 1. Bone marrow transplant (BMT)
- 2. Peripheral Blood Progenitor Cell (PBPC) mobilization and transplant
- 3. Prophylactic use in patients with non-myeloid malignancy
  - **a.** Patient is undergoing myelosuppressive chemotherapy with an expected incidence of febrile neutropenia of 20% or greater §; OR
  - **b.** Patient is undergoing myelosuppressive chemotherapy with an expected incidence of febrile neutropenia of 10% or greater§ AND one or more of the following comorbidities:
    - i. Elderly patients (age 65 or older) receiving full dose intensity chemotherapy
    - ii. History of recurrent febrile neutropenia from chemotherapy
    - iii. Extensive prior exposure to chemotherapy
    - iv. Previous exposure of pelvis, or other areas of large amounts of bone marrow, to radiation
    - v. Pre-existing neutropenia (ANC ≤ 1000/mm3) or bone marrow involvement with tumor
    - vi. Patient has a condition that can potentially increase the risk of serious infection (i.e., HIV/AIDS)
    - vii. Infection/open wounds
    - viii. Recent surgery
    - ix. Poor performance status
    - x. Poor renal function (creatinine clearance <50)
    - xi. Liver dysfunction (elevated bilirubin >2.0)
    - xii. Chronic immunosuppression in the post-transplant setting including organ transplant
- 4. Acute Myeloid Leukemia (AML) patient following induction or consolidation chemotherapy
- 5. Severe chronic neutropenia
  - Patient must have an absolute neutrophil count (ANC) < 500/mm3; AND</li>
  - **b.** Patient must have a diagnosis of one of the following:
    - i. Congenital neutropenia; OR
    - ii. Cyclic neutropenia; OR
    - iii. Idiopathic neutropenia
- 6. Patients acutely exposed to myelosuppressive doses of radiation (Hematopoietic





### **Subsyndrome of Acute Radiation Syndrome)**

\*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

# LIMITATIONS/EXCLUSIONS

- 1. Any indication other than those listed above due to insufficient evidence of therapeutic value.
- 2. Patients with a history of serious allergic reactions to human granulocyte colony-stimulating factors such as filgrastim products or pegfilgrastim products

#### **DEFINITIONS**

- 1. NEUPOGEN (filgrastim) injection, for subcutaneous or intravenous use. Initial U.S. Approval: 1991
  - a. Single-dose vials containing 300 mcg/mL of filgrastim. Dispensing packs of 10 vials
  - b. Single-dose vials containing 480 mcg/1.6 mL (300 mcg/mL) of filgrastim. Dispensing
  - c. packs of 10 vials
  - d. Single-dose, prefilled syringe with 27 gauge, ½ inch needle with an UltraSafe Needle Guard, containing 300 mcg/0.5 mL of filgrastim.
  - e. Single-dose, prefilled syringe with 27 gauge, ½ inch needle with an UltraSafe Needle Guard, containing 480 mcg/0.8 mL of filgrastim.
- 2. GRANIX (tbo-filgrastim) injection, for subcutaneous use. Initial U.S. Approval: 2012
  - a. Prefilled Syringes (w & w/o UltraSafe Passive Needle Guard)
  - b. GRANIX 300 mcg/0.5 mL: Each prefilled syringe contains 300 mcg of tbo-filgrastim in 0.5
  - c. GRANIX 480 mcg/0.8 mL: Each prefilled syringe contains 480 mcg of tbo-filgrastim in 0.8 ml
  - d. GRANIX 300 mcg/1 mL: Each vial contains 300 mcg of tbo-filgrastim in 1 mL solution.
  - e. GRANIX 480 mcg/1.6 mL: Each vial contains 480 mcg of tbo-filgrastim in 1.6 mL solution.
- 3. ZARXIO (filgrastim-sndz) injection, for subcutaneous or intravenous use. Initial U.S. Approval: 2015
  - a. ZARXIO (filgrastim-sndz) is biosimilar\* to NEUPOGEN (filgrastim).
  - b. Injection: Single-dose, preservative-free, prefilled syringes with an UltraSafe Passive Needle Guard, containing 300 mcg/0.5 mL of a clear, colorless to slightly yellowish filgrastim-sndz solution.
  - c. Injection: Single-dose, preservative-free, prefilled syringes with an UltraSafe Passive Needle Guard, containing 480 mcg/0.8 mL of a clear, colorless to slightly yellowish filgrastim-sndz solution.
- 4. NIVESTYM™ (filgrastim-aafi) injection, for subcutaneous or intravenous useInitial U.S. Approval: 2018
  - a. NIVESTYM (filgrastim-aafi) is biosimilar to NEUPOGEN (filgrastim).





- b. Injection: Single-dose vials containing 300 mcg/mL of a sterile, clear, colorless, preservative-free filgrastim-aafi solution. Dispensing packs of 10 vials
- c. Injection: Single-dose vials containing 480 mcg/1.6 mL (300 mcg/mL) of a sterile, clear, colorless, preservative-free filgrastim-aafi solution. Dispensing packs of 10 vials
- d. Injection: Single-dose prefilled syringe with BD UltraSafe Plus™ Passive Needle Guard, containing 300 mcg/0.5 mL of a sterile, clear, colorless, preservative-free filgrastim-aafi
- e. Injection: Single-dose, prefilled syringe with BD UltraSafe Plus™ Passive Needle Guard,
- f. containing 480 mcg/0.8 mL of a sterile, clear, colorless, preservative-free filgrastim-aafi

### **CODING**

Applicable NDC Codes		
55513-0530-xx	Neupogen 300 mcg vial	
55513-0924-xx	Neupogen 300 mcg SingleJect	
55513-0546-xx	Neupogen 480 mcg vial	
55513-0209-xx	Neupogen 480 mcg SingleJect	
63459-0910-xx	Granix 300 mcg prefilled syringe	
63459-0912-xx	Granix 480 mcg prefilled syringe	
61314-0318-xx	Zarxio 300 mcg prefilled syringe	
61314-0326-xx	Zarxio 480 mcg prefilled syringe	
70121-1568-xx	Releuko 300 mcg/0.5 mL Single-dose prefilled syringe	
70121-1569-xx	Releuko 300 mcg/mL Single-dose vials	
70121-1571-xx	Releuko 480 mcg/1.6 mL (300 mcg/mL) Single-dose vials	
70121-1570-xx	Releuko 480 mcg/0.8 mL Single-dose prefilled syringe	

Applicable Procedure Code		
J1442	Injection, filgrastim (g-csf), excludes biosimilars, 1microgram (1 mcg=1 billable unit)	
J1447	Injection, tbo-filgrastim, (Granix), 1 microgram (1 microgram=1 billable unit)	
Q5101	Injection, filgrastim-sndz, biosimiliar, (Zarxio), 1 microgram: 1 billable unit=1 microgram	
Q5110	0 Injection, filgrastim-aafi, biosimilar, (Nivestym), 1 mcg	
J3590	J3590 Unclassified biologic when used for RELEUKO (filgrastim-ayow soln)	

Applicable ICD-10 Codes		
C92.00	Myeloid leukemia not having achieved remission	
C92.02	Myeloid leukemia in relapse	
C92.50	Acute myelomonocytic leukemia not having achieved remission	
C92.52	2 Acute myelomonocytic leukemia in relapse	
C92.60	Acute myeloid leukemia with 11q23-abnormality not having achieved remission	





C92.62	Acute myeloid leukemia with 11q23-abnormality in relapse	
C92.A0	Acute myeloid leukemia with multilineage dysplasia not having achieved remission	
C92.A2	Acute myeloid leukemia with multilineage dysplasia in relapse	
C93.00	Acute monoblastic/monocytic leukemia not having achieved remission	
C93.02	Acute monoblastic/monocytic leukemia in relapse	
C93.10	Chronic myelomonocytic leukemia, not having achieved remission	
C94.00	Acute erythroid leukemia not having achieved remission	
C94.02	Acute erythroid leukemia in relapse	
C94.20	Acute megakaryoblastic leukemia not having achieved remission	
C94.22	Acute megakaryoblastic leukemia in relapse	
D46.0	Refractory anemia without ring sideroblasts, so stated	
D46.1	Refractory anemia with ring sideroblasts	
D46.20	Refractory anemia with excess of blasts, unspecified	
D46.21	Refractory anemia with excess of blasts 1	
D46.22	Refractory anemia with excess of blasts 2	
D46.4	Refractory anemia, unspecified	
D46.9	Myelodysplastic syndrome, unspecified	
D46.A	Refractory cytopenia with multilineage dysplasia	
D46.B	Refractory cytopenia with multilineage dysplasia and ring sideroblasts	
D46.Z	Other myelodysplastic syndrome	
D70.0	Congenital agranulocytosis	
D70.1	Agranulocytosis secondary to cancer chemotherapy	
D70.2	Other drug-induced agranulocytosis	
D70.4	Cyclic neutropenia	
D70.9	Neutropenia, unspecified	
T45.1X5 A	Adverse effect of antineoplastic and immunosuppressive drugs initial encounter	
T45.1X5 D	Adverse effect of antineoplastic and immunosuppressive drugs subsequent encounter	
T45.1X5 S	Adverse effect of antineoplastic and immunosuppressive drugs sequela	
T66.XXX A	Radiation sickness, unspecified, initial encounter	
Z41.8	Encounter for other procedures for purposes other then remedying health state	
Z48.290	Encounter for aftercare following bone marrow transplant	
Z51.11	Encounter for antineoplastic chemotherapy	
Z51.12	Encounter for antineoplastic immunotherapy	
Z51.89	Encounter for other specified aftercare	
Z52.001	Unspecified donor, stem cells	
Z52.011	Autologous donor, stem cells	
Z52.091	Other blood donor, stem cells	





Z94.81	Bone marrow transplant status	
Z94.84	Stem cells transplant status	

#### **EVIDENCE BASED REFERENCES**

- 1. Neupogen [package insert]. Thousand Oaks, CA; Amgen Inc; June 2018. Accessed May 2021.
- 2. Nivestym [package insert]. Lake Forest, IL; Hospira Inc; July 2018. Accessed May 2021.
- 3. Zarxio [package insert]. Princeton, NJ; Sandoz Inc; August 2019. Accessed May 2021.
- 4. Granix [package insert]. North Wales, PA; Teva Pharmaceuticals USA, Inc.; November2019. Accessed May 2021.
- 5. Product Information: RELEUKO(R) subcutaneous, intravenous injection, filgrastim-ayow subcutaneous, intravenous injection. Amneal Biosciences LLC (per FDA), Bridgewater, NJ, 2022.

#### **POLICY HISTORY**

Revision History	Month Day, Year	Updates
Original Effective Date	JULY 1, 2021	
Revision	5/24/2022	Addition of Releuko as a non-preferred filgrastim product.
Revision	JANUARY 1, 2022	Mandatory Step Therapy effective starting January 1, 2022 (grandfathering in place for members on therapy)
	January 1, 2024	Updated to Brand New Day/Central Health Medicare Plan
P&T Committee Endorsement	MAY 24, 2021	

#### **DISCLAIMER**

Brand New Day/Central Health Medicare Plan medical policies address technology assessment of new and emerging treatments, devices, drugs, etc. They are developed to assist in administering plan benefits and do not constitute an offer of coverage nor medical advice. Brand New Day/Central Health Medicare Plan medical policies contain only a partial, general description of plan or program benefits and do not constitute a contract. Brand New Day/Central Health Medicare Plan does not provide health care services and, therefore, cannot guarantee any results or outcomes. Treating providers are solely responsible for medical advice and treatment of members. Our medical policies may be updated and therefore are subject to change without notice. CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). MCG™ and Care Guidelines® are trademarks of MCG Health, LLC (MCG). The ASAM Criteria™ is copyrighted by The American Society of Addiction Medicine.