

**POLICY:** Colony Stimulating Factors – Granix Utilization Management Medical Policy

- Granix® (tbo-filgrastim injection for subcutaneous use – Teva)

**EFFECTIVE DATE:** 9/1/2021**LAST REVISED DATE:** 09/20/2023**COVERAGE CRITERIA FOR:** All Aspirus Medicare Plans

---

**OVERVIEW**

Granix, a leukocyte growth factor, is indicated to reduce the duration of severe neutropenia in adults and pediatric patients 1 month of age and older with non-myeloid malignancies receiving myelosuppressive anti-cancer medications associated with a clinically significant incidence of febrile neutropenia.<sup>1</sup>

**Guidelines**

The National Comprehensive Cancer Network (NCCN) address the use of Granix in guidelines.

- **Hematopoietic Growth Factors:** Guidelines (version 2.2020 – January 27, 2020) recommend Granix, along with other granulocyte colony stimulating factors (CSFs), for prophylactic use if the patient is receiving anti-cancer medications that are associated with a high (> 20%) incidence of severe neutropenia with fever.<sup>2</sup> Consider CSF therapy for patients with an intermediate (10% to 20%) probability of developing febrile neutropenia based on risk factors. The NCCN guidelines also recommend therapy with a CSFs in other scenarios in those given myelosuppressive chemotherapy. Granix is also recommended for mobilization and following hematopoietic cell transplant.
- **Myelodysplastic Syndromes (MDS):** Guidelines (version 2.2020 – February 28, 2020) recommend Granix for use in certain patients with MDS (e.g., neutropenic patients with recurrent or resistant infections, combination use with epoetin alfa or Aranesp® [darbepoetin alfa injection] in patients with anemia).<sup>3</sup>

The American Society of Clinical Oncology clinical practice guidelines for the use of white blood cell growth factors (2015) recommends CSFs to reduce the risk of febrile neutropenia in patients receiving cancer chemotherapy.<sup>4</sup> CSFs may be considered in patients receiving radiation therapy alone if prolonged delays secondary to neutropenia are expected. The guidelines state CSFs should be avoided in patients receiving concomitant chemotherapy and radiation therapy, particularly involving the mediastinum.

**POLICY STATEMENT**

Prior authorization is recommended for medical benefit coverage of Granix. Approval is recommended for those who meet the **Criteria** and **Dosing** for the listed indications. Extended approvals are allowed if the patient continues to meet the Criteria and Dosing. Requests for doses outside of the established dosing documented in this policy will be considered on a case-by-case basis by a clinician (i.e., Medical Director or Pharmacist). All approvals are provided for the duration noted below. In cases where the approval is authorized in months, 1 month is equal to 30 days. Because of the specialized skills required for evaluation and diagnosis of patients treated with Granix as well as the monitoring required for adverse events and long-term efficacy, approval requires Granix to be prescribed by or in consultation with a physician who specializes in the condition being treated.

## RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Granix is recommended for requests meeting both the biosimilar step therapy requirements and indication requirements.

---

### Biosimilar Step Therapy Requirements (New Starts Only)

**Criteria.** *The patient must meet the following criteria (A or B):*

- A) For patients new to Granix (tbo-filgrastim) therapy only, must have a trial of Zarxio prior to approval of Granix. New starts to therapy defined as no use of Granix within the past 180 days for Medicaid and Commercial patients. New starts to therapy defined as no use of Granix within the past 365 days for Medicare patients.
- B) Patient has a contraindication or other clinical reason why a biosimilar cannot be tried before Granix.

Note: Preferred biosimilar step only required for indications FDA-Approved for both Granix and the preferred biosimilar(s).

### FDA-Approved Indications

---

**1. Cancer in a Patient Receiving Myelosuppressive Chemotherapy.** Approve for 6 months if the patient meets the following (A and B):

- A) Patient meets ONE of the following conditions (i, ii, iii, or iv):
  - i. Patient is receiving myelosuppressive anti-cancer medications that are associated with a high risk of febrile neutropenia (the risk is at least 20% based on the chemotherapy regimen); OR
  - ii. Patient is receiving myelosuppressive anti-cancer medications that are associated with a risk of febrile neutropenia, but the risk is less than 20% based on the chemotherapy regimen and the patient has at least one risk factor for febrile neutropenia according to the prescriber.  
Note: Examples of risk factors include age  $\geq 65$  years; prior chemotherapy or radiation therapy; persistent neutropenia; bone marrow involvement by tumor; recent surgery and/or open wounds; liver and/or renal dysfunction; poor performance status; or human immunodeficiency virus (HIV) infection; OR
  - iii. Patient has had a neutropenic complication from prior chemotherapy and did not receive prophylaxis with a colony stimulating factor and a reduced dose or frequency of chemotherapy may compromise treatment outcome; OR  
Note: Examples of colony-stimulating factors include filgrastim products, pegfilgrastim products, and sargramostim products (e.g., Leukine<sup>®</sup>).
  - iv. Patient who has received chemotherapy has febrile neutropenia and has at least one risk factor for poor clinical outcomes or for developing infection-associated complications according to the prescriber; AND  
Note: Examples of risk factors include sepsis syndrome; age  $> 65$  years; severe neutropenia (absolute neutrophil count [ANC]  $< 100$  cells/mm<sup>3</sup>); neutropenia expected to be  $> 10$  days in duration; invasive fungal infection; other clinically documented infections; or prior episode of febrile neutropenia.

B) The medication is prescribed by, or in consultation with, an oncologist or hematologist.

**Dosing.** Approve up to 5 mcg/kg per day by subcutaneous injection given for up to 14 days per month.

### Other Uses with Supportive Evidence

---

- 2. Peripheral Blood Progenitor Cell Collection and Therapy.** Approve for 1 month if prescribed by or in consultation with an oncologist, a hematologist or a physician who specializes in transplantation.

**Dosing.** Approve up to 32 mcg/kg per day by subcutaneous injection.

- 3. Myelodysplastic Syndromes.** Approve for 3 months if prescribed by, or in consultation with, an oncologist or hematologist.

**Dosing.** Approve up to 5 mcg/kg per day by subcutaneous injection.

---

### CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Granix is not recommended in the following situations:

- Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

### REFERENCES

- Granix® subcutaneous injection [prescribing information]. North Wales, PA: Teva; April 2020.
- The NCCN Hematopoietic Growth Factors Clinical Practice Guidelines in Oncology (version 1.2022 – December 22, 2021). © 2021 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on August 16, 2022.
- The NCCN Myelodysplastic Syndromes Clinical Practice Guidelines in Oncology (version 3.2022 – January 13, 2022). © 2022 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed: August 16, 2022.
- Smith TJ, Bohlke K, Lyman GH, Carson KR, et al. Recommendations for the use of WBC growth factors: American Society of Clinical Oncology Clinical Practice Guideline Update. *J Clin Oncol.* 2015; 33(28):3199-3212.
- The NCCN Hematopoietic Cell Transplantation Clinical Practice Guidelines in Oncology (version 1.2022 – April 1, 2022). © 2022 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on August 16, 2022.

### HISTORY

Type of Revision	Summary of Changes	Review Date
Annual Revision	For the criteria regarding patients with cancer receiving myelosuppressive therapy who are adults, in the criteria that reference a colony stimulating factor, the terminology of filgrastim and pegfilgrastim products were added, along with the listing of the individual products, which included adding Nivestym and Fulphila.	08/01/2018
Selected Revision	For the indication of cancer patients receiving myelosuppressive chemotherapy, removed the notation “who are adults” to reflect FDA-approval of Granix in children.	08/08/2018
Annual Revision	The following changes per the specific indications are cited below: <b>1. Cancer in Patients Receiving Myelosuppressive Chemotherapy:</b> CSFs are now provided as examples in a Note rather than as part of the criterion. Also, risk factors are now listed as Notes rather than as part of the criterion. The wording in reference to “according to the prescribing physician” was changed to “according to the prescriber”. <b>2. Peripheral Blood Progenitor Cell Collection and Therapy:</b> The qualifier of “adults and children” was removed from the indication.	08/21/2019
Annual Revision	Myelodysplastic Syndromes, criteria, and dosing were added as an approval condition.	08/19/2020
Annual Revision	No criteria changes.	08/18/2021
Annual Revision	No criteria changes.	08/31/2022
UCare Revision	Combined Medicare Policy with Health Exchange and Medicaid Policy due to retirement of Local Coverage Article A52408 (L33394). Update Biosimilar Step Therapy Requirement section to include lookback period for both Medicare (365 days) and Medicaid and Commercial patients (180 days).	7/28/2023
Annual Revision	No criteria changes	09/20/2023