SPECIALTY GUIDELINE MANAGEMENT

NEUPOGEN (filgrastim)
GRANIX (tbo-filgrastim)
ZARXIO (filgrastim-sndz)

POLICY
A. INDICATIONS
The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

FDA-Approved Indications
Neupogen
- Cancer Patients Receiving Myelosuppressive Chemotherapy
  - Neupogen is 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 significant incidence of severe neutropenia with fever.
- Patients With Acute Myeloid Leukemia Receiving Induction or Consolidation
  - Neupogen is indicated for reducing the time to neutrophil recovery and the duration of fever, following induction or consolidation chemotherapy treatment of adults with acute myeloid leukemia.
- Cancer Patients Receiving Bone Marrow Transplant
  - Neupogen is indicated to reduce the duration of neutropenia and neutropenia-related clinical sequelae, (e.g., febrile neutropenia) in patients with non-myeloid malignancies undergoing myeloablative chemotherapy followed by marrow transplantation.
- Patients Undergoing Peripheral Blood Progenitor Cell Collection and Therapy
  - Neupogen is indicated for the mobilization of hematopoietic progenitor cells into the peripheral blood for collection by leukapheresis.
- Patients With Severe Chronic Neutropenia
  - Neupogen is indicated for chronic administration to reduce the incidence and duration of sequelae of neutropenia (e.g., fever, infections, oropharyngeal ulcers) in symptomatic patients with congenital neutropenia, cyclic neutropenia, or idiopathic neutropenia.

Granix
Granix is indicated to reduce the duration of severe neutropenia in patients with non-myeloid malignancies receiving myelosuppressive anti-cancer drugs associated with a clinically significant incidence of febrile neutropenia.

Zarxio
- Cancer Patients Receiving Myelosuppressive Chemotherapy
  - Zarxio is 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 significant incidence of severe neutropenia with fever.
- Patients With Acute Myeloid Leukemia Receiving Induction or Consolidation
  - Zarxio is indicated for reducing the time to neutrophil recovery and the duration of fever, following induction or consolidation chemotherapy treatment of adults with acute myeloid leukemia.
- Cancer Patients Receiving Bone Marrow Transplant
  - Zarxio is indicated to reduce the duration of neutropenia and neutropenia-related clinical sequelae, (e.g., febrile neutropenia) in patients with non-myeloid malignancies undergoing myeloablative chemotherapy followed by marrow transplantation.
- Patients Undergoing Peripheral Blood Progenitor Cell Collection and Therapy
  - Zarxio is indicated for the mobilization of hematopoietic progenitor cells into the peripheral blood for collection by leukapheresis.
• Patients With Severe Chronic Neutropenia
  o Zarxio is indicated for chronic administration to reduce the incidence and duration of sequelae of neutropenia (e.g., fever, infections, oropharyngeal ulcers) in symptomatic patients with congenital neutropenia, cyclic neutropenia, or idiopathic neutropenia.

Compendial Uses (Neupogen/Granix/Zarxio)
• Treatment of chemotherapy-induced febrile neutropenia in patients with non-myeloid malignancies
• Treatment of symptomatic anemia in patients with myelodysplastic syndromes (MDS), in combination with epoetin or darbepoetin
• Treatment of neutropenia in patients with MDS and recurrent or resistant infections
• Following chemotherapy for acute lymphocytic leukemia (ALL)
• Leukemic relapse following allogeneic stem cell transplantation
• Agranulocytosis
• Aplastic anemia
• Neutropenia related to HIV/AIDS
• Neutropenia related to renal transplantation

All other indications are considered experimental/investigational and are not a covered benefit.

B. REQUIRED DOCUMENTATION
The following documentation is required to initiate a prior authorization review:
Neutropenia In Cancer Patients Receiving Myelosuppressive Chemotherapy: Length of chemotherapy cycle, the days of the cycle on which chemotherapy will be administered, and the first day of the cycle on which the Neupogen/Granix/Zarxio will be administered (e.g., 14 day cycle, chemotherapy on day 1, Neupogen administered day 2)

Myelodysplastic Syndrome: Document the patient’s serum erythropoietin level

C. CRITERIA FOR APPROVAL
1. Neutropenia In Cancer Patients Receiving Myelosuppressive Chemotherapy
   a. Authorization of 6 months may be granted for members for prevention of febrile neutropenia when all of the following criteria are met:
      i. Member has a non-myeloid malignancy (refer to section 6. for the diagnosis of ALL)
      ii. Member is currently receiving or will be receiving myelosuppressive chemotherapy or radiotherapy
      iii. Neupogen/Granix/Zarxio will not be administered less than 24 hours before or after chemotherapy or radiotherapy
      iv. The member will not receive chemotherapy and radiotherapy concurrently
   b. Authorization of 6 months may be granted for members for the treatment of a current episode of febrile neutropenia when all of the following criteria are met:
      i. Member has a non-myeloid malignancy (refer to section 6. for the diagnosis of ALL)
      ii. Member is currently receiving myelosuppressive chemotherapy or radiotherapy
      iii. Neupogen/Granix/Zarxio will not be administered less than 24 hours before or after chemotherapy or radiotherapy
      iv. Member did not receive pegylated G-CSF (e.g., Neulasta) for prevention of neutropenia during the current chemotherapy cycle

2. Acute Myeloid Leukemia (AML)
   a. Authorization of 6 months may be granted for members who are receiving treatment for AML.

3. Stem Cell Transplantation-related Indications
   a. Authorization of 6 months may be granted for members for any of the following indications:
      i. Peripheral blood progenitor cell (PBPC) mobilization/collection prior to transplantation
      ii. Use following bone marrow transplantation or PBPC transplantation
      iii. Leukemic relapse after allogeneic stem cell transplantation
4. **Severe Chronic Neutropenia**
   a. Authorization of 6 months may be granted for members with severe chronic neutropenia (congenital, cyclic, or idiopathic).

5. **Myelodysplastic Syndromes (MDS)**
   a. Authorization of 6 months may be granted for members with MDS undergoing treatment for anemia who meet all of the following conditions:
      i. The member has lower risk MDS (i.e., low or intermediate-1 risk stratification)
      ii. The member has symptomatic anemia
      iii. Neupogen/Granix/Zarxio will be used with epoetin or darbepoetin
      iv. The serum erythropoietin level is less than, or equal to, 500 mU/ml
   b. Authorization of 6 months may be granted for members with MDS who meet all of the following conditions:
      i. The member is neutropenic
      ii. The member experiences recurrent or resistant infections

6. **Acute Lymphocytic Leukemia (ALL)**
   a. Authorization of 6 months may be granted for members receiving treatment for ALL.

7. **Other Indications**
   a. Authorization of 6 months may be granted for members with any of the following indications:
      i. Agranulocytosis
      ii. Aplastic anemia
      iii. Neutropenia related to HIV/AIDS
      iv. Neutropenia related to renal transplantation

D. **CONTINUATION OF THERAPY**
   All members (including new members) requesting authorization for continuation of therapy must meet ALL initial authorization criteria.

E. **DOSEDGE AND ADMINISTRATION**
   Approvals may be subject to dosing limits in accordance with FDA-approved labeling, accepted compendia, and/or evidence-based practice guidelines.

**REFERENCES**