Clinical Policy: Colony Stimulating Factors

Reference Number: ERX.SPMN.07
Effective Date: 03/14
Last Review Date: 09/16

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

Policy/ Criteria
It is the policy of health plans affiliated with Envolve Pharmacy Solutions® that the following injectable colony stimulating factors (CSFs):

- Granix®1 (tbo-filgrastim)
- Leukine®2 (sargramostim)
- Neulasta®3 (pegfilgrastim)
- Neupogen®4 (filgrastim)
- Zarxio™5 (filgrastim-sndz)

are medically necessary for members meeting the following criteria:

I. Approval Criteria
   A. Granix (must meet all):
      1. Patient currently is or will be receiving myelosuppressive chemotherapy for non-myeloid cancer;
      2. Granix will not be given within 24 hours before or after chemotherapy;
      3. Use is for prevention of febrile neutropenia (FN) for a patient at risk for FN based on chemotherapy regimen and risk factors.

         Approval duration: 6 months

   B. Leukine (must meet all):
      1. Leukine will not be given within 24 hours before or after chemotherapy or radiotherapy;
      2. There are no excessive (>10%) leukemic myeloid blasts in the bone marrow or peripheral blood;
      3. Prescribed for one of the following indications:
         a. Following induction or consolidation of chemotherapy in adults ≥ 55 years old with acute myelogenous leukemia (AML);
         b. For mobilization of hematopoietic progenitor cells into peripheral blood for collection by leukapheresis and after myeloablative chemotherapy, following transplant of autologous peripheral blood progenitor cells;
         c. Following autologous bone marrow transplant (BMT) in patients with non-Hodgkin’s lymphoma (NHL), acute lymphoblastic leukemia (ALL), or Hodgkin’s disease;
         d. Following allogeneic BMT in HLA matched related donors;
         e. For delay or failure of engraftment in patients who have had allogeneic or autologous BMT;
      4. For any other indications, refer to section F below.
Approval duration: 6 months

C. Neulasta (must meet all):
   1. Patient currently is or will be receiving myelosuppressive chemotherapy for non-myeloid cancer;
   2. Neulasta will not be given between 14 days before and 24 hours after chemotherapy;
   3. Use is for prevention of FN for a patient at risk for FN based on chemotherapy regimen and risk factors.

Approval duration: 6 months

D. Neupogen (must meet all):
   1. Any of the following indications:
      a. Patient currently is or will be receiving myelosuppressive chemotherapy for non-myeloid cancer, and both of the following:
         i. Neupogen will not be given within 24 hours before or after chemotherapy;
         ii. Intended use is for prevention of FN for a patient at risk for FN based on chemotherapy regimen and risk factors;
      b. Following induction or consolidation of chemotherapy with AML and it will not be given within 24 hours before or after chemotherapy;
      c. Following bone marrow transplant for patients receiving myelosuppressive chemotherapy for non-myeloid cancer and it will not be given within 24 hours before or after chemotherapy;
      d. For mobilization of hematopoietic progenitor cells into peripheral blood for collection by leukapheresis, or following transplant of autologous peripheral blood progenitor cells and it will not be given within 24 hours before or after chemotherapy;
      e. Prevention of FN for patients acutely exposed to myelosuppressive doses of radiation [exposure > 2 gray (Gr)];
      f. Symptomatic patients with severe chronic neutropenia caused by congenital neutropenia, cyclic neutropenia, or idiopathic neutropenia;
   2. For any other indications, refer to section F below.

Approval duration: 6 months

E. Zarxio (must meet all):
   1. Any of the following indications:
      a. Patient currently is or will be receiving myelosuppressive chemotherapy for non-myeloid cancer, and both of the following:
         i. Zarxio will not be given within 24 hours before or after chemotherapy;
         ii. Intended use is for prevention of FN for a patient at risk for FN based on chemotherapy regimen and risk factors; (Continued)
b. Following induction or consolidation of chemotherapy with AML and it will not be given within 24 hours before or after chemotherapy;
c. Following bone marrow transplant for patients receiving myelosuppressive chemotherapy for non-myeloid cancer and it will not be given within 24 hours before or after chemotherapy;
d. For mobilization of hematopoietic progenitor cells into peripheral blood for collection by leukapheresis, or following transplant of autologous peripheral blood progenitor cells and it will not be given within 24 hours before or after chemotherapy;

e. Six months for symptomatic patients with severe chronic neutropenia caused by congenital neutropenia, cyclic neutropenia, or idiopathic neutropenia;

2. For any other indications, refer to section F below.

Approval duration: 6 months

F. Other diagnoses/indications: Refer to ERX.SPMN.16 - Global Biopharm Policy.

1. Additional CSF uses, which are medically accepted compendial indications, are covered for the following drugs and indications per the USS.SPMN.16 Global Biopharm Policy:
   a. Leukine, Neupogen, and Zarxio – treatment of chemotherapy-induced FN associated with myelosuppressive chemotherapy for non-myeloid cancer;
   b. Leukine and Neupogen – treatment of one of the following:
      i. Neutropenia or anemia associated with myelodysplastic syndromes;
      ii. Agranulocytosis;
      iii. Aplastic anemia;
      iv. Neutropenia associated with HIV/AIDS;
   c. Leukine – prevention of FN when receiving myelosuppressive chemotherapy for non-myeloid cancer;

Approval duration: 6 months

Background
CSFs belong to a class of biologic agents called myeloid growth factors (MGFs). MGFs regulate proliferation, survival, and activation of cells in the myeloid lineage. In cancer patients receiving myelosuppressive chemotherapy, MGFs are primarily used to reduce the incidence of neutropenia. 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 febrile neutropenia (FN), defined as a single temperature of ≥ 38.8 C orally or ≥ 38.0 C over 1 hour, which is a major dose-limiting toxicity of chemotherapy that often requires prolonged hospitalization and broad-spectrum antibiotics. Studies have demonstrated that prophylactic use of MGFs can reduce the risk, severity, and duration of FN. MGFs also are...
used for mobilization and supportive care in the hematopoietic cell transplant setting, treatment of severe chronic neutropenia, and for several compendial off-label uses.1-9

Appendices
Appendix A: Abbreviations
AML: acute myeloid/myelogenous leukemia
ANC: absolute neutrophil count
BMT: bone marrow transplantation
CSF: colony stimulating factor
FN: febrile neutropenia
MGF: myeloid growth factors

Coding Implications
The following codes are for informational purposes only. They are current at time of review of this policy. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

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<tr>
<th>CPT®* Codes</th>
<th>Description</th>
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ICD-10-CM Diagnosis Codes that Support Coverage Criteria

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Reviews, Revisions, and Approvals

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<thead>
<tr>
<th>Reviews, Revisions, and Approvals</th>
<th>Date</th>
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<tbody>
<tr>
<td>Policy created.</td>
<td>02/14</td>
<td>03/14</td>
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<tr>
<td>Added Granix to drug list, background, and safety information. Added requirement of PDL med to be used as appropriate in all algorithms. Modified algorithm 2 so that Neulasta/Granix would be denied for PBPC mobilization. Modified approval duration for most indication to 3 months.</td>
<td>02/15</td>
<td>03/15</td>
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<td>Policy converted to new template. Separated criteria by drug rather than indication. Added new drug Zarxio to policy. Added radiation indication for Neupogen. Added compendial indications per NCCN/Micromedex. Modified criteria to align with NCCN guidelines. Simplified criteria sections referring to risk of FN to state only risk of FN due to chemo regimen and risk factors and removed historical requirements of FN from criteria. Removed all safety criteria and requests for documentation. Extended approval periods to 6 months.</td>
<td>08/16</td>
<td>09/16</td>
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Clinical Policy
Colony stimulating factors

References

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.

This Clinical Policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members.

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