Pharmacy Medical Necessity Guidelines: Neulasta® (pegfilgrastim)

Effective: July 10, 2018

<table>
<thead>
<tr>
<th>Prior Authorization Required</th>
<th>Type of Review – Care Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅</td>
<td>✅ Type of Review – Clinical Review</td>
</tr>
<tr>
<td>Not Covered</td>
<td>Department to Review</td>
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<tr>
<td>Pharmacy (RX) or Medical (MED) Benefit</td>
<td>RxUM</td>
</tr>
</tbody>
</table>

This Pharmacy Medical Necessity Guideline applies to the following:

**Tufts Health Plan Commercial Plans**
- ✗ Tufts Health Plan Commercial Plans – large group plans
- ✗ Tufts Health Plan Commercial Plans – small group and individual plans

**Tufts Health Public Plans**
- ✗ Tufts Health Direct – Health Connector
- ✗ Tufts Health Together – A MassHealth Plan
- ✗ Tufts Health RITogether – A Rite Care + Rhody Health Partners Plan

**Tufts Health Freedom Plan products**
- ✗ Tufts Health Freedom Plan – large group plans
- ✗ Tufts Health Freedom Plan – small group plans

Fax Numbers:
- RXUM: 617.673.0988

**OVERVIEW**

**FOOD AND DRUG ADMINISTRATION-APPROVED INDICATIONS**

Chemotherapy-induced neutropenia (CIN) is a major dose-limiting toxicity of chemotherapy. CIN is associated with significant morbidity, mortality, and costs due to the management of its complications, which include Febrile Neutropenia (FN) and infection. Patients with neutropenic complications often require hospitalization for evaluation and treatment with empiric broad-spectrum antibiotics. Neutropenic complications can also result in chemotherapy dose reductions or treatment delays, which can compromise clinical outcomes.

The risk of neutropenic complications increases in direct proportion to the severity and duration of neutropenia. Colony stimulating factors (CSFs) have been shown to reduce the duration and severity of neutropenia and the risk of FN. These agents work by stimulating the production, maturation, and activation of neutrophils. CSFs have been evaluated for prophylactic use following the administration of chemotherapy when neutropenia is anticipated (primary prophylaxis) and during retreatment after a previous chemotherapy cycle that caused FN (secondary prophylaxis). Available evidence supports the benefit of CSF primary prophylaxis in reducing the frequency of hospitalization for antibiotic therapy, documented infection, and rates of FN in adults. The impact of CSFs on survival and in the pediatric population is less clear.

Primary prophylaxis with a CSF is recommended when the anticipated incidence of FN is >20% (high risk) based on patient-, disease-, and treatment-related factors. This threshold was established based on trials demonstrating that primary prophylaxis was cost effective when the risk of FN with a specific chemotherapy regimen exceeded 20%. Guidelines recommend against primary prophylaxis when the anticipated incidence of FN is <10% (low risk). When the anticipated incidence of FN is 10 to 20%, primary prophylaxis may be appropriate.

There is currently no consensus nomogram for FN risk assessment in patients receiving chemotherapy. If the specific chemotherapy regimen prescribed is not associated with >20% incidence of FN, individual patient- and disease-related factors should be evaluated to determine appropriateness of primary prophylaxis. According to both the American Society of Clinical Oncology (ASCO) and the National Comprehensive Cancer Network (NCCN), consideration should be given to advanced age (>65 years), pre-existing neutropenia, prior chemotherapy or radiotherapy, tumor involvement in the bone marrow, poor performance status, comorbidities, infection, HIV infection, renal dysfunction, and hepatic dysfunction. Additional factors recommended by the ASCO include advanced disease, open wounds or recent surgery, poor nutritional status, and cardiovascular disease.

Secondary prophylaxis with CSFs is recommended for patients who experienced a neutropenic complication from a prior chemotherapy cycle (for which primary prophylaxis was not received), and a
reduced dose or treatment delay may compromise disease-free or overall survival or treatment outcome.

Compared to prophylactic therapy, there is less evidence supporting the use of CSFs for the treatment of FN. Guidelines state treatment of FN with CSFs should be considered in patients who are at high risk for infection-associated complications or who have prognostic factors predictive of poor clinical outcomes.

CSFs are recommended when a patient is exposed to lethal doses of total-body radiotherapy.

Neulasta (pegfilgrastim) is indicated to decrease the incidence of infection, as manifested by FN, in patients with non-myeloid malignancies receiving myelosuppressive anti-cancer drugs associated with a clinically significant incidence of FN. Neulasta (pegfilgrastim) is also indicated to increase survival in patients acutely exposed to myelosuppressive doses of radiation. Neulasta (pegfilgrastim) is not indicated for the mobilization of peripheral blood progenitor cells for hematopoietic stem cell transplantation.

**COVERAGE GUIDELINES**
The plan may authorize coverage of Neulasta (pegfilgrastim) for Members when all the following criteria are met and limitations do not apply:

**Primary prophylaxis of chemotherapy-induced neutropenia (CIN)**
1. Documentation the Member will be receiving a chemotherapy regimen associated with a high risk (>20%) of febrile neutropenia (FN) based on the National Comprehensive Cancer Network (NCCN) clinical guidelines for myeloid growth factors (see Attachment 1 below)

   OR

2. Documentation the Member will be receiving a chemotherapy regimen associated with an intermediate risk (10 to 20%) of FN based on the NCCN clinical guidelines for myeloid growth factors (see Attachment 2 below) AND the Member has at least one of the following risk factors
   a. Age ≥65 years
   b. Advanced disease (stage 2 or higher or bone marrow involvement)
   c. Prior chemotherapy or radiation therapy
   d. Pre-existing neutropenia
   e. Poor performance status (Eastern Cooperative Oncology Group [ECOG] score of 2 to 5) or poor nutritional status
   f. Recent infection (<60 days prior to start of chemotherapy)
   g. Recent surgery or open wounds
   h. Comorbidities (cardiovascular disease, renal dysfunction [creatinine clearance <50], liver dysfunction [bilirubin >2.0], human immunodeficiency virus [HIV] virus)
   i. Concern with Member’s comprehension of the severity of fever development or concern with Member’s access to a hospital if fever developed
   j. Chronic immunosuppression in the post-transplant setting

**Note:** The cancer type and drugs in the chemotherapy regimen are required. Patient risk factors, if applicable, also need to be submitted with the request.

**Secondary prophylaxis of CIN**
1. Documentation the Member experienced a neutropenic complication (FN or dose-limiting neutropenic event) from a prior cycle of the same chemotherapy

**Hematopoietic Subsyndrome of Acute Radiation Syndrome**
1. Documentation requested use is to increase survival in a Member acutely exposed to myelosuppressive doses of radiation
### Attachment 1: NCCN Myeloid Growth Factors Guidelines – Examples of Disease Settings and Chemotherapy Regimens with a High Risk for FN (>20%)

<table>
<thead>
<tr>
<th>Disease Setting</th>
<th>Chemotherapy Regimens</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALL</strong></td>
<td>• ALL induction regimens</td>
</tr>
<tr>
<td><strong>Bladder Cancer</strong></td>
<td>• MVAC (MTX/vinblastine/doxorubicin/cisplatin) (neoadjuvant, adjuvant, or metastatic)</td>
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<tr>
<td><strong>Breast Cancer</strong></td>
<td>• Docetaxel + trastuzumab (metastatic or relapsed)</td>
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<tr>
<td></td>
<td>• Dose-dense AC followed by T (doxorubicin, cyclophosphamide, paclitaxel) (adjuvant)</td>
</tr>
<tr>
<td><strong>Esophageal and Gastric Cancers</strong></td>
<td>• Docetaxel/cisplatin/fluorouracil</td>
</tr>
<tr>
<td><strong>Hodgkin Lymphoma</strong></td>
<td>• BEACOPP (bleomycin/etoposide/doxorubicin/cyclophosphamide/vincristine/procarbazine/prednisone)</td>
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<tr>
<td><strong>Kidney Cancer</strong></td>
<td>• Doxorubicin + gemcitabine</td>
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<tr>
<td><strong>NHL</strong></td>
<td>• ICE (ifosfamide/carboplatin/etoposide) (DLBCL, PTCL, 2nd Line)</td>
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<td></td>
<td>• RICE (rituximab/ifosfamide/carboplatin/etoposide)</td>
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<td></td>
<td>• CHOP-14 (cyclophosphamide/doxorubicin/vincristine/prednisone) ± rituximab</td>
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<td></td>
<td>• MINE (mesna/ifosfamide/novantrone/etoposide) (DLBCL, 2nd line, refractory)</td>
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<td></td>
<td>• DHAP (dexamethasone/cisplatin/cytarabine) (PTCL, DLBCL, 2nd line)</td>
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<tr>
<td></td>
<td>• ESHAP (etoposide/methylprednisolone/cisplatin/cytarabine) (DLBCL, PTCL, 2nd line, recurrent)</td>
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<td></td>
<td>• HyperCVAD + rituximab (cyclophosphamide/vincristine/doxorubicin/dexamethasone + rituximab)</td>
</tr>
<tr>
<td><strong>Melanoma</strong></td>
<td>• Dacarbazine-based combination (dacarbazine/cisplatin/vinblastine) (advanced, metastatic, or recurrent)</td>
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<td></td>
<td>• Dacarbazine-based combination with IL-2, interferon alfa (dacarbazine/cisplatin/vinblastine/IL-2/interferon alfa) (advanced, metastatic, or recurrent)</td>
</tr>
<tr>
<td><strong>Ovarian Cancer</strong></td>
<td>• Topotecan</td>
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<tr>
<td></td>
<td>• Paclitaxel</td>
</tr>
<tr>
<td></td>
<td>• Docetaxel</td>
</tr>
<tr>
<td><strong>Soft Tissue Sarcoma</strong></td>
<td>• MAID (mesna/doxorubicin/ifosfamide/dacarbazine)</td>
</tr>
<tr>
<td></td>
<td>• Doxorubicin</td>
</tr>
<tr>
<td></td>
<td>• Ifosfamide/doxorubicin</td>
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<tr>
<td><strong>SCLC</strong></td>
<td>• Topotecan</td>
</tr>
<tr>
<td><strong>Testicular Cancer</strong></td>
<td>• VeIP (vinblastine/ifosfamide/cisplatin)</td>
</tr>
<tr>
<td></td>
<td>• VIP (etoposide/ifosfamide/cisplatin)</td>
</tr>
<tr>
<td></td>
<td>• BEP (bleomycin/etoposide/cisplatin)</td>
</tr>
<tr>
<td></td>
<td>• TIP (paclitaxel/ifosfamide/cisplatin)</td>
</tr>
</tbody>
</table>

**ALL**=acute lymphoblastic leukemia, **DLBCL**=diffuse large B-cell lymphoma, **MTX**=methotrexate, **NHL**=non-hodgkin’s lymphoma, **PTCL**=peripheral T-cell lymphoma, **SCLC**=small cell lung cancer

### Attachment 2: NCCN Myeloid Growth Factors Guidelines – Examples of Disease Settings and Chemotherapy Regimens with an Intermediate Risk for FN (10-20%)

<table>
<thead>
<tr>
<th>Disease Setting</th>
<th>Chemotherapy Regimens</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adenocarcinoma-occult primary</strong></td>
<td>• Gemcitabine/docetaxel</td>
</tr>
<tr>
<td><strong>Breast Cancer</strong></td>
<td>• Docetaxel every 21 days</td>
</tr>
<tr>
<td></td>
<td>• CMF classic (cyclophosphamide/MTX/fluorouracil) (adjuvant)</td>
</tr>
<tr>
<td></td>
<td>• AC (doxorubicin/cyclophosphamide) + sequential docetaxel (adjuvant) (taxane portion only)</td>
</tr>
<tr>
<td></td>
<td>• AC (doxorubicin/cyclophosphamide) + sequential docetaxel + trastuzumab (adjuvant)</td>
</tr>
<tr>
<td></td>
<td>• FEC (fluorouracil/epirubicin/cyclophosphamide) + sequential docetaxel</td>
</tr>
<tr>
<td></td>
<td>• Paclitaxel every 21 days (metastatic or relapsed)</td>
</tr>
<tr>
<td></td>
<td>• TC (docetaxel/cyclophosphamide)</td>
</tr>
<tr>
<td><strong>Cervical Cancer</strong></td>
<td>•</td>
</tr>
</tbody>
</table>
- Cisplatin/topotecan (recurrent or metastatic)
- Paclitaxel/cisplatin
- Topotecan (recurrent or metastatic)
- Irinotecan (recurrent or metastatic)

**Colorectal Cancer**
- FOLFOX (fluorouracil/leucovorin/oxaliplatin)

**Esophageal and Gastric Cancers**
- Irinotecan/cisplatin
- Epirubicin/cisplatin/5-fluorouracil
- Epirubicin/cisplatin/capecitabine

**Multiple Myeloma**
- DT-PACE (dexamethasone/thalidomide/cisplatin/doxorubicin/cyclophosphamide/etoposide)
- DT-PACE + bortezomib (VTD-PACE)

**NHL**
- EPOCH (etoposide/prednisone/vincristine/cyclophosphamide/doxorubicin) (AIDS-related NHL, Burkitt lymphoma, recurrent, other NHL subtypes)
- EPOCH (etoposide/prednisolone/vincristine/cyclophosphamide/doxorubicin) + IT chemotherapy (AIDS-related NHL, DLBCL, recurrent)
- GDP (gemcitabine/dexamethasone/cisplatin) (DLBCL, PTCL, 2nd line)
- GDP (gemcitabine/dexamethasone/cisplatin) + rituximab (DLBCL, 2nd line, Burkitt lymphoma, other NHL subtypes)
- FMR (fludarabine/mitoxantrone/rituximab)
- CHOP + rituximab (cyclophosphamide/doxorubicin/vincristine/prednisone/rituximab) including regimens with pegylated liposomal doxorubicin or mitoxantrone substituted for doxorubicin

**NSCLC**
- Cisplatin/paclitaxel (advanced/metastatic)
- Cisplatin/vinorelbine (adjuvant, advanced/metastatic)
- Cisplatin/docetaxel (adjuvant, advanced/metastatic)
- Cisplatin/etoposide (adjuvant, advanced/metastatic)
- Carboplatin/paclitaxel (adjuvant, advanced/metastatic)
- Docetaxel (advanced/metastatic)

**Ovarian Cancer**
- Carboplatin/docetaxel

**Pancreatic Cancer**
- FOLFIRINOX (folinic acid/fluorouracil/irinotecan/oxaliplatin)

**Prostate Cancer**
- Cabazitaxel

**SCLC**
- Etoposide/carboplatin

**Testicular Cancer**
- Etoposide/cisplatin

**Uterine Sarcoma**
- Docetaxel (advanced or metastatic)

ALL = acute lymphoblastic leukemia, DLBCL = diffuse large B-cell lymphoma, MTX = methotrexate, NHL = non-hodgkin’s lymphoma, NSCLC = non small cell lung cancer, PTCL = peripheral T-cell lymphoma, SCLC = small cell lung cancer

**LIMITATIONS**
1. Authorizations of Neulasta® (pegfilgrastim) will be provided for six months.

**CODES**

The following HCPCS/CPT code(s) are:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>J2505</td>
<td>Injection, pegfilgrastim, 6 mg</td>
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**REFERENCES**


**APPROVAL HISTORY**

July 11, 2017: Reviewed by Pharmacy & Therapeutics Committee.

Subsequent endorsement date(s) and changes made:

- **July 10, 2018:** No changes

**BACKGROUND, PRODUCT AND DISCLAIMER INFORMATION**

Pharmacy Medical Necessity Guidelines have been developed for determining coverage for plan benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. They are used in conjunction with a Member's benefit document and in coordination with the Member's physician(s). The plan makes coverage decisions on a case-by-case basis considering the individual Member's health care needs. Pharmacy Medical Necessity Guidelines are developed for selected therapeutic classes or drugs found to be safe, but proven to be effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations. The plan revises and updates Pharmacy Medical Necessity Guidelines annually, or more frequently if new evidence becomes available that suggests needed revisions.

This Pharmacy Medical Necessity Guideline does not apply to Uniformed Services Family Health Plan Members or to certain delegated service arrangements. Unless otherwise noted in the Member’s benefit document or applicable Pharmacy Medical Necessity Guideline, Pharmacy Medical Necessity Guidelines do not apply to CareLinkSM Members. For self-insured plans, drug coverage may vary depending on the terms of the benefit document. If a discrepancy exists between a coverage guideline and a self-insured Member's benefit document, the provisions of the benefit document will govern. Applicable state or federal mandates will take precedence.

For Tufts Health Plan Medicare Preferred, please refer to Tufts Health Plan Medicare Preferred Prior Authorization Criteria.
Treating providers are solely responsible for the medical advice and treatment of Members. The use of this policy is not a guarantee of payment or a final prediction of how specific claim(s) will be adjudicated. Claims payment is subject to Member eligibility and benefits on the date of service, coordination of benefits, referral/authorization and utilization management guidelines when applicable, and adherence to plan policies and procedures and claims editing logic.