# SPECIALTY GUIDELINE MANAGEMENT

NEULASTA (pegfilgrastim) FULPHILA (pegfilgrastim-jmdp) NYVEPRIA (pegfilgrastim-apgf) UDENYCA (pegfilgrastim-cbqv) ZIEXTENZO (pegfilgrastim-bmez)

# POLICY

# I. 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.

# A. <u>FDA-Approved Indication</u>

## Neulasta

- 1. Patients with Cancer Receiving Myelosuppressive Chemotherapy Neulasta 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 clinically significant incidence of febrile neutropenia.
- Hematopoietic Syndrome of Acute Radiation Syndrome Neulasta is indicated to increase survival in patients acutely exposed to myelosuppressive doses of radiation (Hematopoietic Syndrome of Acute Radiation Syndrome).

## Fulphila

Patients with Cancer Receiving Myelosuppressive Chemotherapy

Fulphila 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 clinically significant incidence of febrile neutropenia

## Udenyca

Patients with Cancer Receiving Myelosuppressive Chemotherapy

Udenyca 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 clinically significant incidence of febrile neutropenia.

## Ziextenzo

Patients with Cancer Receiving Myelosuppressive Chemotherapy

Ziextenzo 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 clinically significant incidence of febrile neutropenia.

Limitations of Use: Ziextenzo is not indicated for the mobilization of peripheral blood progenitor cells for hematopoietic stem cell transplantation.

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## Nyvepria

Patients with Cancer Receiving Myelosuppressive Chemotherapy

Nyvepria is a leukocyte growth factor 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 clinically significant incidence of febrile neutropenia.

Limitations of Use: Nyvepria is not indicated for the mobilization of peripheral blood progenitor cells for hematopoietic stem cell transplantation.

- B. <u>Compendial Use</u>
  - 1. Stem cell transplantation-related indications
  - 2. Prophylaxis for chemotherapy-induced febrile neutropenia in patients with solid tumors
  - 3. Hematopoietic Syndrome of Acute Radiation Syndrome
  - 4. Hairy cell leukemia
  - 5. Chronic Myeloid Leukemia (CML), treatment of persistent neutropenia due to tyrosine kinases inhibitor therapy

All other indications are considered experimental/investigational and not medically necessary.

# **II. REQUIRED DOCUMENTATION**

## Primary Prophylaxis of Febrile Neutropenia

Documentation must be provided of the member's diagnosis and chemotherapeutic regimen.

# **III. CRITERIA FOR INITIAL APPROVAL**

- **A.** Prevention of neutropenia in cancer patients receiving myelosuppressive chemotherapy Authorization of 6 months may be granted for prevention of febrile neutropenia when all of the following criteria are met (1, 2, 3, and 4):
  - 1. The requested medication will not be used in combination with other colony stimulating factors within any chemotherapy cycle.
  - 2. The member will not be receiving concurrent chemotherapy and radiation therapy.
  - 3. The requested medication will not be administered with weekly chemotherapy regimens.
  - 4. One of the following criteria is met (i or ii):
    - i. The requested medication will be used for primary prophylaxis in members with a solid tumor or non-myeloid malignancies who have received, are currently receiving, or will be receiving myelosuppressive anti-cancer therapy that is expected to result in 20% or higher incidence of febrile neutropenia (FN) (See Appendix A) OR 10 19% risk of FN (See Appendix B).
    - ii. The requested medication will be used for secondary prophylaxis in members with solid tumors or non-myeloid malignancies who experienced a febrile neutropenic complication or a doselimiting neutropenic event (a nadir or day of treatment count impacting the planned dose of chemotherapy) from a prior cycle of similar chemotherapy, with the same dose and scheduled planned for the current cycle (for which primary prophylaxis was not received).

## **B.** Other indications

Authorization of 6 months may be granted for members with any of the following indications:

- 1. Stem cell transplantation-related indications
- 2. Hematopoietic Syndrome of Acute Radiation Syndrome
- Treatment for radiation-induced myelosuppression following a radiological/nuclear incident
- 3. Hairy cell leukemia

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Members with hairy cell leukemia with neutropenic fever following chemotherapy

 Chronic Myeloid Leukemia Members with chronic myeloid Leukemia (CML) for treatment of persistent neutropenia due to tyrosine kinase inhibitor therapy

# IV. CONTINUATION OF THERAPY

All members (including new members) requesting authorization for continuation of therapy must meet all initial authorization criteria.

# V. APPENDIX

- A. <u>APPENDIX A: Selected Chemotherapy Regimens with an Incidence of Febrile Neutropenia of 20% or</u> <u>Higher</u>\*
  - 1. Acute Lymphoblastic Leukemia:
    - Select ALL regimens as directed by treatment protocol (see NCCN guidelines ALL)
  - 2. Bladder Cancer:
    - i. Dose dense MVAC (methotrexate, vinblastine, doxorubicin, cisplatin)
    - ii. CBDCa/Pac (carboplatin, paclitaxel)
  - 3. Bone Cancer:
    - i. VAI (vincristine, doxorubicin or dactinomycin, ifosfamide)
    - ii. VDC-IE (vincristine, doxorubicin or dactinomycin, and cyclophosphamide alternating with ifosfamide and etoposide)
    - iii. Cisplatin/doxorubicin
    - iv. VDC (cyclophosphamide, vincristine, doxorubicin or dactinomycin)
    - v. VIDE (vincristine, ifosfamide, doxorubicin or dactinomycin, etoposide)
  - 4. Breast Cancer:
    - i. Docetaxel + trastuzumab
    - ii. Dose-dense AC (doxorubicin, cyclophosphamide) + paclitaxel (or dose dense paclitaxel)
    - iii. TAC (docetaxel, doxorubicin, cyclophosphamide)
    - iv. AT (doxorubicin, docetaxel)
    - v. Doc (docetaxel)
    - vi. TC (docetaxel, cyclophosphamide)
    - vii. TCH (docetaxel, carboplatin, trastuzumab)
  - 5. Colorectal Cancer:
    - FOLFOXIRI (fluorouracil, leucovorin, oxaliplatin, irinotecan)
  - 6. Esophageal and Gastric Cancers: Docetaxel/cisplatin/fluorouracil
  - 7. Head and Neck Squamous Cell Carcinoma:
    - TPF (docetaxel, cisplatin, 5-fluorouracil)
  - 8. Hodgkin Lymphoma:
    - i. Brentuximab vedotin + AVD (doxorubicin, vinblastine, dacarbazine)
    - ii. Escalated BEACOPP (bleomycin, etoposide, doxorubicin, cyclophosphamide, vincristine, procarbazine, prednisone)
  - 9. Kidney Cancer:
    - Doxorubicin/gemcitabine
  - 10. Non-Hodgkin's Lymphoma:
    - i. Dose-adjusted EPOCH (etoposide, prednisone, vincristine, cyclophosphamide, doxorubicin)
    - ii. ICE (ifosfamide, carboplatin, etoposide)
    - iii. Dose-dense CHOP-14 (cyclophosphamide, doxorubicin, vincristine, prednisone) ± rituximab

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- iv. MINE (mesna, ifosfamide, mitoxantrone, etoposide)
- v. DHAP (dexamethasone, cisplatin, cytarabine)
- vi. ESHAP (etoposide, methylprednisolone, cisplatin, cytarabine (Ara-C))
- vii. HyperCVAD ± rituximab (cyclophosphamide, vincristine, doxorubicin, dexamethasone ± rituximab)

viii. VAPEC-B (vincristine, doxorubicin, prednisolone, etoposide, cyclophosphamide, bleomycin) 11. Melanoma:

- Dacarbazine-based combination with IL-2, interferon alpha (dacarbazine, cisplatin, vinblastine, IL-2, interferon alfa)
- 12. Multiple myeloma:
  - i. VTD-PACE (dexamethasone/thalidomide/cisplatin/doxorubicin/cyclophosphamide/etoposide + bortezomib)
  - ii. DT-PACE (dexamethasone/thalidomide/cisplatin/doxorubicin/cyclophosphamide/etoposide)
- 13. Ovarian Cancer:
  - i. Topotecan
  - ii. Docetaxel
- 14. Pancreatic Cancer:

FOLFIRINOX (fluorouracil, leucovorin, irinotecan, oxaliplatin)

- 15. Soft Tissue Sarcoma:
  - i. MAID (mesna, doxorubicin, ifosfamide, dacarbazine)
  - ii. Doxorubicin
  - iii. Ifosfamide/doxorubicin
- 16. Small Cell Lung Cancer:
  - i. Top (topotecan)
  - ii. CAV (cyclophosphamide, doxorubicin, vincristine)
- 17. Testicular cancer:
  - i. VeIP (vinblastine, ifosfamide, cisplatin)
  - ii. VIP (etoposide, ifosfamide, cisplatin)
  - iii. TIP (paclitaxel, ifosfamide, cisplatin)

\*Applies to chemotherapy regimens with or without monoclonal antibodies (e.g., trastuzumab, rituximab)

- B. <u>APPENDIX B: Selected Chemotherapy Regimens with an Incidence of Febrile Neutropenia of 10% to</u> <u>19%</u>\*
  - 1. Occult primary adenocarcinoma: Gemcitabine/docetaxel
  - 2. Breast cancer:
    - i. Docetaxel
    - ii. CMF classic (cyclophosphamide, methotrexate, fluorouracil)
    - iii. CA (doxorubicin, cyclophosphamide) (60 mg/m2) (hospitalized)
    - iv. AC (doxorubicin, cyclophosphamide) + sequential docetaxel (taxane portion only)
    - v. AC + sequential docetaxel + trastuzumab
    - vi. A (doxorubicin) (75 mg/m2)
    - vii. AC (doxorubicin, cyclophosphamide)
    - viii. CapDoc (capecitabine, docetaxel)
    - ix. Paclitaxel every 21 days
  - 3. Cervical Cancer:
    - i. Irinotecan
    - ii. Cisplatin/topotecan
    - iii. Paclitaxel/cisplatin
    - iv. Topotecan

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- 4. Colorectal Cancer:
  - i. FL (fluorouracil, leucovorin)
  - ii. CPT-11 (irinotecan) (350 mg/m2 q 3 wk)
  - iii. FOLFOX (fluorouracil, leucovorin, oxaliplatin)
- 5. Esophageal and Gastric Cancers:
  - i. Irinotecan/cisplatin
  - ii. Epirubicin/cisplatin/5-fluorouracil
  - iii. Epirubicin/cisplatin/capecitabine
- 6. Non-Hodgkin's lymphomas:
  - i. EPOCH-IT chemotherapy
  - ii. GDP (gemcitabine, dexamethasone, cisplatin/carboplatin)
  - iii. GDP (gemcitabine, dexamethasone, cisplatin/carboplatin) + rituximab
  - iv. FMR (fludarabine, mitoxantrone, rituximab)
  - v. CHOP (cyclophosphamide, doxorubicin, vincristine, prednisone) including regimens with pegylated liposomal doxorubicin
  - vi. CHOP + rituximab (cyclophosphamide, doxorubicin, vincristine, prednisone, rituximab) including regimens with pegylated liposomal doxorubicin
  - vii. CHP (cyclophosphamide, doxorubicin, prednisone) + brentuximab vedotin
  - viii. Bendamustine
- 7. Non-Small Cell Lung Cancer:
  - i. Cisplatin/paclitaxel
  - ii. Cisplatin/vinorelbine
  - iii. Cisplatin/docetaxel
  - iv. Cisplatin/etoposide
  - v. Carboplatin/paclitaxel
  - vi. Docetaxel
- 8. Ovarian cancer: Carboplatin/docetaxel
- Prostate cancer: Cabazitaxel
- 10. Small Cell Lung Cancer:
  - Etoposide/carboplatin
- 11. Testicular Cancer:
  - i. BEP (bleomycin, etoposide, cisplatin)
  - ii. Etoposide/cisplatin
- 12. Uterine sarcoma: Docetaxel

\*Applies to chemotherapy regimens with or without monoclonal antibodies (e.g., trastuzumab, rituximab)

## VI. REFERENCES

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