

### Carfilzomib

(Kyprolis®) J9047 (1mg)

### **Covered with prior authorization**

Requests for Kyprolis® (carfilzomib) may be approved if the following criteria are met:

- Individual has a diagnosis of multiple myeloma; AND
- Individual does not have New York Heart Association (NYHA) class III or IV heart failure: AND
- Individual is using for one of the following:
  - Primary treatment in combination with lenalidomide plus dexamethasone (NCCN 2A): OR
  - Primary treatment in combination with daratumumab plus lenalidomide and dexamethasone; OR
  - Primary treatment in combination with cyclophosphamide and dexamethasone in patients with renal insufficiency and/or peripheral neuropathy: **OR**
  - Treatment for early relapsed or refractory disease (1-3 prior therapies) with one of the following:
    - Bortezomib refractory:
      - In combination with lenalidomide and dexamethasone
      - In combination with pomalidomide and dexamethasone
      - In combination with daratumumab and dexamethasone
    - Lenalidomide refractory:
      - In combination with pomalidomide and dexamethasone
      - In combination with daratumumab and dexamethasone
      - In combination with isatuximab-irfc and dexamethasone
    - Alternative regimens for early relapse
      - In combination with dexamethasone
      - In combination with cyclophosphamide and dexamethasone
      - In combination with cyclophosphamide, thalidomide and dexamethasone
      - In combination with selinexor and dexamethasone
  - Treatment for late relapse or refractory disease (>3 prior therapies):
    - In combination with bendamustine and dexamethasone

- Individual has a diagnosis of Waldenström's macroglobulinemia (NCCN 2A); AND
- Carfilzomib is used for the following:
  - As a primary agent, in combination with rituximab (or rituximab biosimilar) and dexamethasone

#### OR

Individual has a diagnosis of Systemic Light Chain Amyloidosis (NCCN 2A); AND



- Individual has relapsed or refractory non-cardiac disease; AND
- Carfilzomib is used as a single agent or in combination with dexamethasone.

Requests for Kyprolis® (carfilzomib) may **not** be approved if the above criteria are not met and for all other indications not included above.

Initial and renewal authorizations are for up to 12 months.

Annual reauthorizations will require medical chart documentation that the patient has been seen within the past 12 months and that markers of disease are improved by therapy.

When coverage is available and medically necessary, the dosage, frequency, duration of therapy, and site of care should be reasonable, clinically appropriate, and supported by evidence-based literature and adjusted based upon severity, alternative available treatments, and previous response to therapy.

Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

#### **Exclusion criteria:**

- Kyprolis® (carfilzomib) is not considered medically necessary when any of the following selection criteria is met:
  - Member has disease progression while taking Kyprolis® (carfilzomib).
  - Kyprolis® (carfilzomib) exceeds single dose limit BSA of 2.2m^2.
- Doses, durations, or dosing intervals that exceed FDA maximum limits for any FDA-approved indication or are not supported by industry-accepted practice guidelines or peer-reviewed literature for the relevant off-label use;
- Individuals with significant known risk factors unless the record provides an assessment of clinical benefit that outweighs the risk.

#### **U.S. Food and Drug Administration:**

This section is to be used for informational purposes. FDA approval alone is not a basis for coverage.) Kyprolis® is a second generation proteasome inhibitor used for treatment of multiple myeloma and Waldenström's macroglobulinemia. The FDA approved indications for Kyprolis<sup>®</sup> include treatment for relapsed or refractory multiple myeloma: in combination with dexamethasone with or without lenalidomide in those who have received one to three lines of therapy, or as a single agent in those who have received one or more lines of therapy. The FDA label includes several warnings for the use of Kyprolis<sup>®</sup>, including cardiac toxicities. In clinical studies, congestive heart failure, pulmonary edema, or decreased ejection fraction (either a new onset or a worsening of previous condition) has led to death due to cardiac arrest within 1 day of administration of carfilzomib. Individuals with New York Heart Association Class III and IV heart failure were ineligible for clinical trials. The National Comprehensive Cancer Network® (NCCN) provides additional category 2A recommendations for the use of Kyprolis®. NCCN recommends Kyprolis<sup>®</sup> in combination with dexamethasone and lenalidomide as primary therapy for multiple myeloma. It also may be used in combination with pomalidomide, panobinostat, daratumumab, or isatuximab for relapsed or refractory disease. NCCN also recommends Kyprolis® for Waldenström's macroglobulinemia (also called lymphoplasmacytic



lymphoma), a type of non-Hodgkin's lymphoma. It is used in combination with rituximab and dexamethasone for primary treatment as well as treatment for relapsed disease. The NCCN guidelines for systemic light chain amyloidosis additionally recommend its use in relapsed or refractory non-cardiac disease.

### **Key References Accessed 8/2022:**

- 1. Bringhen S, Petrucci MT, Larocca A, et al. Carfilzomib, cyclophosphamide, and dexamethasone in patients with newly diagnosed multiple myeloma: a multicenter, phase 2 study. Blood. 2014; 124(1):63-69.
- 2. Bringhen S, D'agostino M, De Paoli L, et al. Phase I/II study of weekly carfilzomib, cyclophosphamide, dexamethasone in newly diagnosed transplant-ineligible myeloma. Leukemia 2018; 32: 979-985.
- 3. Jakubowiak A, Chari A, Lonial S, et al. Daratumumab in combination with carfilzomib, lenalidomide and dexamethasone in patients with newly diagnosed multiple myeloma (MMY1001). J Clin Oncol. 2017; 35(15):8000-8000
- 4. Lexi-Comp ONLINE™ with AHFS™, Hudson, Ohio: Lexi-Comp, Inc.; 2020; Updated periodically.
- 5. NCCN Clinical Practice Guidelines in Oncology™. © 2022 National Comprehensive Cancer Network, Inc. For additional information visit the NCCN website: https://www.nccn.org/guidelines/category\_1.

  Multiple Myeloma. V1.2023. Revised September 14, 2022.
  - a. Systemic Light Chain Amyloidosis. V1.2023. Revised September, 2022.
  - b. Waldenstrom macroglobulinemia/lymphoplasmacytic lymphoma. V1.2023. Revised July 6, 2022.
- 6. Shah JJ, Stadtmauer EA, Abonour R, et al. Carfilzomib, pomalidomide, and dexamethasone for relapsed or refractory myeloma. Blood. 2015; 126(20):2284-2290.
- 7. Manwani R, Mahmood S, Sachchithanantham S, et al. Carfilzomib is an effective upfront treatment in AL amyloidosis patients with peripheral and autonomic neuropathy. Br J Haematol. 2019; 187:638-641.
- 8. Mikhael JR, Reeder CB, Libby EN, et al. A phase I/II trial of cyclophosphamide, carfilzomib, thalidomide and dexamethasone (CYCLONE) in patients with newly diagnosed multiple myeloma: Final Results of MTD expansion cohort. Blood 2013; 122:3179.

Date	Summary of Changes
August 2022	Criteria for use summary developed by the Ascension Medical Specialty Prior Authorization Team.
September 2022	Criteria for use summary approved by the Ascension Ambulatory Care Expert Review Panel.
October 2022	Criteria for use summary approved by the Ascension Therapeutic Affinity Group.



If you have questions, call 833-980-2352 to speak to a member of the Ascension Rx prior authorization team, or email your questions to <a href="mailto:smarthealthspecialty@ascension.org">smarthealthspecialty@ascension.org</a>.