

Clinical Policy: Carfilzomib (Kyprolis)

Reference Number: CP.PHAR.309

Effective Date: 02.01.17

Last Review Date: 11.21

Line of Business: Commercial, HIM, Medicaid

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Carfilzomib (Kyprolis[®]) is a proteasome inhibitor.

FDA Approved Indication(s)

Kyprolis is indicated

- For the treatment of adult patients with relapsed or refractory multiple myeloma (MM) who have received one to three lines of therapy in combination with:
 - Lenalidomide and dexamethasone or
 - Dexamethasone or
 - Daratumumab and dexamethasone
- As a single agent for the treatment of adult patients with relapsed or refractory MM who have received one or more lines of therapy.

Policy/Criteria

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation[®] that Kyprolis is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Multiple Myeloma (must meet all):

1. Diagnosis of MM;
2. Prescribed by or in consultation with an oncologist;
3. Age \geq 18 years;
4. For primary therapy, Kyprolis is prescribed in one of the following ways (a or b):*
 - a. In combination with dexamethasone and Revlimid[®] (lenalidomide)
 - b. In combination with dexamethasone and cyclophosphamide;
5. For previously treated multiple myeloma for relapsed or refractory disease, Kyprolis is prescribed in one of the following ways (a, b, or c):*
 - a. In combination with dexamethasone or with Revlimid[®] (lenalidomide) plus dexamethasone in patients who have received one or three lines of therapy (*see Appendix B for examples of prior therapy*);
 - b. As a single agent in patients who have received one or more lines of therapy;
 - c. In combination with Darzalex[®] (daratumumab) and dexamethasone in patients who have received one or three lines of therapy;

*Prior authorization may be required.

6. Request meets one of the following (a, b, c, or d):*
 - a. Monotherapy: dose does not exceed 56 mg/m² twice weekly each 28-day cycle;
 - b. With dexamethasone and Revlimid: dose does not exceed 27 mg/m² twice weekly 3 out of 4 weeks for twelve 28-day cycles, then 27 mg/m² twice weekly 2 out of 4 weeks for the next six 28-day cycles for up to a total of 18 cycles;
 - c. With dexamethasone ± Darzalex: dose does not exceed (i or ii):
 - i. 70 mg/m² once weekly each 28-day cycle;
 - ii. 56 mg/m² twice weekly each 28-day cycle;
 - d. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

*Prescribed regimen must be FDA-approved or recommended by NCCN.

Approval duration: 6 months

B. Waldenstrom's Macroglobulinemia (Lymphoplasmacytic Lymphoma) (off-label)
(must meet all):

1. Diagnosis of Waldenstrom's macroglobulinemia (i.e., lymphoplasmacytic lymphoma) (WM/LPL);
2. Prescribed by or in consultation with an oncologist;
3. Age ≥ 18 years;
4. Prescribed as a component of CaRD (carfilzomib, Rituxan[®]* [rituximab], and dexamethasone) regimen as primary or Kyprolis-relapsed therapy;
5. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).*

*Prescribed regimen must be FDA-approved or recommended by NCCN.

Approval duration: 6 months

C. Other diagnoses/indications

1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace and CP.PMN.53 for Medicaid.

II. Continued Therapy

A. Multiple Myeloma (must meet all):

1. Currently receiving medication via Centene benefit, or documentation supports that member is currently receiving Kyprolis for a covered indication and has received this medication for at least 30 days;
2. Member is responding positively to therapy;
3. If request is for a dose increase, request meets one of the following (a, b, c, or d):*
 - a. Monotherapy: new dose does not exceed 56 mg/m² twice weekly each 28-day cycle;
 - b. With Revlimid plus dexamethasone: new dose does not exceed 27 mg/m² twice weekly 3 out of 4 weeks for twelve 28-day cycles, then 27 mg/m² twice weekly 2 out of 4 weeks for the next six 28-day cycles for up to a total of 18 cycles;
 - c. With dexamethasone ± Darzalex: new does not exceed (i or ii):
 - i. 70 mg/m² once weekly each 28-day cycle;

- ii. 56 mg/m² twice weekly each 28-day cycle;
- d. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).

**Prescribed regimen must be FDA-approved or recommended by NCCN.*

Approval duration: 12 months

B. Waldenstrom's Macroglobulinemia (Lymphoplasmacytic Lymphoma) (off-label)
(must meet all):

- 1. Currently receiving medication via Centene benefit, or documentation supports that member is currently receiving Kyprolis for a covered indication and has received this medication for at least 30 days;
- 2. Member is responding positively to therapy;
- 3. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).*

**Prescribed regimen must be FDA-approved or recommended by NCCN.*

Approval duration: 12 months

C. Other diagnoses/indications (must meet 1 or 2):

- 1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.

Approval duration: Duration of request or 6 months (whichever is less); or

- 2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace and CP.PMN.53 for Medicaid.

III. Diagnoses/Indications for which coverage is NOT authorized:

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace and CP.PMN.53 for Medicaid or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

CaRD: carfilzomib, rituximab,
dexamethasone

FDA: Food and Drug Administration

MM: multiple myeloma

NCCN: National Comprehensive Cancer
Network

WM/LPL: Waldenstrom's
macroglobulinemia/lymphoplasmacytic
lymphoma

Appendix B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
Kyprolis (carfilzomib), Velcade [®] (bortezomib), Revlimid (lenalidomide), cyclophosphamide, dexamethasone	<u>MM: Examples of primary therapy</u> <ul style="list-style-type: none"> • Bortezomib/lenalidomide/dexamethasone • Bortezomib/cyclophosphamide/dexamethasone • Carfilzomib/lenalidomide/dexamethasone • Daratumumab/lenalidomide/dexamethasone • Daratumumab/lenalidomide/bortezomib/dexamethasone • Carfilzomib/cyclophosphamide/dexamethasone • Carfilzomib/lenalidomide/dexamethasone 	Varies
Kyprolis (carfilzomib), Velcade [®] (bortezomib), Revlimid (lenalidomide), Darzalex [®] (daratumumab), Ninlaro [®] (ixazomib), Pomalyst (pomalidomide), Empliciti [®] (elotuzumab), Farydak (panobinostat), Thalomid [®] (thalidomide), bendamustine, cyclophosphamide, dexamethasone	<u>MM: Examples of therapy for previously treated for relapsed or refractory disease:</u> <ul style="list-style-type: none"> • Bendamustine • Bortezomib/dexamethasone • Carfilzomib/lenalidomide/dexamethasone • Daratumumab/bortezomib/dexamethasone • Daratumumab/carfilzomib/dexamethasone • Daratumumab/lenalidomide/dexamethasone • Ixazomib/lenalidomide/dexamethasone • Pomalidomide/bortezomib/dexamethasone • Elotuzumab/lenalidomide/dexamethasone • Panobinostat/bortezomib/dexamethasone • Carfilzomib/cyclophosphamide/dexamethasone • Carfilzomib/dexamethasone • Pomalidomide/carfilzomib/dexamethasone • Carfilzomib/cyclophosphamide/thalidomide/dexamethasone • Panobinostat/carfilzomib 	Varies
Rituxan (rituximab) Kyprolis (carfilzomib) dexamethasone	<u>WM/LPL: CaRD</u> (carfilzomib, rituximab, and dexamethasone)	Varies

Therapeutic alternatives are listed as Brand name[®] (generic) when the drug is available by brand name only and generic (Brand name[®]) when the drug is available by both brand and generic.

Appendix C: Contraindications/Black Box Warnings

None reported

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
MM	<p><u>Kyprolis + Dexamethasone:</u></p> <ul style="list-style-type: none"> • Cycles: Kyprolis IV as a 30-minute infusion (28-day cycles). <ul style="list-style-type: none"> ○ Cycle 1: administer Kyprolis 20 mg/m² on Day 1 and 70 mg/m² on Days 8 and 15 ○ Cycle 2 and later: 70 mg/m² on Day 1, 8, and 15 • Dose (once weekly 20/70 mg/m² regimen): <ul style="list-style-type: none"> ○ Starting dose of Kyprolis 20 mg/m² on Cycle 1, Day 1 ○ If tolerated, escalate Kyprolis to 70 mg/m² on Day 8 of Cycle 1. ○ Dexamethasone: 40 mg PO or IV on Days 1, 8, 15 of all 28-day cycles and on Day 22 of Cycles 1-9. <p><u>Kyprolis + Dexamethasone, OR Monotherapy:</u></p> <ul style="list-style-type: none"> • Cycles: Kyprolis IV as a 30-minute infusion (28-day cycles). <ul style="list-style-type: none"> ○ Cycle 1: administer Kyprolis 20 mg/m² on Days 1 and 2, and 56 mg/m² on Day 8, 9, 15, and 16 ○ Cycle 2 and later: administer Kyprolis 56 mg/m² on Days 1, 2, 8, 9, 15 and 16 ○ For monotherapy: Cycle 13 and later: administer Kyprolis 56 mg/m² on Days 1, 2, 15 and 16 • Dose (twice weekly 20/56 mg/m² regimen): <ul style="list-style-type: none"> ○ Starting dose of Kyprolis 20 mg/m² on Cycle 1, Days 1 and 2 ○ If tolerated, escalate Kyprolis to 56 mg/m² on Day 8 of Cycle 1. <p><u>Do not include if Monotherapy:</u></p> <ul style="list-style-type: none"> ○ Dexamethasone: 20 mg PO or IV on Days 1, 2, 8, 9, 15, 16, 22 and 23 of each 28-day cycle. <p><u>Kyprolis + Revlimid + Dexamethasone, OR Monotherapy:</u></p> <ul style="list-style-type: none"> • Cycles: Kyprolis IV as a 10-minute infusion for 28-day cycles. <ul style="list-style-type: none"> ○ Cycle 1: administer Kyprolis 20 mg/m² on Days 1 and 2, and 27 mg/m² on Days 8, 9, 15 and 16 ○ Cycle 2 to 12: administer Kyprolis 27 mg/m² on Days 1, 2, 8, 9, 15 and 16 ○ Cycle 13 and later, administer Kyprolis 27mg/m² on Day 1, 2, 15 and 16 	70 mg/m ²

Indication	Dosing Regimen	Maximum Dose
	<ul style="list-style-type: none"> ○ Discontinue Kyprolis after Cycle 18 and continue Revlimid and dexamethasone thereafter. ● Dose (twice weekly 20/27 mg/m² regimen): <ul style="list-style-type: none"> ○ Starting dose of Kyprolis: 20 mg/m² on Cycle 1, Days 1 and 2 ○ If tolerated, escalate Kyprolis to 27 mg/m² on Day 8 of Cycle 1. <u>Do not include if Monotherapy:</u> <ul style="list-style-type: none"> ○ Revlimid: 25 mg PO QD on Days 1–21 of each cycle. ○ Dexamethasone: 40 mg PO or IV on Days 1, 8, 15, and 22 of each 28-day cycle. <u>Kyprolis + Darzalex + Dexamethasone:</u> Twice weekly 20/56 mg/m² regimen: <ul style="list-style-type: none"> ● Cycles: Kyprolis IV as a 30-minute infusion (28-day cycles). <ul style="list-style-type: none"> ○ Cycle 1: administer Kyprolis 20 mg/m² on Days 1 and 2 and 56 mg/m² on Days 8, 9, 15 and 16 ○ Cycle 2 and later: administer Kyprolis 56 mg/m² on Days 1, 2, 8, 9, 15 and 16 ● Dose: <ul style="list-style-type: none"> ○ Starting dose of Kyprolis: 20 mg/m² on Cycle 1, Days 1 and 2 ○ If tolerated, escalate Kyprolis to 56 mg/m² on Day 8 of Cycle 1 ○ See prescribing information for Darzalex and dexamethasone dosing. Once weekly 20/70 mg/m² regimen: <ul style="list-style-type: none"> ● Cycles: Kyprolis IV as a 30-minute infusion (28-day cycles). <ul style="list-style-type: none"> ○ Cycle 1: administer Kyprolis 20 mg/m² on Day 1 and 70 mg/m² on Days 8 and 15 ○ Cycle 2 and later: administer Kyprolis 70 mg/m² on Days 1, 8 and 15 ● Dose: <ul style="list-style-type: none"> ○ Starting dose of Kyprolis: 20 mg/m² on Cycle 1, Days 1 and 2 ○ If tolerated, escalate Kyprolis to 70 mg/m² on Day 8 of Cycle 1 ○ See prescribing information for Darzalex and dexamethasone dosing. 	

Indication	Dosing Regimen	Maximum Dose
	<i>Calculate the Kyprolis dose using the patient's actual body surface area at baseline. In patients with a body surface area greater than 2.2 m², calculate the dose based upon a body surface area of 2.2 m².</i>	

VI. Product Availability

Single-dose vial: 10 mg, 30 mg, 60 mg

VII. References

1. Kyprolis Prescribing Information. Thousand Oaks: Onyx Pharmaceuticals, Inc.; March 2021. Available at: <http://www.kyprolis.com>. Accessed August 6, 2021.
2. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: http://www.nccn.org/professionals/drug_compendium. Accessed August 6, 2021.
3. National Comprehensive Cancer Network. Multiple Myeloma Version 07.2021. Available at: https://www.nccn.org/professionals/physician_gls/pdf/myeloma.pdf. Accessed August 6, 2021.
4. National Comprehensive Cancer Network. Waldenstrom's macroglobulinemia-lymphoplasmacytic lymphoma Version 01.2022. Available at: https://www.nccn.org/professionals/physician_gls/pdf/waldenstroms.pdf. Accessed August 6, 2021.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. 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.

HCPCS Codes	Description
J9047	Injection, carfilzomib, 1 mg

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy split from CP.PHAR.182 Excellus Oncology.	01.01.17	02.17
Age and dosing added Safety information removed. NCCN recommended uses added separately.	09.05.17	11.17
4Q 2018 annual review: HIM-Medical added; NCCN and FDA-approved uses summarized for improved clarity; specialist involvement in care and continuation of care added; MM prior therapy regimens consolidated into primary or subsequent therapy; dexamethasone and cyclophosphamide added as an MM regimen; references reviewed and updated.	08.07.18	11.18
Commercial line of business added.	10.15.19	

Reviews, Revisions, and Approvals	Date	P&T Approval Date
4Q 2019 annual review: HIM line of business added; Kyprolis dosing as monotherapy and in combination with dexamethasone added per PI; references reviewed and updated.	08.20.19	11.19
4Q 2020 annual review: MM - FDA approved regimen added: in combination with Darzalex and dexamethasone, and NCCN recommended regimen added: in combination with dexamethasone and cyclophosphamide ± Thalomid; references reviewed and updated.	09.02.20	11.20
4Q 2021 annual review: added primary therapy and revised therapy for previous treated for relapsed or refractory disease and updated Appendix B Therapeutic Alternatives as per NCCN recommendation; updated Section V Dosage and Administration and Section VI Product Availability; modified reference from HIM.PHAR.21 to HIM.PA.154; references reviewed and updated.	08.06.21	11.21

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. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. 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. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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Note:

For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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