

Clinical Policy: Thalidomide (Thalomid)

Reference Number: PA.CP.PHAR.78

Effective Date: 09/11

Last Review Date: 04/18

[Revision Log](#)

Description

The intent of the criteria is to ensure that patients follow selection elements established by Pennsylvania Health and Wellness[®] clinical policy for thalidomide (Thalomid[®]) capsules for oral use.

FDA Approved Indication(s)

Thalomid is indicated:

- For the treatment of patients with newly diagnosed multiple myeloma (MM) in combination with dexamethasone
- For the acute treatment of the cutaneous manifestations of moderate to severe erythema nodosum leprosum (ENL)
- As maintenance therapy for prevention and suppression of the cutaneous manifestations of ENL recurrence

Limitation of use: Thalomid is not indicated as monotherapy for such ENL treatment in the presence of moderate to severe neuritis.

Policy/Criteria

It is the policy of Pennsylvania Health and Wellness[®] that Thalomid is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Multiple Myeloma (must meet all):

1. Diagnosis of multiple myeloma (MM);
2. Prescribed by or in consultation with an oncologist;
3. Age \geq 12 years;
4. Prescribed in combination with dexamethasone;
5. Request meets one of the following (a or b):
 - a. Dose does not exceed 200 mg/day;
 - b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 6 months

B. Erythema Nodosum Leprosum (must meet all):

1. Diagnosis of erythema nodosum leprosum (ENL);
2. Prescribed by or in consultation with an infectious disease specialist, immunologist, or dermatologist;
3. Age \geq 12 years;
4. Dose does not exceed 400 mg/day.

Approval duration: 6 months

C. Myeloproliferative Neoplasms (off-label) (must meet all):

1. Diagnosis of myeloproliferative neoplasms (myelofibrosis);
2. Prescribed by or in consultation with an oncologist;
3. Age ≥ 12 years;
4. Prescribed as a single agent, or in combination with prednisone for management of myelofibrosis-associated anemia;
5. Member meets one of the following (a or b):
 - a. Serum EPO ≥ 500 mU/mL;
 - b. Serum EPO < 500 mU/mL, and no response or loss of response to erythropoietic stimulating agents;
6. Request meets one of the following (a or b):
 - a. Dose does not exceed 400 mg/day;
 - b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 6 months

D. Castleman's Disease (off-label) (must meet all):

1. Diagnosis of multicentric Castleman's disease;
2. Prescribed by or in consultation with an oncologist;
3. Age ≥ 12 years;
4. Prescribed as subsequent therapy with or without rituximab for disease that has progressed following treatment of relapsed/refractory or progressive disease;
5. Request meets one of the following (a or b):
 - a. Dose does not exceed 400 mg/day;
 - b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 6 months

E. Kaposi Sarcoma (off-label) (must meet all):

1. Diagnosis of AIDS-related Kaposi Sarcoma;
2. Prescribed by or in consultation with an oncologist or immunologist;
3. Age ≥ 12 years;
4. Prescribed in combination with antiretroviral therapy;
5. Disease has progressed or not responded to doxorubicin and paclitaxel;
6. Request meets one of the following (a or b):
 - a. Dose does not exceed 400 mg/day;
 - b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 6 months

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

1. Diagnosis of Waldenstrom's macroglobulinemia or lymphoplasmacytic lymphoma;

2. Prescribed by or in consultation with an oncologist;
3. Age ≥ 12 years;
4. Prescribed as a single agent or in combination with rituximab for one of the following (a or b):
 - a. Primary therapy;
 - b. Therapy for previously treated disease that does not respond to primary therapy or for progressive or relapsed disease;
5. Request meets one of the following (a or b):
 - a. Dose does not exceed 400 mg/day;
 - b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 6 months

G. Other diagnoses/indications (must meet all):

1. Other indications may be covered provided that member meets the off-label criteria defined in the Global Biopharm policy (PA.CP.PHAR.57):

Approval duration: 6 months

II. Continued Approval

A. All Indications in Section I (must meet all):

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria or the Continuity of Care Policy (PA.LTSS.PHAR.01) applies;
2. No disease progression or unacceptable toxicity;
3. If request is for a dose increase, request meets one of the following (a or b):
 - a. New dose does not exceed 400 mg/day;
 - b. Requested new dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 12 months

B. Other diagnoses/indications (1 or 2):

1. Currently receiving medication via Pennsylvania Health and Wellness benefit and documentation supports positive response to therapy or the Continuity of Care Policy (PA.LTSS.PHAR.01) applies.

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

2. Refer to PA.CP.PHAR.57 - Global Biopharm Policy.

Background

Description/Mechanism of Action:

Thalomid, α -(N-phthalimido) glutarimide, is an immunomodulatory agent. The mechanism of action of Thalomid is not fully understood. Thalomid possesses immunomodulatory, anti-inflammatory and antiangiogenic properties. Available data from in vitro studies and clinical

trials suggest that the immunologic effects of this compound can vary substantially under different conditions, but may be related to suppression of excessive tumor necrosis factor-alpha (TNF- α) production and down-modulation of selected cell surface adhesion molecules involved in leukocyte migration. For example, administration of thalidomide has been reported to decrease circulating levels of TNF- α in patients with erythema nodosum leprosum (ENL); however, it has also been shown to increase plasma TNF- α levels in HIV-seropositive patients.

Other anti-inflammatory and immunomodulatory properties of thalidomide may include suppression of macrophage involvement in prostaglandin synthesis, and modulation of interleukin-10 and interleukin-12 production by peripheral blood mononuclear cells. Thalidomide treatment of multiple myeloma patients is accompanied by an increase in the number of circulating natural killer cells, and an increase in plasma levels of interleukin-2 and interferon-gamma (T cell-derived cytokines associated with cytotoxic activity). Thalidomide was found to inhibit angiogenesis in a human umbilical artery explant model in vitro. The cellular processes of angiogenesis inhibited by thalidomide may include the proliferation of endothelial cells.

Formulations:

Thalomid oral capsules: 50 mg, 100 mg, 150 mg, 200 mg

Safety Information: REMS Program

- Thalomid is only available under a restricted distribution program called the Thalomid REMS program due to a black box warning for embryo-fetal toxicity. Patient and physician enrollment in the manufacturer's REMS program is required.

Appendices

Appendix A: Abbreviation Key

CD: Castleman's disease

ENL: erythema nodosum leprosum

MM: multiple myeloma

Reviews, Revisions, and Approvals	Date	Approval Date
2Q 2018 annual review;; added prescriber and age requirements; removed off label indication for systemic light chain amyloidosis that is no longer included in NCCN Compendium; added off-label use for Kaposi Sarcoma; summarized NCCN and FDA approved uses for improved clarity; added specialist involvement in care; references reviewed and updated.	01.22 .18	04.18

References

1. Thalomid Prescribing Information. Summit, NJ: Celgene Corporation; January 2017. Available at https://www.accessdata.fda.gov/drugsatfda_docs/label/2017/020785s0611bl.pdf. Accessed January 22, 2018.

2. Thalidomide. In: National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at www.nccn.org. . Accessed January 22, 2018.
3. Multiple myeloma (Version 3.2017). In: National Comprehensive Cancer Network Guidelines. Available at www.nccn.org. Accessed January 22, 2018.
4. AIDS-Related Kaposi Sarcoma (Version 1.2018). In: National Comprehensive Cancer Network Guidelines. Available at www.nccn.org. Accessed January 31, 2018.