Clinical Policy: Thalidomide (Thalomid)
Reference Number: ERX.SPMN.95
Effective Date: 07/16
Last Review Date: 06/16

See Important Reminder at the end of this policy for important regulatory and legal information.

1. Policy/Criteria
2. It is the policy of health plans affiliated with Envolve Pharmacy Solutions® that thalidomide (Thalomid®) is medically necessary when the following criteria are met:

3. Initial Approval Criteria
   a. Multiple Myeloma (must meet all):
4. Diagnosis of multiple myeloma;
5. Member meets a or b:
   a. FDA approved use (all of the following):
      i. Multiple myeloma is newly diagnosed;
      ii. Thalomid will be used in combination with dexamethasone;
   b. NCCN recommended use:
      i. Thalomid will be used in one of the following ways:
6. As primary chemotherapy for progressive solitary plasmacytoma or smoldering myeloma (asymptomatic) that has progressed to active (symptomatic) myeloma (a or b):
   a. In combination with dexamethasone for transplant candidates;
   b. In combination with dexamethasone or in MPT (melphalan, prednisone, thalidomide) regimen for nontransplant candidates;
7. For maintenance therapy as a single agent or in combination with bortezomib or prednisone for any of the following:
   a. Active (symptomatic) myeloma responding to primary myeloma therapy;
   b. Stable or responsive disease following stem cell transplant;
   c. With second tandem transplant for stable or responsive disease following autologous stem cell transplant;
8. Therapy for disease relapse after 6 months following primary chemotherapy with the same regimen, and (1 or 2):
   a. In combination with dexamethasone for transplant candidates;
   b. In combination with dexamethasone or in MPT (melphalan, prednisone, thalidomide) regimen for nontransplant candidates;
9. Therapy for previously treated myeloma for disease relapse or for progressive or refractory disease, and one of the following:
   a. As a single agent for steroid-intolerant patients;
   b. In combination with dexamethasone;
   c. In DT-PACE (dexamethasone, thalidomide, cisplatin, doxorubicin, cyclophosphamide, etoposide) regimen;
   d. In VTD-PACE (bortezomib, dexamethasone, thalidomide, cisplatin, doxorubicin, cyclophosphamide, etoposide) regimen.
Approval duration: 3 months

A. **Erythema Nodosum Leprosum** (must meet all):
   1. Diagnosis of erythema nodosum leprosum (ENL);
   2. FDA approved use:
      a. Thalomid will be used in one of the following ways:
         i. As acute treatment of the cutaneous manifestations of moderate to severe ENL;
         ii. In combination with corticosteroids (may be tapered) for moderate to severe neuritis associated with a severe ENL reaction;
         iii. As maintenance therapy for prevention and suppression of the cutaneous manifestations of ENL recurrence;
      b. Prescribed dose does not exceed 400 mg/day.

Approval duration: 3 months

B. **Other diagnoses/indications**: Refer to ERX.SPMN.16 - Global Biopharm Policy.
   1. Additional Thalomid uses, as outlined in the NCCN compendium and meeting NCCN category 1, 2a, or 2b, are covered for the following indications per the USS.SPMN.16 Global Biopharm Policy:
      a. Castleman’s disease (CD);
      b. Systemic light chain amyloidosis;
      c. Waldenstrom’s macroglobulinemia/lymphoplasmacytic lymphoma.

II. Continued Approval
   A. **All Indications** (must meet all):
      1. Currently receiving medication via health plan benefit or member has previously met all initial approval criteria.

Approval duration: 6 months

B. **Other diagnoses/indications** (must meet 1 or 2):
   1. Currently receiving medication via health plan benefit and documentation supports positive response to therapy; or
   2. Refer to ERX.SPMN.16 - 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, antiinflammatory 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 is available in 50 mg, 100 mg, 150 mg and 200 mg capsules for oral administration. Active ingredient: thalidomide.

FDA Approved Indications:
Thalomid is an immunomodulatory/oral capsule formulation indicated for:
- Multiple myeloma:
  - Thalomid in combination with dexamethasone is indicated for the treatment of patients with newly diagnosed multiple myeloma (MM).
- Erythema nodosum leprosum:
  - Thalomid is indicated for the acute treatment of the cutaneous manifestations of moderate to severe erythema nodosum leprosum (ENL).
    - Thalomid is not indicated as monotherapy for such ENL treatment in the presence of moderate to severe neuritis.
  - Thalomid is also indicated as maintenance therapy for prevention and suppression of the cutaneous manifestations of ENL recurrence.

Appendices

Appendix A: Abbreviation Key
CD: Castleman’s disease
ENL: erythema nodosum leprosum
NCCN: National Comprehensive Cancer Network

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.

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Reviews, Revisions, and Approvals

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References

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.

This Clinical Policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. 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.

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