



Medical Policy Bulletin

Title:

Tildrakizumab-asmn (Ilumya)

Policy #:

MA08.098a

The Company makes decisions on coverage based on the Centers for Medicare and Medicaid Services (CMS) regulations and guidance, benefit plan documents and contracts, and the member's medical history and condition. If CMS does not have a position addressing a service, the Company makes decisions based on Company Policy Bulletins. Benefits may vary based on contract, and individual member benefits must be verified. The Company determines medical necessity only if the benefit exists and no contract exclusions are applicable. Although the Medicare Advantage Policy Bulletin is consistent with Medicare's regulations and guidance, the Company's payment methodology may differ from Medicare.

When services can be administered in various settings, the Company reserves the right to reimburse only those services that are furnished in the most appropriate and cost-effective setting that is appropriate to the member's medical needs and condition. This decision is based on the member's current medical condition and any required monitoring or additional services that may coincide with the delivery of this service.

This Policy Bulletin document describes the status of CMS coverage, medical terminology, and/or benefit plan documents and contracts at the time the document was developed. This Policy Bulletin will be reviewed regularly and be updated as Medicare changes their regulations and guidance, scientific and medical literature becomes available, and/or the benefit plan documents and/or contracts are changed.

Policy

Coverage is subject to the terms, conditions, and limitations of the member's Evidence of Coverage.

The Company reserves the right to reimburse only those services that are furnished in the most appropriate and cost-effective setting that is appropriate to the member's medical needs and condition.

MEDICALLY NECESSARY

Tildrakizumab-asmn (Ilumya™) is considered medically necessary and, therefore, covered for adult individuals with moderate-to-severe chronic plaque psoriasis who are candidates for systemic therapy or phototherapy, when the following criteria listed below are met:

- Individual has been diagnosed with moderate to severe plaque psoriasis for at least 6 months
- There is documentation of failure, contraindication, or intolerance to a trial of at least one of the following:
 - Systemic agent (e.g., immunosuppressives, retinoic acid derivatives, and/or methotrexate)
 - Phototherapy (i.e., Psoralens with UVA light (PUVA) OR UVB with coal tar or dithranol)
 - Topical agents (e.g., Anthralin, Coal Tar preparations, corticosteroids, emollients, immunosuppressives, keratolytics, retinoic acid derivatives, and/or Vitamin D analogues)
- Active or latent tuberculosis (TB) has been ruled out
- Individuals will not be treated with live vaccine(s) during treatment with tildrakizumab-asmn (Ilumya™)

EXPERIMENTAL/INVESTIGATIONAL

All other uses of tildrakizumab-asmn (Ilumya™) are considered experimental/investigational and, therefore, not covered unless the indication is supported as an accepted off-label use, as defined in the Company medical policy on off-label coverage for prescription drugs and biologics.

REQUIRED DOCUMENTATION

The individual's medical record must reflect the medical necessity for the care provided. These medical records may include, but are not limited to: records from the professional provider's office, hospital, nursing home, home health agencies, therapies, and test reports.



The Company may conduct reviews and audits of services to our members, regardless of the participation status of the provider. All documentation is to be available to the Company upon request. Failure to produce the requested information may result in a denial for the drug.

Guidelines

BENEFIT APPLICATION

Subject to the applicable Evidence of Coverage, tildrakizumab-asmn (Ilumya™) is covered under the medical benefits of the Company's Medicare Advantage products when the medical necessity criteria listed in this medical policy are met.

There is no Medicare coverage determination addressing this drug; therefore, the Company policy is applicable.

For Medicare Advantage members, certain drugs are available through either the member's medical benefit (Part B benefit) or pharmacy benefit (Part D benefit), depending on how the drug is prescribed, dispensed, or administered. This medical policy only addresses instances when tildrakizumab-asmn (Ilumya™) is covered under a member's medical benefit (Part B benefit). It does not address instances when tildrakizumab-asmn (Ilumya™) is covered under a member's pharmacy benefit (Part D benefit).

US FOOD AND DRUG ADMINISTRATION (FDA) STATUS

Tildrakizumab-asmn (Ilumya™) was approved by the FDA on March 20, 2018 for treatment of adults with moderate-to-severe plaque psoriasis who are candidates for systemic therapy or phototherapy.

PEDIATRIC USE

The safety and effectiveness of tildrakizumab-asmn (Ilumya™) have not been established in pediatric individuals.

Description

Tildrakizumab-asmn (Ilumya™) is a recombinant humanized IgG1K monoclonal antibody, which inhibits the interleukin-23 (IL-23) receptor that specifically binds to the p19 subunit of interleukin-23, thereby blocking the release of proinflammatory cytokines and chemokines during the inflammatory response.

Psoriasis is a chronic, immune-related disease of the skin that primarily affects adults. Plaque psoriasis is the most common form, characterized by scaling and inflammation. Individuals diagnosed with psoriasis may experience pain and itching, restricted range of motion in their joints, and emotional distress. The course of psoriasis is marked by chronic and acute phases with a wide variety in relapse and clearance rates. Disease severity and clinical response to biologics may be measured with either the Psoriasis Area and Severity Index (PASI) or the Physician Global Assessment (PGA) scale.

The treatment of psoriasis consists of controlling inflammation and preventing discomfort through methods such as light therapy, stress reduction, and medications that suppress the immune response (e.g., topical corticosteroids or nonsteroidals, oral methotrexate, retinoids, cyclosporine).

Tildrakizumab-asmn is a biologic treatment for adults with moderate-to severe plaque psoriasis. Tildrakizumab binds specifically to IL-23p19 and binds to IL-23 molecules and prevents its interaction with the IL-23R, blocking the downstream signaling cascade. IL-23 is a naturally occurring cytokine known to be involved with multiple inflammatory pathways. This block initiates a downstream signaling cascade to induce a transcription of the inflammatory cytokines, IL-17. IL-17 activates inflammatory pathways associated with psoriasis.

PEER-REVIEWED LITERATURE

Summary

On March 20, 2018, based on results from two three-part, phase 3, randomized, placebo controlled studies, the US Food and Drug Administration (FDA) approved tildrakizumab-asmn in the treatment of adult individuals with moderate-to severe plaque psoriasis.



ReSURFACE 1, randomized 772 participants in a 2:2:1 ratio to either receive tildrakizumab 200 mg, tildrakizumab 100 mg, or placebo, which resulted in 308 participants to tildrakizumab 200 mg, 309 in the tildrakizumab 100 mg, and 155 individuals in the placebo arm. The three-part series of trial comprised of two treatment assignments with re-randomization after the initial 12 weeks. The participants were re-randomized in part 2, those in the placebo group were re-randomized (1:1) to either tildrakizumab 200 or tildrakizumab 100 mg. Participants were then re-randomized across the dosing regimens. In part 3 of both studies (week 28), responders (PASI ≥ 75) and partial responders (PASI ≥ 50 and PASI < 75) to tildrakizumab 200 mg and 100 mg were re-randomized to continue the same treatment, a different dose of tildrakizumab, or placebo. Results from reSURFACE 1 indicate at week 12, 192 patients (62%) in the 200 mg group and 197 patients (64%) in the 100 mg group achieved PASI 75, compared with 9 patients (6%) in the placebo group ($p < 0.0001$).

In reSURFACE 2, 1039 participants were assigned to four arms in a 2:2:1:2 ratio. The comparison groups were tildrakizumab 200 (n=314), tildrakizumab 100 (n=307), placebo (n=156) or etanercept (n=313). Similarly, participants were re-randomized at week 12, and again at week 28, subjects were re-randomized based on their PASI response status (< 50 % improvement or partial response ≥ 50 < 75 %). All responsive participants were followed until week 52. The individuals treated with etanercept were converted into one of the tildrakizumab treatment groups and treated at weeks 28, 32, 36, and 48.

The researchers reported the two co-primary endpoints evaluated in the trial were the proportion of participants achieving Psoriasis Area and Severity Index (PASI 75) and a Physician's Global Assessment (PGA) response at 12 weeks. In reSURFACE 2 results at week 12 demonstrated 206 participants (66%) in the 200 mg group, and 188 participants (61%) in the 100 mg group achieved PASI 75, compared with 9 individuals (6%) in the placebo group and 151 of those (48%) in the etanercept group ($p < 0.0001$ for comparisons of both tildrakizumab groups vs placebo; $p < 0.0001$ for 200 mg vs etanercept and $p = 0.0010$ for 100 mg vs etanercept). Researchers reported on PGA response, 186 participants (59%) in the 200 mg group, and 168 participants (55%) in the 100 mg group achieved a PGA response, compared with 7 individuals (4%) in the placebo group and 149 of those (48%) in the etanercept arm ($p < 0.0001$ for comparisons of both tildrakizumab groups vs placebo; $p = 0.0031$ for 200 mg vs etanercept and $p = 0.0663$ for 100 mg vs etanercept). Results demonstrated statistical significance across all comparisons excluding 100 mg vs etanercept.

Tildrakizumab 200 mg and 100 mg doses were given at baseline and week 4 and subsequently every 12 weeks. In reSURFACE 1, participants were given tildrakizumab 200 mg, tildrakizumab 100 mg, or placebo subcutaneously at baseline and week 4. In part 2, tildrakizumab patient received another dose at week 16; re-randomized placebo patients received either tildrakizumab 200 or 100 mg at weeks 12 and 16. In reSURFACE 2, participants received tildrakizumab 200 mg, tildrakizumab 100 mg, placebo, or etanercept 50 mg (etanercept 50 mg was given twice a week). In part 2, tildrakizumab patients received their doses at week 16. Etanercept patients received one dose weekly; re-randomized placebo patients received tildrakizumab 200 mg or 100 mg (at weeks 12 and 16). In part 3 of both studies, participants received doses of tildrakizumab or placebo until week 64 (reSURFACE 1) or week 52 (reSURFACE 2).

The studies indicate tildrakizumab significantly improved the proportion of individuals achieving Psoriasis Area and Severity Index (PASI 75) response and a Physician's Global Assessment (PGA) score of clear or minimal compared with placebo in 2 randomized studies at week 12 ($p < 0.0001$). In 1 of the 2 randomized studies, a significantly greater proportion of participants achieved PASI 75 with tildrakizumab compared with etanercept, but there was no significant difference between tildrakizumab 100 mg dose and etanercept for PGA score of clear or minimal. The median time to loss of PASI 75 response after treatment withdrawal was 20 weeks and loss of PGA score of clear or minimal response was 16 weeks. In both studies, results for PASI 75 and PGA for both doses of tildrakizumab continued to improve to week 28. A higher proportion of participants who received either dose of tildrakizumab compared to the participants who received placebo achieved the more rigorous endpoints of PASI 90 (minimal) and PASI 100 (clear) in reSURFACE 1 and reSURFACE 2 at week 12.

Based on the results from these two studies tildrakizumab-asmn (Ilumya™) the following administration schedule has been approved for subcutaneous injection in adults at 100 mg at weeks 0, 4, and every 12 weeks thereafter.

SAFETY

Tildrakizumab-asmn (Ilumya™) should be interrupted if an individual develops a serious infection or an opportunistic infection or sepsis, until the infection resolves or is adequately controlled. Other safety concerns that require monitoring during tildrakizumab-asmn (Ilumya™) therapy are individuals with a previous serious hypersensitivity reaction to tildrakizumab or to any of the excipients. Avoid the use of live vaccines in patients treated with

tildrakizumab.

OFF-LABEL INDICATIONS

There may be additional indications contained in the Policy section of this document due to evaluation of criteria highlighted in the Company's off-label policy, and/or review of clinical guidelines issued by leading professional organizations and government entities.

References

American Hospital Formulary Service (AHFS). Drug Information 2020. Tildrakizumab-asmn (Ilumya). [Lexicomp Online Web site]. 08/27/2018. Available at: <http://online.lexi.com/lco/action/home> [via subscription only]. Accessed January 10, 2020.

Armstrong, AW, Siegel, MP, Bagel, P. From the medical board of the national psoriasis foundation: treatment targets for plaque psoriasis. *J Am Acad Dermatol*. Feb. 2017;76(2):290–298.

Elsevier Gold's Clinical Pharmacology Compendium. Tildrakizumab-asmn (Ilumya™). [Clinical Key Web site]. 03/24/2018. Available at <https://www.clinicalkey.com/pharmacology/monograph/5017>. [via subscription only]. Accessed June 14, 2018.

Lexi-Drugs Compendium. Tildrakizumab-asmn (Ilumya™). [Lexicomp Online Web site]. 05/24/2018. Available at: <http://online.lexi.com/lco/action/home> [via subscription only]. Accessed June 13, 2018.

Menter A, Gottlieb A, Feldman SR, Van Voorhees AS, Leonardi CL, Gordon KB, et al. Guidelines of care for the management of psoriasis and psoriatic arthritis: Section 1. Overview of psoriasis and guidelines of care for the treatment of psoriasis with biologics. *J Am Acad Dermatol*. 2008 May;58(5):826-50.

National Psoriasis Foundation. Systemic treatments: biologics and oral treatments. 2017. Available at: https://www.psoriasis.org/sites/default/files/systemic_treatments_-_biologics_and_oral_treatments.pdf. Accessed May 18, 2018.

Papp K, Thaçi D, Reich K. Tildrakizumab (MK-3222), an anti-interleukin-23p19 monoclonal antibody, improves psoriasis in a phase IIb randomized placebo-controlled trial. *Br J Dermatol*. 2015 Oct;173(4):930-9.

Reich K, Papp KA, Blauvelt A, et al. Tildrakizumab versus placebo or etanercept for chronic plaque psoriasis (reSURFACE 1 and reSURFACE 2): results from two randomised controlled, phase 3 trials. *Lancet* 2017; 390(10091):276-288.

Truven Health Analytics. Micromedex® DrugDex® Compendium. DrugDex®. tildrakizumab-asmn (Ilumya™). [Micromedex® Solutions Web site]. May 07, 2018. Available at: <http://www.micromedexsolutions.com/micromedex2/librarian> [via subscription only]. Accessed May 18, 2018.

US Food and Drug Administration. Center for Drug Evaluation and Research. tildrakizumab-asmn (Ilumya™) Product Labeling. [FDA Web site] Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/761067s000lbl.pdf. Accessed on May 18, 2018.

US Food and Drug Administration. Center for Drug Evaluation and Research. tildrakizumab-asmn (Ilumya™) Approval Letter. [FDA Web site]. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/nda/2018/761067Orig1s000Approv.pdf. Accessed on May 18, 2018.

Coding

Inclusion of a code in this table does not imply reimbursement. Eligibility, benefits, limitations, exclusions, precertification/referral requirements, provider contracts, and Company policies apply.



The codes listed below are updated on a regular basis, in accordance with nationally accepted coding guidelines. Therefore, this policy applies to any and all future applicable coding changes, revisions, or updates.

In order to ensure optimal reimbursement, all health care services, devices, and pharmaceuticals should be reported using the billing codes and modifiers that most accurately represent the services rendered, unless otherwise directed by the Company.

The Coding Table lists any CPT, ICD-10, and HCPCS billing codes related only to the specific policy in which they appear.

CPT Procedure Code Number(s)

N/A

ICD - 10 Procedure Code Number(s)

N/A

ICD - 10 Diagnosis Code Number(s)

L40.0 Psoriasis vulgaris

HCPCS Level II Code Number(s)

J3245 Injection, tildrakizumab, 1 mg

Revenue Code Number(s)

N/A

Policy History

Revisions From MA08.098a:

05/07/2024	This policy has been reissued in accordance with the Company's annual review process.
09/05/2023	The policy has been reviewed and reissued to communicate the Company's continuing position on tildrakizumab-asmn (Ilumya™).
03/09/2023	This policy has been reissued in accordance with the Company's annual review process.
03/09/2022	This policy has been reissued in accordance with the Company's annual review process.
03/10/2021	This policy has been reissued in accordance with the Company's annual review process.
02/12/2020	The policy has been reviewed and reissued to communicate the Company's continuing position on tildrakizumab-asmn (Ilumya™).
03/13/2019	This policy has been reissued in accordance with the Company's annual review process.
01/01/2019	<p>This version of the policy will become effective 01/01/2019.</p> <p>This policy has been identified for the HCPCS code update, effective 01/01/2019.</p> <p>The following HCPCS code has been added to this policy: J3245 Injection, tildrakizumab, 1 mg</p> <p>The following HCPCS codes have been removed from this policy: C9399 Unclassified drugs or biologicals J3590 Unclassified biologics</p>

Revisions From MA08.098:

07/16/2018	This version of the policy will become effective 07/16/2018. This new policy has been issued to communicate the Company's coverage position.
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Version Effective Date:



01/01/2019

Version Issued Date:

01/03/2019

Version Reissued Date:

05/07/2024