

Tezspire (tezepelumab)

Disclaimer

Clinical guidelines are developed and adopted to establish evidence-based clinical criteria for utilization management decisions. Clinical guidelines are applicable according to policy and plan type. The Plan may delegate utilization management decisions of certain services to third parties who may develop and adopt their own clinical criteria.

Coverage of services is subject to the terms, conditions, and limitations of a member's policy, as well as applicable state and federal law. Clinical guidelines are also subject to in-force criteria such as the Centers for Medicare & Medicaid Services (CMS) national coverage determination (NCD) or local coverage determination (LCD) for Medicare Advantage plans. Please refer to the member's policy documents (e.g., Certificate/Evidence of Coverage, Schedule of Benefits, Plan Formulary) or contact the Plan to confirm coverage.

Summary

Asthma is a chronic respiratory disease that affects the airways, leading to recurrent episodes of wheezing, breathlessness, chest tightness, and coughing. The condition is caused by a combination of genetic and environmental factors, such as allergens, pollutants, and respiratory infections. Asthma is characterized by inflammation of the airways, which makes them hypersensitive and prone to constricting in response to various triggers. The inflammation is driven by immune cells, including eosinophils, mast cells, and T lymphocytes, which release pro-inflammatory mediators, such as histamine, leukotrienes, and cytokines.

Severe asthma is a type of asthma that is difficult to control and is characterized by persistent and frequent symptoms, exacerbations, and airflow limitation, despite adherence to maximal optimized therapy. According to the Global Initiative for Asthma (GINA), severe asthma is a subset of a "difficult-to-treat" asthma, which is defined as asthma that is uncontrolled despite medium-or high-dose inhaled corticosteroid (ICS) with a second controlled (including long-acting beta-agonists (LABA) or with maintenance oral corticosteroid, or that requires high-dose treatment to maintain good symptom control and reduce risk of exacerbation. Severe asthma is specifically defined as asthma that is uncontrolled despite maximally optimized high-dose ICS/LABA treatment and management of contributory factors (e.g., inhaler technique, adherence, comorbidities), or that worsens when high-dose treatment is decreased. In addition, severe asthma may be associated with comorbidities such as obesity, sinusitis,

and gastroesophageal reflux disease (GERD), and may require additional diagnostic tests, such as lung function tests, bronchial challenge tests, and imaging studies, to confirm the diagnosis and guide treatment.

The treatment of severe asthma requires a multi-faceted approach, including medication management, environmental control, and lifestyle modifications. The goal of treatment is to improve asthma control and reduce the risk of exacerbations. The following are some of the treatment options available for severe asthma:

- High-dose inhaled corticosteroids: These medications are the mainstay of treatment for asthma and are often used in combination with long-acting beta-agonists. However, in severe asthma, higher doses may be required. As asthma progresses, patients may require the addition of a long-acting muscarinic antagonist (LAMA) to the ICS-LABA therapy.
- Biologic medications: These medications are specifically designed to target specific immune pathways that contribute to asthma. Biologics are effective in reducing exacerbations and improving asthma control in severe asthma. Examples include omalizumab, mepolizumab, benralizumab, and dupilumab.
- Oral corticosteroids: In severe asthma, oral corticosteroids may be necessary for short-term management of exacerbations. However, long-term use of oral corticosteroids can lead to serious side effects and should be avoided.
- Lifestyle modifications: Lifestyle modifications such as weight loss, exercise, and smoking cessation can help improve asthma control in people with severe asthma.

Tezspire (tezepelumab), a thymic stromal lymphopoietin (TSLP) blocker which may reduce the effect of the asthma inflammatory cascade, is indicated for the add-on maintenance treatment of adult and pediatric patients aged 12 years and older with severe asthma. It is not indicated for the relief of acute bronchospasm or status asthmaticus. The recommended dosage of Tezspire (tezepelumab) is 210 mg administered subcutaneously once every 4 weeks. The pivotal trials, NAVIGATOR (12-80 years) and PATHWAY (18-75 years) were randomized placebo-controlled trials assessing the role of Tezspire (tezepelumab) in those with severe asthma receiving a medium-to-high dose ICS and at least one additional controlled medication, with or without oral glucocorticoids. Tezspire (tezepelumab) is unique in the lack of requirement of oral corticosteroid dependence, thus allowing those with severe asthma to receive additional therapy and avoid the potential risks of long-term corticosteroid use. In a pooled analysis of the NAVIGATOR and PATHWAY study, they found a significant reduction in the number of annual asthma exacerbations, and exacerbation-related hospitalization and emergency department visits.

Definitions

“Adjunctive therapy” refers to additional therapy, in addition to a primary treatment modality with a goal of enhancing the effectiveness of the primary treatment.

"Biomarker" is a substance found in the body that works as an indicator of exposure, effect, susceptibility, or clinical disease.

"IgG2 lambda monoclonal antibody" is a laboratory-produced molecule that acts as a substitute antibody that can restore, enhance or mimic the immune system's attack on cells.

"Inhaled corticosteroids (ICS)" refer to inhaled steroid medications, aimed at reducing inflammation associated with respiratory diseases like asthma and chronic obstructive pulmonary disease (COPD).

"Leukotriene receptor antagonists (LTRA)" are oral medications which reduce inflammation associated with leukotrienes. Leukotrienes are released by the body and can cause coughing, excessive mucus production, inflammation of airways, tightness in the chest and wheezing or difficulty breathing.

"Long-Acting Beta-Agonist (LABA)" are long-acting inhalers which relax the smooth muscle of the airways, improving airflow in patients with asthma and/or COPD.

"Long-Acting Muscarinic Antagonists (LAMA)" are inhaled medications which block the muscarinic receptor, responsible for constriction of the airways, thus reducing inflammation in the airways associated with asthma and/or COPD.

"Phenotype" is a set of clinical characteristics, lung function and inflammation that is specific to a type of asthma as there are many different types of asthma.

"Thymic stromal lymphopoietin (epithelial cytokine)" is a regulator of a type of immunity, which drives a broad range of allergic responses.

Medical Necessity Criteria for Initial Authorization

The Plan considers **Tezspire (tezepelumab)** medically necessary when **ALL** the following criteria are met:

1. Prescribed by or in consultation with an allergist, immunologist, or pulmonologist; **AND**
2. The member is 12 years of age or older; **AND**
3. The member has a documented diagnosis of severe asthma; **AND**
4. The member has a history of one or more of the following within the last 12 months:
 - a. Two or more (≥ 2) exacerbations requiring oral/systemic corticosteroids treatment; **or**
 - b. One or more (≥ 1) exacerbation resulting in hospitalization or intensive care unit (ICU) admission; **and**
5. The member has tried and failed, or is unable to use, **ALL** of the following at optimized[#] doses:
 - a. High-dose inhaled corticosteroids (ICS); **and**

- b. Adjunctive therapy (in combination with inhaled corticosteroid), such as **ONE** of the following:
 - i. Long-Acting Beta-2 Agonists (LABA), such as formoterol or salmeterol; **or**
 - ii. Leukotriene Receptor Antagonist (LTRA), such as montelukast (Singulair) or zafirlukast (Accolate); **or**
 - iii. Long-Acting Muscarinic Antagonists (LAMA), such as tiotropium; **or**
 - iv. Extended-release theophylline. **AND**

#member should be receiving treatment with inhaled corticosteroid and additional controller (adjunctive therapy) for at least the previous 3 months.

6. Clinical chart documentation is provided showing **BOTH** of the following:
 - a. Tezspire (tezepelumab) will not be used as monotherapy; **and**
 - b. Tezspire (tezepelumab) will not be used concomitantly with other biologics (e.g., Cinqair, Fasenra, Nucala or Xolair) in the treatment of asthma; **AND**
7. Tezspire (tezepelumab) is being prescribed within the manufacturer's published dosing guidelines or falls within dosing guidelines found in a compendia of current literature; **AND**
8. Clinical chart documentation is provided for review to substantiate the above listed requirements.

If the above prior authorization criteria are met, Tezspire (tezepelumab) will be approved for up to 6 months.

Medical Necessity Criteria for Reauthorization

Reauthorization for up to 12 months will be granted for members 12 years of age or older when recent chart documentation (within the past 6 months) is provided showing **ALL** of the following criteria are met:

1. The member's asthma has improved on Tezspire (tezepelumab) treatment based upon the prescriber's assessment as demonstrated by at least **ONE** of the following:
 - a. A reduction in the frequency and/or severity of symptoms and exacerbations; **or**
 - b. A reduction in the daily maintenance oral corticosteroid dose; **AND**
2. Clinical chart documentation is provided showing **BOTH** of the following:
 - a. Tezspire (tezepelumab) will not be used as monotherapy; **and**
 - b. Tezspire (tezepelumab) will not be used concomitantly with other biologics (e.g., Cinqair, Fasenra, Nucala or Xolair) in the treatment of asthma; **AND**
3. Tezspire (tezepelumab) is being prescribed within the manufacturer's published dosing guidelines or falls within dosing guidelines found in a compendia of current literature.

Experimental or Investigational / Not Medically Necessary

Tezspire (tezepelumab) for any other indication is considered not medically necessary by the Plan, as it is deemed to be experimental, investigational, or unproven. Non-covered indications include, but are not limited to, the following:

- Atopic dermatitis (AD)
- Chronic rhinosinusitis with nasal polyps
- Chronic obstructive pulmonary disease (COPD)
- Chronic spontaneous urticaria
- Eosinophilic esophagitis (EoE)

References

1. AstraZeneca plc. (2020, December 22). Update on SOURCE Phase III trial for Tezepelumab in patients with severe, oral corticosteroid-dependent asthma. Available at: <https://www.astrazeneca.com/media-centre/press-releases/2020/update-on-source-phase-iii-trial-for-tezepelumab-in-patients-with-severe-oral-corticosteroid-dependent-asthma.html>. Last accessed December 27, 2021.
2. Cloutier MM, Dixon AE, Krishnan JA, et al. Managing asthma in adolescents and adults: 2020 asthma guideline update from the National Asthma Education and Prevention Program. *JAMA*. 2020;324(22): 2301-2317.
3. Corren J, Ambrose CS, Griffiths JM, et al. Efficacy of tezepelumab in severe allergic asthma: results from the phase 3 NAVIGATOR study. *Clin Exp Allergy*. 2023 Apr;53(4):417-428. doi:10.1111/cea.14256. Epub 2022 Dec 12.
4. Corren J, Menzies-Gow A, Chupp G, et al. Efficacy of tezepelumab in severe, uncontrolled asthma: a pooled analysis of the PATHWAY and NAVIGATOR clinical trials. *Am J Respi Crit Care Med*. 2023 Jul 1;208(1):13-24. doi:10.1164/rccm.202210-2005OC.
5. Corren J, Parnes JR, Wang L, et al. Tezepelumab in adults with uncontrolled asthma. *N Engl J Med*. 2017;377(10):936-946.
6. Expert Panel Working Group of the National Heart, Lung, and Blood Institute. Guidelines 2020 focused updates for asthma management-summary reported. *J Allergy Clin Immunol* 2020;146(6):1217-1270.
7. Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention. <https://ginasthma.org/wp-content/uploads/2021/05/GINA-Main-Report-2021-V2-WMS.pdf>. Updated 2021.
8. Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention. Updated 2024. https://ginasthma.org/wp-content/uploads/2024/05/GINA-2024-Strategy-Report-24_05_22_WMS.pdf
9. Menzies-Gow A, Ambrose CS, Colice G, et al. Effect of tezepelumab on lung function in patients with severe uncontrolled asthma in the phase 3 NAVIGATOR study. *Adv Ther*. 2023 Nov;40(11):4957-4971. doi:10.1007/s12325-023-02659-y. Epub 2023 Sep 19.

10. Menzies-Gow A, Bourdin A, Chugg G, et al. Effect of tezepelumab on healthcare utilization in patients with severe, uncontrolled asthma: the NAVIGATOR study. *Ann Allergy Asthma Immunol*. 2023 Sep; 131(3):343-348. E2. doi:10.1016/j.anai.2023.05.028. Epub 2023 May 30.
11. Menzies-Gow A, Colice G, Griffiths JM, et al. NAVIGATOR: a phase 3 multicentre, randomized, double-blind, placebo-controlled, parallel-group trial to evaluate the efficacy and safety of tezepelumab in adults and adolescents with severe, uncontrolled asthma. *Respir Res*. 2020;21(1):266. doi:10.1186/s12931-020-01526-6
12. Menzies-Gow A, Corren J, Bourdin A, et al. Tezepelumab in adults and adolescents with severe, uncontrolled asthma. *N Engl J Med*. 2021;384(19):1800-1809. doi:10.1056/NEJMoa2034975.
13. Menzies-Gow A, Ponnarambil S, Downie J, et al. DESTINATION: a phase 3, multicentre, randomized, double-blind, placebo-controlled, parallel-group trial to evaluate the long-term safety and tolerability of tezepelumab in adults and adolescents with severe, uncontrolled asthma. *Respir Res*. 2020 Oct 21;21(1):279. doi:10.1186/s12931-020-01541-7.
14. Menzies-Gow A, Wechsler ME, Brightling CE, et al. Long-term safety and efficacy of tezepelumab in people with severe, uncontrolled asthma (DESTINATION): a randomised, placebo-controlled extension study. *Lancet Respir Med*. 2023 May;11(5):425-438. doi:10.1016/S2213-2600(22)00492-1. Epub 2023 Jan 23.
15. Pavord ID, Hoyte FCL, Lindsley AW, et al. Tezepelumab reduces exacerbations across all seasons in patients with severe, uncontrolled asthma (NAVIGATOR). *Ann Allergy Asthma Immunol*. 2023 Nov;131(5):587-597.e3. doi:10.1016/j.anai.2023.08.015. Epub 2023 Aug 23.
16. Tezspire (tezepelumab) [prescribing information]. Thousand Oaks, CA: Amgen, Inc; May 2023.
17. Wechsler ME, Brusselle G, Virchow JC, et al. Clinical response and on-treatment clinical remission with tezepelumab in a broad population of patients with severe uncontrolled asthma: results over 2 years from the NAVIGATOR and DESTINATION studies. *Eur Respir J*. 2024 Dec 5;64(6):2400316. doi:10.1183/13993003.00316-2024. Print 2024 Dec.
18. Wechsler ME, Menzies-Gow A, Christopher E Brightling CE, et al, SOURCE study group. Evaluation of the oral corticosteroid-sparing effect of tezepelumab in adults with oral corticosteroid-dependent asthma (SOURCE): a randomised, placebo-controlled, phase 3 study. *Lancet Respir Med*. 2022 Mar 29;S2213-2600(21)00537-3. Online ahead of print.

Clinical Guideline Revision / History Information

Original Date: 03/17/2022

Reviewed/Revised: 3/23/2023, 06/29/2023, 3/21/2024, 7/1/2025