

Nucala® (mepolizumab) (Subcutaneous)

Document Number: DH-0260

Last Review Date: 01/06/2025

Date of Origin: 12/04/2015

Dates Reviewed: 12/2015, 07/2016, 03/2017, 06/2017, 09/2017, 12/2017, 01/2018, 03/2018, 06/2018, 10/2018, 10/2019, 01/2020, 10/2020, 03/2021, 08/2021, 02/2022, 10/2022, 10/2023, 10/2024, 01/2025

I. Length of Authorization

- 6 months for severe eosinophilic asthma; 12 months for EGPA, HES, CRSwNP, and all other indications
- Renewal: 12 months for all indications

II. Dosing Limits

A. Max Units (per dose and over time) [HCPCS Unit]:

Severe Eosinophilic Asthma

- 100 billable units every 28 days

EGPA

- 300 billable units every 28 days

Hypereosinophilic Syndrome

- 300 billable units every 28 days

CRSwNP

- 100 billable units every 28 days

III. Initial Approval Criteria ¹

Coverage is provided in the following conditions:

Patient is required to meet Site of Service specialty infusion program requirements (refer to the [Dean Health Plan Site of Service Policy](#)).

Severe Asthma † ^{1-3,7,10,12,13,19,21,22}

- Prescribed by, or in consultation with, an allergist, pulmonologist, or immunologist; **AND**
- Patient is at least 6 years of age; **AND**
- Patient has severe* disease; **AND**
- Patient has asthma with an eosinophilic phenotype indicated by blood eosinophils ≥ 150 cells/ μ L; **AND**
- History of ≥ 2 asthma exacerbations requiring treatment with systemic corticosteroids or emergency department visit or hospitalization for treatment of asthma within the past year

despite adherent utilization of either an inhaled corticosteroid (ICS) with one (1) additional asthma controller medication or maximally tolerated inhaled corticosteroid/long-acting beta agonist (ICS/LABA) combination product; **AND**

- Prescriber attests to all the following:
 - Member adherent to controller medications; **AND**
 - Member is a non-smoker or is adherent to an attempt at smoking cessation; **AND**
 - Will not be used in combination with another targeted immunomodulator product used for asthma

Eosinophilic Granulomatosis with Polyangiitis (EGPA)/Churg-Strauss Syndrome † Φ^{1,4-6,23}

- Patient is at least 18 years of age; **AND**
- Prescribed by, or in consultation with, a rheumatologist, allergist, pulmonologist, or immunologist; **AND**
- Patient has a confirmed diagnosis of EGPA§ (aka Churg-Strauss Syndrome); **AND**
- Documentation of one of the following:
 - Baseline blood eosinophil count > 1000 cells/μL; OR
 - Baseline blood eosinophil count > 10% of the total leukocyte count; **AND**
- Trial of oral corticosteroid therapy (equivalent to prednisone 7.5 mg/day for a minimum of 4 weeks) was ineffective, contraindicated, or not tolerated; **AND**
- Trial of one of the following was ineffective, contraindicated, or not tolerated
 - Cyclophosphamide
 - Azathioprine
 - Methotrexate
 - Leflunomide

Hypereosinophilic Syndrome (HES) † Φ^{1,11}

- Patient is at least 12 years of age; **AND**
- Prescribed by, or in consultation with, a rheumatologist, allergist, pulmonologist, gastroenterologist, hematologist, or other specialist experienced in the diagnosis and treatment of hypereosinophilic syndromes; **AND**
- Diagnosis of hypereosinophilic syndrome (HES) without clinical features consistent with a myeloid disorder; **AND**
- HES has persisted for at least six (6) months; **AND**
- Blood eosinophils > 1000 cells/μL; **AND**
- ≥ 2 or more HES flares within past 12 months; **AND**
- Trial of corticosteroids was ineffective, not tolerated, or contraindicated; **AND**
- Trial of second-line and/or steroid-sparing agent (such as, but not limited to hydroxyurea or interferon alfa) was ineffective, not tolerated, or contraindicated

Chronic Rhinosinusitis with Nasal Polyps (CRSwNP) †^{1,15,16,18,24}

- Patient is at least 18 years of age; **AND**
- Prescribed by, or in consultation with, an allergist, immunologist, or otolaryngologist; **AND**
- Diagnosis of chronic rhinosinusitis with nasal polyposis, lasting at least 12 weeks; **AND**
- Bilateral nasal polyposis confirmed with sinus CT scan; **AND**
- Trial of each of the following was ineffective, contraindicated, or not tolerated
 - Oral corticosteroid
 - Nasal corticosteroid spray; **AND**
- Documentation of moderate to severe symptoms of nasal congestion, blockage, or obstruction (such as loss of smell, rhinorrhea, or facial pain)

***Components of severity for classifying asthma as severe may include any of the following (not all inclusive):^{2,12}**

- Symptoms throughout the day
- Nighttime awakenings, often 7x/week
- SABA use for symptom control occurs several times per day
- Extremely limited normal activities
- Lung function (percent predicted FEV₁) <60%
- Exacerbations requiring oral systemic corticosteroids are generally more frequent and intense relative to moderate asthma

§Eosinophilic Granulomatosis Polyangiitis (EGPA) defined as all of the following:^{4,6}

- History or presence of asthma
- Blood eosinophil level > 10% or an absolute eosinophil count >1000 cells/mm³
- Two or more of the following criteria:
 - Histopathologic evidence of eosinophilic vasculitis, perivascular eosinophilic infiltration or eosinophil rich granulomatous inflammation
 - Neuropathy
 - Pulmonary infiltrates
 - Sinonasal abnormalities
 - Cardiomyopathy
 - Glomerulonephritis
 - Alveolar hemorrhage
 - Palpable purpura
 - Antineutrophil Cytoplasmic Antibody (ANCA) positivity

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); Ⓢ Orphan Drug

IV. Renewal Criteria ¹

Coverage may be renewed based upon the following criteria:

- Patient continues to meet the universal and other indication-specific relevant criteria identified in section III; **AND**

- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include the following: parasitic (helminth) infection, herpes zoster infection, severe hypersensitivity reactions (e.g., anaphylaxis, angioedema, bronchospasm, hypotension, urticaria, rash, etc.), etc.; **AND**

Severe Asthma ^{1-3,7,10}

- Documentation showing positive clinical benefit

Eosinophilic Granulomatosis with Polyangiitis/Churg-Strauss Syndrome ^{1,5,6}

- Documentation showing positive clinical benefit

Hypereosinophilic Syndrome (HES) ^{1,11}

- Documentation showing positive clinical benefit

Chronic Rhinosinusitis with Nasal Polyps (CRSwNP) † ^{1,15,18}

- Documentation showing positive clinical benefit

V. Dosage/Administration ¹

Indication	Dose
Severe Eosinophilic Asthma	<u>Pediatric Patients Aged 6 to 11 years:</u> 40 mg administered subcutaneously once every 4 weeks <u>Adults and Adolescents Aged 12 years and older:</u> 100 mg administered subcutaneously once every 4 weeks
Eosinophilic Granulomatosis with Polyangiitis (EGPA)	300 mg administered subcutaneously once every 4 weeks as 3 separate 100-mg injections. Administer each injection at least 2 inches apart.
Hypereosinophilic Syndrome (HES)	300 mg administered subcutaneously once every 4 weeks as 3 separate 100-mg injections. Administer each injection at least 2 inches apart.
Chronic Rhinosinusitis with Nasal Polyps (CRSwNP)	100 mg administered subcutaneously once every 4 weeks.

VI. Billing Code/Availability Information

HCPCS Code:

- J2182 - Injection, mepolizumab, 1 mg; 1 billable unit = 1 mg

NDC(s):

- Nucala 100 mg/mL lyophilized powder single-dose vial: 00173-0881-xx
- Nucala 100 mg/mL single-dose prefilled autoinjector or syringe (cartons of 1): 00173-0892-xx
- Nucala 40 mg/0.4 mL single-dose prefilled syringe (cartons of 1): 00173-0904-xx

VII. References

1. Nucala [package insert]. Philadelphia, PA; GlaxoSmithKline LLC; March 2023. Accessed August 2024.
2. National Asthma Education and Prevention Program (NAEPP). Guidelines for the diagnosis and management of asthma. Expert Panel Report 3. Bethesda, MD: National Institutes of Health (NIH), National Heart, Lung, and Blood Institute (NHLBI); August 2007.
3. Global Initiative for Asthma (GINA). Global Strategy for Asthma Management and Prevention. 2019 Update. Available from: <http://www.ginasthma.org>. Accessed September 2023.
4. Wechsler ME, Akuthota P, Jayne D, et al. Mepolizumab or Placebo for Eosinophilic Granulomatosis with Polyangiitis. *N Engl J Med*. 2017 May 18;376(20):1921-1932. doi: 10.1056/NEJMoa1702079.
5. Hellmich B, Flossmann O, Gross WL, et al. EULAR recommendations for conducting clinical studies and/or clinical trials in systemic vasculitis: focus on antineutrophil cytoplasm antibody-associated vasculitis. *Ann Rheum Dis* 2007; 66: 605-17.
6. Masi AT, Hunder GG, Lie JT; Michel BA, et al. The American College of Rheumatology 1990 criteria for the classification of Churg-Strauss syndrome (allergic granulomatosis and angiitis). *Arthritis Rheum*. 1990; 33(8):1094-100 (ISSN: 0004-3591).
7. Chung KF, Wenzel SE, Brozek JL, et al. International ERS/ATS Guidelines on Definition, Evaluation, and Treatment of Severe Asthma. *Eur Respir J* 2014; 43: 343-373.
8. Yates M, Watts RA, Bajema IM, et al. EULAR/ERA-EDTA recommendations for the management of ANCA-associated vasculitis. *Ann Rheum Dis*. 2016 Sep;75(9):1583-94. doi: 10.1136/annrheumdis-2016-209133.
9. Groh M, Panoux C, Baldini C, et al. Eosinophilic granulomatosis with polyangiitis (Churg–Strauss) (EGPA) Consensus Task Force recommendations for evaluation and management. *European Journal of Internal Medicine* 26 (2015) 545–553.
10. Holguin F, Cardet JC, Chung KF, et al. Management of severe asthma: a European Respiratory Society/American Thoracic Society guideline. *Eur Respir J* 2020; 55: 1900588 [<https://doi.org/10.1183/13993003.00588-2019>]
11. Roufosse F, Kahn JE, Rothenberg ME, et al. Efficacy and safety of mepolizumab in hypereosinophilic syndrome: a Phase III, randomized, placebo-controlled trial. *Journal of Allergy and Clinical Immunology* (2020), doi: <https://doi.org/10.1016/j.jaci.2020.08.037>.
12. National Asthma Education and Prevention Program (NAEPP). 2020 Focused Updates to the Asthma Management Guidelines: A Report from the National Asthma Education and Prevention Program Coordinating Committee Expert Panel Working Group. Bethesda, MD: National Institutes of Health (NIH), National Heart, Lung, and Blood Institute (NHLBI); December 2020.
13. Global Initiative for Asthma (GINA). Global Strategy for Asthma Management and Prevention. 2021 Update. Available from: <http://www.ginasthma.org>. Accessed September 2023.
14. Han JK, Bachert C, Fokkens W, et al; SYNAPSE study investigators. Mepolizumab for chronic rhinosinusitis with nasal polyps (SYNAPSE): a randomised, double-blind, placebo-controlled,

- phase 3 trial. *Lancet Respir Med*. 2021 Apr 16:S2213-2600(21)00097-7. doi: 10.1016/S2213-2600(21)00097-7.
15. Fokkens WJ, Lund V, Bachert C, et al. EUFOREA consensus on biologics for CRSwNP with or without asthma. *Allergy*. 2019;74:2312–2319. DOI: 10.1111/all.13875.
 16. Gandhi NA, Bennett BL, Graham NMH, et al. Targeting key proximal drivers of type 2 inflammation in disease. *Nat Rev Drug Discov*. 2016;15(1):35-50.
 17. Global Initiative for Asthma (GINA). Global Strategy for Asthma Management and Prevention. 2022 Update. Available from: <http://www.ginasthma.org>. Accessed September 2023.
 18. Fokkens WJ, Viskens AS, Backer V, et al. EPOS/EUFOREA update on indication and evaluation of Biologics in Chronic Rhinosinusitis with Nasal Polyps 2023. *Rhinology* 2023; 61:194.
 19. Global Initiative for Asthma (GINA) Report: Global Strategy for Asthma Management and Prevention. 2023 Update. Available from: <http://www.ginasthma.org/2023-gina-main-report>. Accessed September 2023.
 20. Grayson PC, Ponte C, Suppiah R, et al. 2022 American College of Rheumatology/European Alliance of Associations for Rheumatology Classification Criteria for Eosinophilic Granulomatosis with Polyangiitis. *Ann Rheum Dis*. 2022 Mar;81(3):309-314. doi: 10.1136/annrheumdis-2021-221794.
 21. Global Initiative for Asthma (GINA) Report: Global Strategy for Asthma Management and Prevention. 2024 Update. Available from: <http://www.ginasthma.org>. Accessed August 2024.
 22. Chipps BE, Jarjour N, Calhoun WJ, et al. A Comprehensive Analysis of the Stability of Blood Eosinophil Levels. *Ann Am Thorac Soc*. 2021 Dec; 18(12):1978-1987. doi: 10.1513/AnnalsATS.202010-1249OC.
 23. Chung, SA, Langford CA, Maz M, et al. 2021 American College of Rheumatology/Vasculitis Foundation Guideline for the Management of Antineutrophil Cytoplasmic Antibody-Associated Vasculitis. *Arthritis Care Res (Hoboken)* 2021; 73:1088.
 24. Rank MA, Chu DK, Bognanni A, et al. The Joint Task Forcer on Practice Parameters GRADE guidelines for the medical management of chronic rhinosinusitis with nasal polyposis. *J Allergy Clin Immunol*. 2023 Feb; 151(2):386-398. doi: <https://doi.org/10.1016/j.jaci.2022.10.026>.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
D72.110	Idiopathic hypereosinophilic syndrome [IHES]
D72.111	Lymphocytic Variant Hypereosinophilic Syndrome [LHES]
D72.119	Hypereosinophilic syndrome [HES], unspecified
J33.0	Polyp of nasal cavity
J33.1	Polypoid sinus degeneration
J33.8	Other polyp of sinus
J33.9	Nasal polyp, unspecified

ICD-10	ICD-10 Description
J45.50	Severe persistent asthma, uncomplicated
J82.81	Eosinophilic pneumonia, NOS
J82.82	Acute eosinophilic pneumonia
J82.83	Eosinophilic asthma
J82.89	Other pulmonary eosinophilia, not elsewhere classified
M30.1	Polyarteritis with lung involvement [Churg-Strauss]

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

The preceding information is intended for non-Medicare coverage determinations. Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determinations (NCDs) and/or Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. Local Coverage Articles (LCAs) may also exist for claims payment purposes or to clarify benefit eligibility under Part B for drugs which may be self-administered. The following link may be used to search for NCD, LCD, or LCA documents: <https://www.cms.gov/medicare-coverage-database/search.aspx>. Additional indications, including any preceding information, may be applied at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD/LCA): N/A

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC