

## Nucala® (mepolizumab) (Subcutaneous)

Document Number: IC-0260

Last Review Date: 03/01/2021

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

### I. Length of Authorization

Coverage is provided for six months and is eligible for renewal.

### II. Dosing Limits

#### A. Quantity Limit (max daily dose) [NDC Unit]:

- 100 mg/mL single dose vial for injection: 3 vials every 28 days
- 100 mg/mL single dose prefilled autoinjector or syringe for injection: 3 autoinjectors or syringes every 28 days

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

##### Severe Asthma with an eosinophilic phenotype

- 100 billable units every 28 days

##### EGPA

- 300 billable units every 28 days

##### Hypereosinophilic Syndrome

- 300 billable units every 28 days

### III. Initial Approval Criteria <sup>1</sup>

Coverage is provided in the following conditions:

#### Universal Criteria <sup>1</sup>

- Must not be used in combination with another monoclonal antibody (e.g., benralizumab, omalizumab, reslizumab, etc.); **AND**

#### Severe Asthma † <sup>1-3,7,10</sup>

- Patient is at least 6 years of age; **AND**
- Patient must have severe\* disease; **AND**

- Patient must have asthma with an eosinophilic phenotype defined as blood eosinophils  $\geq 300$  cells/ $\mu\text{L}$  within previous 12 months or  $\geq 150$  cells/ $\mu\text{L}$  within 6 weeks of dosing; **AND**
- Must be used for add-on maintenance treatment in patients regularly receiving BOTH of the following:
  - Medium to high-dose inhaled corticosteroids; **AND**
  - An additional controller medication (e.g., long-acting beta agonist, leukotriene modifiers, etc.); **AND**
- Will not be used for treatment acute bronchospasm or status asthmaticus; **AND**
- Patient must have two or more exacerbations in the previous year requiring daily oral corticosteroids for at least 3 days (in addition to the regular maintenance therapy defined above); **AND**
- Baseline measurement of at least one of the following for assessment of clinical status:
  - Use of systemic corticosteroids
  - Use of inhaled corticosteroids
  - Number of hospitalizations, ER visits, or unscheduled visits to healthcare provider due to condition
  - Forced expiratory volume in 1 second (FEV<sub>1</sub>)

#### **Eosinophilic Granulomatosis with Polyangiitis (EGPA)/Churg-Strauss Syndrome † $\Phi$ 1,5,6**

- Patient is at least 18 years of age; **AND**
- Patient has a confirmed diagnosis of EGPA§ (aka Churg-Strauss Syndrome); **AND**
- Patient must have blood eosinophils  $\geq 150$  cells/ $\mu\text{L}$  within 6 weeks of dosing; **AND**
- Patient has been on stable doses of concomitant oral corticosteroid therapy for at least 4 weeks (i.e., prednisone or prednisolone at a dose of 7.5 mg/day); **AND**
- Physician has assessed baseline disease severity utilizing an objective measure/tool (e.g., Birmingham Vasculitis Activity Score [BVAS], history of asthma symptoms and/or exacerbations, duration of remission, or rate of relapses, etc.)

#### **Hypereosinophilic Syndrome (HES) † $\Phi$ 1,11**

- Patient is at least 12 years of age; **AND**
- Patient has been diagnosed with HES for at least 6 months prior to starting treatment; **AND**
- Patient does NOT have non-hematologic secondary HES (e.g., drug hypersensitivity, parasitic helminth infection, HIV infection, non-hematologic malignancy) or FIP1L1-PDGFR $\alpha$  kinase-positive HES; **AND**
- Patient has a history of 2 or more HES flares within the previous 12 months (e.g., documented HES-related worsening of clinical symptoms or blood eosinophil counts requiring an escalation in therapy); **AND**
- Patient must have blood eosinophils  $\geq 1000$  cells/ $\mu\text{L}$  within 4 weeks of dosing; **AND**

- Used in combination with stable doses of at least one other HES therapy (e.g., oral corticosteroids, immunosuppressive agents, cytotoxic therapy, etc.)

**\*Components of severity for classifying asthma as severe may include any of the following (not all**

- 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 FEV<sub>1</sub>) <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:**

- History or presence of asthma
- Blood eosinophil level > 10% or an absolute eosinophil count >1000 cells/mm<sup>3</sup>
- 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); Ⓢ Orphan Drug

**IV. Renewal Criteria** <sup>1-3,5-7,10,11</sup>

- Patient continues to meet the universal and other indication-specific relevant 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, etc.; **AND**

**Severe Asthma**

- Improvement in asthma symptoms or asthma exacerbations as evidenced by decrease in one or more of the following:
  - Use of systemic corticosteroids
  - Two-fold or greater decrease in inhaled corticosteroid use for at least 3 days
  - Hospitalizations
  - ER visits
  - Unscheduled visits to healthcare provider; **OR**
- Improvement from baseline in forced expiratory volume in 1 second (FEV<sub>1</sub>)

**Eosinophilic Granulomatosis with Polyangiitis/Churg-Strauss Syndrome**

- Disease response as indicated by improvement in signs and symptoms compared to baseline as evidenced in one or more of the following:
  - Patient is in remission [defined as a Birmingham Vasculitis Activity Score (BVAS) score=0 and a prednisone/prednisolone daily dose of  $\leq 7.5$  mg]
  - Decrease in maintenance dose of systemic corticosteroids
  - Improvement in BVAS score compared to baseline
  - Improvement in asthma symptoms or asthma exacerbations
  - Improvement in duration of remission or decrease in the rate of relapses

### Hypereosinophilic Syndrome (HES)

- Disease response as indicated by a decrease in HES flares from baseline (*Note: An HES flare is defined as worsening of clinical signs and symptoms of HES or increasing eosinophils (on at least 2 occasions), resulting in the need to increase oral corticosteroids or increase/add cytotoxic or immunosuppressive HES therapy*).

## V. Dosage/Administration <sup>1</sup>

Indication	Dose
Severe Asthma with eosinophilic phenotype	<u>Pediatric Patients Aged 6 to 11 years (single dose vial only):</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/Churg-Strauss Syndrome	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.
<i>**Single dose vial must be prepared and administered by a healthcare professional</i>	

## VI. Billing Code/Availability Information

### HCPCS Code:

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

### NDC:

- 100 mg/mL single dose vial: 00173-0881-xx
- 100 mg/mL single dose prefilled autoinjector or syringe (cartons of 1): 00173-0892-xx

## VII. References

1. Nucala [package insert]. Philadelphia, PA; GlaxoSmithKline LLC; September 2020. Accessed September 2020.

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 2020.
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>.

## Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
D72.1	Eosinophilia
J45.50	Severe persistent asthma, uncomplicated
J45.51	Severe persistent asthma with (acute) exacerbation
J45.52	Severe persistent asthma with status asthmaticus
J82.81	Eosinophilic pneumonia, NOS
J82.82	Acute eosinophilic pneumonia

ICD-10	ICD-10 Description
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)

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 Determination (NCD), Local Coverage Determinations (LCDs), and Local Coverage Articles (LCAs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered 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, LLC
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
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