

## **Nucala® (mepolizumab) (Subcutaneous)**

**Effective Date: 01/01/2020**

**Review Date: 12/18/2019, 12/20/2019, 1/29/2020, 9/9/2020, 11/2/2020, 3/18/2021, 01/05/2022, 1/05/2023, 12/07/23, 01/10/2024, 04/24/2024, 09/17/2025, 5/12/2026**

**Scope: Medicaid, Commercial, Medicare**

### **I. Length of Authorization**

Coverage is provided for six months and is eligible for renewal for 12 months.

### **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
- 40mg/0.4ml single-dose prefilled syringe for injection: 1 syringe every 28 days

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

##### **Severe Asthma with an eosinophilic phenotype, CRSwNP & COPD**

- 100 billable units every 28 days

##### **EGPA, 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 other anti-IgE, anti-IL4, anti-IL5, or IgG2 lambda monoclonal antibody agents (e.g., Dupixent, Fasentra, Nucala, Xolair, Tezspire); **AND**

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

- Member is at least 6 years of age; **AND**
- Member must have severe\* disease; **AND**
- Nucala is prescribed by, or in consultation with, a pulmonologist or allergist/immunologist; **AND**

- Documentation member has 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 OR the member is dependent on systemic corticosteroids; **AND**
- Member is adherent to current treatment with both of the following medications at optimized doses for at least 3 months with or without oral corticosteroids:
  - High-dose inhaled corticosteroid; **AND**
  - Additional controller medication (e.g., long acting beta<sub>2</sub>-agonist, long-acting muscarinic antagonist, leukotriene modifier); **AND**
- Will not be used for treatment acute bronchospasm or status asthmaticus; **AND**
- Documentation member has inadequate asthma control with two or more exacerbations in the previous year requiring additional medical treatment (e.g., daily oral corticosteroids for at least 3 days, emergency department or urgent care visits, or hospitalizations) in addition to the regular maintenance therapy defined above; **AND**
- Documentation of 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 † Φ<sup>1,5,6</sup>**

- Member is at least 18 years of age; **AND**
- Nucala is prescribed by, or in consultation with, a pulmonologist, rheumatologist or allergist/immunologist; **AND**
- Documentation member has a confirmed diagnosis of EGPA§ (aka Churg-Strauss Syndrome); **AND**
- Documentation member has blood eosinophils  $\geq 150$  cells/ $\mu\text{L}$  within 6 weeks of dosing; **AND**
- Member 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 and documented 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.)

#### **Hyper eosinophilic Syndrome (HES) † Φ<sup>1,11</sup>**

- Member is at least 12 years of age; **AND**
- Documentation member has been diagnosed with HES for at least 6 months prior to starting treatment; **AND**

- Member 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**
- Documentation member 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**
- Documentation that member has blood eosinophils  $\geq 1000$  cells/ $\mu$ 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.)

#### **Chronic Rhinosinusitis with Nasal Polyps (CRSwNP) †<sup>1,15,16</sup>**

- Member is at least 18 years of age; **AND**
- Documentation that member has bilateral symptomatic sino-nasal polyposis with symptoms lasting at least 8 weeks; **AND**
- Member has failed on at least 8 weeks of intranasal corticosteroid therapy; **AND**
- Documentation that member has at least three (3) of the following indicators for biologic treatment:
  - Member has evidence of type 2 inflammation (e.g., tissue eosinophils  $\geq 10$ /hpf, blood eosinophils  $\geq 150$  cells/ $\mu$ L, or total IgE  $\geq 100$  IU/mL)
  - Member has required  $\geq 2$  courses of systemic corticosteroids per year or  $>3$  months of low dose corticosteroids, unless contraindicated
  - Disease significantly impairs the member's quality of life
  - Member has experienced significant loss of smell
  - Member has a comorbid diagnosis of asthma; **AND**
- Member does not have any of the following:
  - Antrochoanal polyps
  - Nasal septal deviation that would occlude at least one nostril
  - Disease with lack of signs of type 2 inflammation
  - Cystic fibrosis
  - Mucocoeles; **AND**
- Documentation that other causes of nasal congestion/obstruction have been ruled out (e.g., acute sinusitis, nasal infection or upper respiratory infection, rhinitis medicamentosa, tumors, infections, granulomatosis, etc.); **AND**
- Physician has assessed and documented baseline disease severity utilizing an objective measure/tool; **AND**
- Therapy will be used in combination with intranasal corticosteroids unless not able to tolerate or use is contraindicated

### Chronic Obstructive Pulmonary Disease (COPD)

- Authorization may be granted for treatment of COPD in members when all of the following criteria are met:
  - Member is 18 years of age or older; **AND**
  - Documentation that diagnosis has been confirmed by spirometry showing forced expiratory volume in one second (FEV1)/forced vital capacity (FVC) less than 0.7 post-bronchodilation; **AND**
  - Member demonstrates classic signs or symptoms of COPD (e.g., dyspnea, wheezing, chest tightness, fatigue, activity limitation, cough with or without sputum production, chronic bronchitis); **AND**
  - Documentation member has an absolute blood eosinophil count of at least 150 cells per microliter prior to initiating therapy with the requested medication; **AND**
  - Documentation member has inadequately controlled COPD as demonstrated by experiencing either of the following in the last year:
    - At least two moderate exacerbations resulting in treatment with systemic glucocorticoids, antibiotics or both; OR
    - One or more severe exacerbation(s) requiring hospitalizations or an emergency medical care visit; **AND**
  - Member meets either of the following:
    - Member is currently receiving maintenance inhaled triple therapy (i.e., inhaled corticosteroid [ICS], long-acting muscarinic antagonist [LAMA], and long-acting beta2-agonist [LABA]); OR
    - Member is currently receiving a LAMA and LABA, and has a contraindication to ICS ; **AND**
  - Member will continue to use maintenance COPD treatments (e.g., ICS with LAMA and LABA, LAMA and LABA) in combination with the requested medication.

#### \*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); Φ Orphan Drug

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

- Member 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.); **AND**
- The member will NOT be using the requested agent in combination with another immunomodulatory agent (e.g., TNF inhibitors, JAK inhibitors, IL-4 inhibitors); **AND**

#### **Severe Asthma**

- Documentation of 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**
- Documentation of improvement from baseline in forced expiratory volume in 1 second (FEV<sub>1</sub>)

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

- Documentation of disease response as indicated by improvement in signs and symptoms compared to baseline as evidenced by one or more of the following:
  - Member is in remission [defined as a Birmingham Vasculitis Activity Score (BVAS) score=0 and a prednisone/prednisolone daily dose of ≤ 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)**

- Documentation of 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.*)

### **Chronic Rhinosinusitis with Nasal Polyps (CRSwNP) †<sup>1,15</sup>**

- Documentation of disease response as indicated by improvement in signs and symptoms compared to baseline in one or more of the following: nasal/obstruction symptoms, improvement of sinus opacifications as assessed by CT-scans and/or an improvement on a disease activity scoring tool [e.g., nasal polyposis score (NPS), nasal congestion (NC) symptom severity score, sino-nasal outcome test-22 (SNOT-22), etc.]; **OR**
- Documentation member had an improvement in at least one (1) of the following response criteria:
  - Reduction in nasal polyp size
  - Reduction in need for systemic corticosteroids
  - Improvement in quality of life
  - Improvement in sense of smell
  - Reduction of impact of comorbidities

### **Chronic Obstructive Pulmonary Disease (COPD)**

- Member is 18 years of age or older
- Documentation the member has achieved or maintained a positive clinical response as evidenced by improvement in signs and symptoms of COPD (e.g., decrease in exacerbations, improvement in pre-bronchodilator FEV1) or stabilization of disease
- Member will continue to use maintenance COPD treatments (e.g., ICS with LAMA and LABA, LAMA and LABA) in combination with the requested medication.

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

Indication	Dose
Severe Asthma with eosinophilic phenotype	<u>Pediatric Members 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.
Chronic Rhinosinusitis with Nasal Polyps (CRSwNP)	100 mg administered subcutaneously once every 4 weeks.
Chronic Obstructive Pulmonary Disease (COPD)	100 mg administered subcutaneously once every 4 weeks.
<i>**Note: Single dose vial must be prepared and administered by a healthcare professional, the auto-injector or prefilled syringe may be self-administered.</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

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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.

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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
J82.83	Eosinophilic asthma
J82.89	Other pulmonary eosinophilia, not elsewhere classified
M30.1	Polyarteritis with lung involvement [Churg-Strauss]