Pharmacy Management Drug Policy

SUBJECT: Interleukin Antagonists for Asthma and Other Conditions: Nucala (mepolizumab), Cinqair (reslizumab), Fasenra (benralizumab), Dupixent (dupilumab), Adbry (tralokinumab-ldrm), Ebglyss (lebrikizumab), Nemluvio (nemolizumab), Exdensur (depemokimab-ulaa), Icotyde (icotrokinra)
POLICY NUMBER: PHARMACY-62
EFFECTIVE DATE: 12/2015
LAST REVIEW DATE: 11/12/2026

If the member's subscriber contract excludes coverage for a specific service or prescription drug, it is not covered under that contract. In such cases, medical or drug policy criteria are not applied. This drug policy applies to the following line/s of business:

Policy Application

Category:	☒ Commercial Group (e.g., EPO, HMO, POS, PPO)	☒ Medicare Advantage
	☒ On Exchange Qualified Health Plans (QHP)	☐ Medicare Part D
	☒ Off Exchange Direct Pay	☒ Essential Plan (EP)
	☒ Medicaid & Health and Recovery Plans (MMC/HARP)	☒ Child Health Plus (CHP)
	☐ Federal Employee Program (FEP)	☐ Ancillary Services
	☒ Dual Eligible Special Needs Plan (D-SNP)	

DESCRIPTION:

Asthma

Asthma is a heterogeneous syndrome that might be better described as a constellation of phenotypes, each with distinct cellular and molecular mechanisms, rather than as a singular disease. One of these phenotypes is eosinophilic asthma. Chronic airway inflammation results in symptoms that include wheezing, shortness of breath, chest tightness, and cough.

Development of eosinophilic inflammation is dependent on the biological activity of Interleukin-5 (IL-5), an inflammatory cytokine. IL-5 is responsible for growth, differentiation, recruitment, activation, and survival of eosinophils. Currently available interleukin antagonists antagonize the IL-5/eosinophil inflammatory pathway; however, the exact mechanisms of actions in asthma have not been definitively established.

Atopic Dermatitis (AD)

Atopic dermatitis is a chronic inflammatory disease of the skin. Symptoms vary in severity and the disease often follows a relapsing course. Clinical findings include pruritus (most common) erythema, dry skin, edema, erosions/excoriations, oozing/crusting, and lichenification. Pathogenesis involves a complex combination of genetic and environmental factors. Numerous cytokines are involved; however, IL-13 is found to be locally overexpressed in patients with atopic dermatitis, compromising skin integrity.

Allergic Fungal Rhinosinusitis (AFRS)

Allergic fungal rhinosinusitis is a distinct subtype of chronic rhinosinusitis with nasal polyps (CRSwNP), accounting for 5-10% of all CRSwNP cases. AFRS is driven by a localized Th2 inflammatory response to noninvasive fungal growth in areas of compromised mucus drainage and is characterized by occlusive eosinophilic mucus and severe, refractory nasal polyposis causing sinus expansion and pressure-induced dehiscence of the surrounding orbit and skull base. AFRS is typically present in adults younger than 30 years who are immunocompetent with evidence of type 1 hypersensitivity to fungi.

Chronic Rhinosinusitis with Nasal Polyps (CRSwNP)

CRSwNP is a subtype of chronic rhinosinusitis (CRS). It is a heterogeneous chronic inflammatory disease of the nasal lining and sinuses, resulting in the development of noncancerous soft tissue growth (polyps) in the sino-nasal cavity. Symptoms include loss of smell, nasal congestion, and nasal drainage. Most patients with CRSwNP show evidence of type 2 inflammation. Nasal polyp tissue is characterized by local eosinophil inflammation in a large majority of patients with this condition. Despite optimized treatment, nasal polyps have a high rate of recurrence.

Chronic Obstructive Pulmonary Disease (COPD)

COPD is a heterogeneous lung condition characterized by chronic respiratory symptoms (dyspnea, cough, sputum productions and/or exacerbation) due to abnormalities of the airways (bronchitis, bronchiolitis) and/or alveoli (emphysema) that cause persistent, often progressive, airflow obstruction.

Chronic Spontaneous Urticaria (CSU)

Chronic spontaneous urticaria is defined by the presence of wheals (hives), angioedema (swelling), or both, most days of the week, for a duration of 6 weeks or longer. The hives may appear at any age, can occur anywhere on the body and vary in size. They are typically itchy, raised, and appear as reddish areas on the skin. Angioedema may be painful and usually occurs in the face, throat, hands, and feet, though it can occur in other areas of the body as well.

Eosinophilic Esophagitis (EoE)

Eosinophilic esophagitis is a chronic, progressive, allergic inflammatory disease of the esophagus characterized by esophageal dysfunction and eosinophilic infiltration. It occurs when high levels of eosinophils accumulate in the esophageal tissue. Persistent inflammation can result in esophageal remodeling, fibrosis, and stricture formation. Symptoms vary by age. Children often have non-specific symptoms such as feeding difficulty, nausea and vomiting, abdominal pain, heartburn, and failure to thrive. Adolescents/Adults typically present with dysphagia and food impaction. Regarding pathogenesis, IL-13 is overexpressed in the esophageal mucosa of patients with EoE and plays a role in eosinophil recruitment, remodeling, and fibrosis. IL-4 leads to signaling and recruitment of eosinophils into tissue, and IL-5 appears to be involved in the maturation and release of eosinophils.

Eosinophilic Granulomatosis with Polyangiitis (EGPA)

Eosinophilic granulomatosis with polyangiitis is a systemic small- and medium-vessel necrotizing vasculitis, characterized by extravascular granulomas, eosinophilia, and tissue infiltration by eosinophils. It occurs in people with adult-onset asthma, allergic rhinitis, nasal polyposis, or a combination.

Plaque Psoriasis (PsO)

Plaque psoriasis is a chronic, immune-mediated, hyperproliferative skin condition that is characterized by well-demarcated, thick, oval-circular plaques with an appearance that can vary by skin type. For some patients, the skin may be red with silvery-white scales; for others, plaques may appear purple or discolored skin. Plaques may itch, burn, or sting and typically appear over the scalp, trunk, and extensor body surface, although any area of skin may be involved. The severity of plaque psoriasis is generally defined by the total body surface area (BSA) involved, although different definitions have been proposed.

The Joint American Academy of Dermatology–National Psoriasis Foundation (JAAD–NPF) guidelines consider BSAs of <3%, 3% to 10%, and >10% as mild, moderate, and severe disease, respectively.

Prurigo Nodularis (PN)

Prurigo nodularis is a rare, chronic inflammatory skin condition primarily affecting older adults. The disease is characterized by a self-perpetuating itch-scratch cycle with symmetrically distributed, multiple, firm, pruritic nodules. The nodules are typically dome-shaped and often found on areas of the skin that are amenable to scratching, such as the extensor surfaces of the arms and legs and on the trunk (sparing the face, palms, soles, and difficult to reach areas). The absence of PN lesions on the upper mid-back is called the 'butterfly sign.' Nodules can be flesh-colored, erythematous, or brown/black, and range in number (a few to hundreds) and size (millimeters to several centimeters). The exact pathogenesis of PN is unclear but it is mediated by neural and immune mechanisms, including type 2 cytokines such as interleukin (IL) 4, IL-5, and IL-13 and IL-31.

Hypereosinophilic Syndrome (HES)

Hypereosinophilic syndromes are a group of rare disorders marked by the sustained overproduction of eosinophils, in which eosinophilic infiltration and mediator release cause damage to multiple organs. Treatment is based on patient presentation, lab findings, and mutational analysis.

Bullous Pemphigoid (BP)

Bullous pemphigoid (BP) is the most common autoimmune blistering disease of the skin and mucous membranes. This disease typically affects the elderly and presents with itch and localized or, most frequently, generalized bullous lesions. A subset of patients only develops excoriations, prurigo-like lesions, and eczematous and/or urticarial erythematous lesions. The disease, which is significantly associated with neurological disorders, has high morbidity and severely impacts the quality of life.

Mechanisms of Actions and Indications:

Adbry (tralokinumab-ldrm) is a human IgG4 monoclonal antibody that specifically bind to human interleukin13 (IL-13) and inhibits its interaction with the IL-13 receptor complex. Adbry inhibits IL-13-induced responses including the release of proinflammatory cytokines, chemokines and IgE.

- Adbry is indicated for the treatment of moderate-to-severe atopic dermatitis in patients 12 years and older whose disease is not adequately controlled with topical prescription therapies or when those therapies are not advisable.

Cinqair (reslizumab) is an interleukin-5 antagonist (IgG4, kappa). Cinqair binds to IL-5 with a dissociation constant of 81 pM, inhibiting the bioactivity of IL-5 by blocking its binding to the alpha chain of the IL-5 receptor complex expressed on the eosinophil surface.

- Cinqair is indicated for add-on maintenance treatment of patients with severe asthma aged ≥18 years who have an eosinophilic phenotype.

Dupixent (dupilimumab) is a human monoclonal IgG4 antibody that inhibits interleukin-4 (IL-4) and interleukin-13 (IL-13) signaling by specifically binding to the IL-4Rα subunit shared by the IL-4 and IL-13 receptor complexes. These actions decrease interleukin signaling which reduces production and survival of eosinophils, thereby reducing inflammation.

- Dupixent is indicated for the following:
  1. add-on maintenance treatment in patients with moderate-to-severe asthma aged 6 years and older with an eosinophilic phenotype or with oral corticosteroid-dependent asthma
  2. the treatment of patients 6 months and older with moderate-to-severe atopic dermatitis (AD) whose disease is not adequately controlled with topical prescription therapies or when those therapies are not advisable
  3. add-on maintenance treatment in adult and pediatric patients aged 12 years and older with inadequately controlled chronic rhinosinusitis with nasal polyposis (CRSwNP)
  4. the treatment for chronic spontaneous urticaria (CSU) in adults and pediatric patients 2 years and older who remain symptomatic despite H1 antihistamine treatment
  5. the treatment of adult and pediatric patients aged 1 years and older, weighing at least 15 kg, with eosinophilic esophagitis (EoE)
  6. the treatment of adult patients with prurigo nodularis (PN)
  7. add-on maintenance treatment of adult patients with inadequately controlled chronic obstructive pulmonary disease (COPD) and an eosinophilic phenotype
  8. the treatment of adult patients with bullous pemphigoid (BP)
  9. the treatment of adult and pediatric patients aged 6 years and older with allergic fungal rhinosinusitis (AFRS) who have a history of sino-nasal surgery.

Ebglyss (lebrikizumab-lbkz) is an IgG4 monoclonal antibody that binds with high affinity and slow off-rate to interleukin (IL)-13 and allows IL-13 to bind to IL-13Rα1 but inhibits human IL13 signaling through the IL-4Rα/IL-13Rα1 receptor complex. Ebglyss inhibits IL-13 induced responses including the release of proinflammatory cytokines, chemokines and IgE. Ebglyss bound IL-13 can still bind IL-13Rα2 allowing subsequent internalization and natural clearance of IL-13.

- Ebglyss is indicated for the treatment of adults and pediatric patients 12 years of age and older who weigh at least 40 kg with moderate-to-severe atopic dermatitis whose disease is not adequately controlled with topical prescription therapies or when those therapies are not advisable

Exdensur (depemokimab-ulaa) is an IL-5 antagonist (humanized IgG1 kappa monoclonal antibody), which binds to IL-5 with a dissociation constant of 10.5 pM, inhibiting the bioactivity of IL-5 with in vitro IC50 value of 4 pM by blocking its binding to the alpha chain of the IL-5 receptor complex expressed on the cel surface. Depemokimab-ulaa contains a triple amino acid substitution (YTE) in the fragment crystalizable (Fc) region which increases binding to the neonatal Fc receptor and thereby extends the elimination half-life. These properties support the dosing interval of every 6 months.

- Exdensur is indicated for the add-on maintenance treatment of severe asthma characterized by an eosinophilic phenotype in adult and pediatric patients aged 12 years and older

Fasenra (benralizumab) is a humanized afucosylated, monoclonal antibody (IgG1, kappa) that directly binds to the alpha subunit of the human interleukin-5 receptor (IL-5Rα) with a dissociation constant of 11 pM, In an in vitro setting, the absence of fucose in the Fc domain of Fasenra facilitates binding (45.5 nM) to FcγRIII receptors on immune effector cels, such as natural kiler (NK) cels, leading to apoptosis of eosinophils and basophils through antibody-dependent cel-mediated cytotoxicity (ADCC).

- Fasenra is indicated as follows:
  1. add-on maintenance treatment of patients with severe asthma aged 6 years and older who have an eosinophilic phenotype
  2. the treatment of adult patients with eosinophilic granulomatosis with polyangiitis (EGPA)
  3. the treatment of adult and pediatric patients aged 12 years and older with hypereosinophilic syndrome (HES) without an identifiable non-hematologic secondary cause.

Icotyde (icotrokinra) is a peptide that selectively binds to the IL-23 receptor (IL-23R) with a dissociation constant of 7 pM and antagonizes the binding of IL-23. IL-23 is a naturally occurring cytokine that is involved in inflammatory and immune responses. Icotrokinra inhibits the IL-23/IL-23R-dependent release of proinflammatory cytokines.

- Icotyde is indicated for the treatment of moderate-to-severe plaque psoriasis in adults and pediatric patients 12 years of age and older who weigh at least 40 kg who are candidates for systemic therapy or phototherapy.

Nemluvio (nemolizumab-ilto) is a humanized IgG2 monoclonal antibody that blocks the α subunit of the IL-31 receptor, modulates the neuroimmune response, and alleviates itching by directly blocking signaling.

- Nemluvio is indicated for the following:
  1. the treatment of adults with prurigo nodularis
  2. the treatment of adults and pediatric patients 12 years of age and older with moderate-to-severe atopic dermatitis in combination with topical corticosteroids and/or calcineurin inhibitors when the disease is not adequately controlled with topical prescription therapies

Nucala (mepolizumab) is an IL-5 antagonist (IgG1 kappa), inhibiting the bioactivity of IL-5 by blocking its binding to the alpha chain of the IL-5 receptor complex expressed on the eosinophil cell surface. IL-5 is the major cytokine responsible for the growth and differentiation, recruitment, activation, and survival of eosinophils.

- Nucala is indicated for the following:
  1. add-on maintenance treatment of patients with severe asthma aged ≥ 6 years who have an eosinophilic phenotype.
  2. add-on maintenance treatment of adult patients 18 years and older with chronic rhinosinusitis with nasal polyps (CRSwNP) with inadequate response to nasal corticosteroids
  3. for the treatment of adult patients with eosinophilic granulomatosis with polyangiitis (EGPA, also known as Churg-Strauss Syndrome [CSS])
  4. the treatment of adult and pediatric patients aged 12 years and older with hypereosinophilic syndrome (HES) for 6 months or longer without an identifiable non-hematologic secondary cause
  5. add-on maintenance treatment of chronic obstructive pulmonary disease (COPD) in adults who are inadequately controlled and have an eosinophilic phenotype.

POLICY:

Moderate to Severe Asthma

Based upon our criteria and review of the peer-reviewed literature, treatment with **Nucala, Cinqair, Fasenra, Dupixent or Exdensur** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment that reduces the risk of asthma exacerbations in patients with moderate to severe eosinophilic or oral-corticosteroid dependent (Dupixent only) asthma. Therefore, it is considered **medically appropriate** if **all** the following criteria are met:

1. Patient must be at least 6 years of age for Fasenra, at least 6 years old for Dupixent, at least 18 years of age for Cinqair, at least 6 years old for Nucala, and at least 12 years old for Exdensur **AND**
2. Patient must be followed by, and drug ordered by an Allergist/Immunologist or Pulmonologist **AND**
3. Patient must have moderate to severe persistent asthma **AND**
4. Patient must be a non-smoker. Non-smoker is defined as someone who has not smoked in the preceding 6 months **AND**
5. Patient must have well-documented use of high-dose inhaled corticosteroids (ICS) (see **Tables 1-3** in

policy guidelines section) for **at least 3 months**, be compliant with existing therapy, and have followed GINA guidelines for asthma treatment including an adequate trial of a high-dose inhaled steroid in combination with a long-acting beta agonist
   a. Compliance will be assessed based on pharmacy refill history. If the patient does not have pharmacy benefits through this health plan, a recent pharmacy profile will be requested. Progress notes documenting usage of sample medication may also be requested.
   b. If there is a contraindication to use of a long-acting beta agonist, then an alternative controller drug may be used in combination with a high-dose inhaled steroid such as a leukotriene inhibitor or long-acting muscarinic antagonist.
   c. Patient must have documentation of inadequate control despite optimal therapy (above) for a period of at least 3 months **AND**
6. Must be used in combination with existing asthma therapy (as defined above)
   a. Monotherapy will not be authorized as these agents are only FDA approved as an add-on maintenance treatment **AND**
7. Requests for Cinqair (medical benefit only), Exdensur (medical benefit only), Fasenra (office-administered, medical benefit), and Nucala (office administered, medical benefit), will require documentation of an inability to self-inject. This requirement does not apply to Fasenra and Nucala requests for individuals 6-11 years of age.
   ****This applies to New Starts requests for all lines of business, except Medicare. Does NOT apply to Medicare B (Medicare Advantage) ****
   a. Fasenra For pediatric patients 12 to less than 18 years of age, documentation must also include the inability of a caregiver to administer the medication. This requirement does not apply to Fasenra requests for individuals 6-11 years of age.
   b. Nucala – For pediatric patients 12 to less than 18 years of age, documentation must also include the inability of a caregiver to administer the medication. This requirement does not apply to Nucala requests for individuals 6-11 years of age.
      i. Nucala ages 6-11 years old – The FDA-approved dose is 40mg every 4 weeks. For those that meet for coverage under the medical benefit, the use of Nucala 40mg/0.4ml prefilled syringes is required to eliminate vial waste **AND**
8. For Nucala: Patient must have a peripheral blood eosinophil count of at least 150 cells per microliter within the **preceding 6 weeks** before Nucala request **OR** at least 300 cells per microliter at any time within the **preceding year AND**
   For Exdensur: Patient must have a peripheral blood eosinophil count of at least 150 cells per microliter within the **preceding 6 weeks** before Exdensur request **OR** at least 300 cells per microliter at any time within the **preceding year AND**
   For Cinqair: Patient must have a peripheral blood eosinophil count of at least 400 cells per microliter within **the preceding 6 weeks AND**
   For Fasenra: Patient must have a peripheral blood eosinophil count of at least 150 cells per microliter within the **preceding 6 weeks AND**
   For Dupixent: Patient must have a peripheral blood eosinophil count of at least 150 cells per microliter within the **preceding 6 weeks.** *If the patient is oral corticosteroid dependent, then eosinophil count is not required**.** OCS-dependence (reliance on daily, maintenance oral prednisone, methylprednisolone, etc.) must be supported by clinical progress notes and/or pharmacy claims **AND**

*****See links to eosinophil calculators in policy guidelines section below*****

9. Patient must have experienced **2 or more** asthma exacerbations within the **preceding 12 months** that required medical intervention (defined as non-routine doctor visits, urgent care visits, emergency room visits, hospital admissions, or documented need for acute systemic steroids) despite existing therapy as outlined in criterion #5
10. Initial approval will be for 6 months. Subsequent recertifications after the initial 6-month approval will

require an objective assessment of response from the provider (reductions in hospitalizations, ER visits, and rescue medication use) as well as compliance history with the inhaled corticosteroid and controller medication. Recertification will not be granted if the patient starts or re-starts smoking. See recertification statement and approval time-period table in policy guidelines section of this policy.

Chronic Obstructive Pulmonary Disease (COPD)

Based upon our criteria and review of the peer-reviewed literature, treatment with **Dupixent** and **Nucala** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for Chronic Obstructive Pulmonary Disease (COPD). Therefore, it is considered **medically appropriate** if **all** the following criteria are met:

1. Must be requested by or in consultation with a Pulmonologist **AND**
2. Must be 18 years of age or older **AND**
3. Must have confirmed diagnosis of COPD by spirometry documenting FEV1/FVC ratio < 0.7 post bronchodilation **AND**
   a. Must have moderate to very severe disease defined as FEV1 < 80% predicted **AND**
   b. Must have confirmed eosinophilic phenotype
4. Must have been using **a or b** for at least 3 months:
   a. Triple Therapy consisting of a long-acting muscarinic antagonist (LAMA), long-acting beta agonist (LABA), and inhaled corticosteroid (ICS)
   b. LAMA–LABA alone *if* ICS agents were contraindicated.
5. Must have **a or b** in the previous year despite receiving maintenance 4a or 4b.
   a. Two moderate exacerbations. A moderate exacerbation is defined as in need of treatment with systemic corticosteroids and/or antibiotics was required
   b. One severe exacerbation, defined as an exacerbation resulted in hospitalization or observation for over 24 hours in an emergency department or urgent care facility
6. Must continue concomitant use of 4a or 4b with Dupixent **OR** Nucala
7. Concomitant use of Dupixent and Nucala for the treatment of COPD will not be approved
8. Requests for Nucala (office-administered, medical benefit) will require documentation of an inability to self-inject. ****This applies to New Start requests for all lines of business, except Medicare. Does NOT apply to Medicare B (Medicare Advantage)****
9. Approved dosage:
   a. Dupixent 300mg/2mL SC once every 2 weeks **OR**
   b. Nucala 100mg/1mL SC once every 4 weeks
10. Quantity Limit:
    a. Dupixent 4 mL per 28 days
    b. Nucala 1mL per 28 days
11. Initial approval will be for 6 months. Reauthorization for 2 years at a time will require documentation of the following:
    a. Patient has experienced a decrease in symptoms while on therapy
    b. Patient is continuing to use concomitant maintenance therapy of 4a or 4b

Chronic Spontaneous Urticaria (CSU)

Based upon our criteria and review of the peer-reviewed literature, treatment with **Dupixent** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for Chronic Spontaneous Urticaria (CSU). Therefore, it is considered medically appropriate if **all** the following criteria are met:

1. Must be requested by or in consultation with an allergist/immunologist or dermatologist **AND**
2. Patients must be at least 2 years old with the diagnosis of chronic spontaneous urticaria (CSU) defined as at least a 6-week history of urticaria characterized by the development of wheals (hives), angioedema, or both, despite adequate trials (minimum of four weeks each) of:
   a. A second generation H1-antihistamine at standard dosing **AND** a second-generation H1-antihistamine trial at 2-4 times the standard dose
   b. These criteria may be satisfied by using either the same second generation H1-antihistamine at standard dosing and 2-4 times standard dosing OR using two different second generation H1-antihistamines with at least one agent being at 2-4 times standard dosing
3. For patients with past trials of Xolair (omalizumab) for the treatment of chronic spontaneous urticaria (CSU):
   a. Approval may be considered if documented ***intolerance*** to Xolair is provided including but not limiting headache, peripheral edema, gastrointestinal adverse effect, etc.
   b. Approval will NOT be provided for patients with ***incomplete response*** to Xolair therapy for the treatment of chronic spontaneous urticaria (CSU)
      i. Based on LIBERTY-CSU CUPID Study B which included patients with incomplete response to Xolair therapy for the treatment of chronic spontaneous urticaria (CSU), Dupixent arm did not meet the primary end points of change from baseline over 7 days in the Urticaria Activity Score (UAS7) or Itch Severity Score (ISS7) at week 24.
4. Initial approval is for 6 months.
      i. All recertifications will be for 2 years and will require documentation that the patient has responded to or continues to benefit from therapy (i.e., decreased severity of itching, or size/number of hives).
5. Dupixent will not be approved for use in combination with Xolair and Rhapsido for Chronic Spontaneous Urticaria

Eosinophilic Granulomatosis with Polyangiitis (EGPA)

Based upon our criteria and review of the peer-reviewed literature, treatment with **Nucala** and **Fasenra** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for adult patients with eosinophilic granulomatosis with polyangiitis (EGPA, also known as Churg-Strauss Syndrome [CSS]). Therefore, it is considered **medically appropriate** if **all** the following criteria are met:

1. Patient must be at least 18 years of age **AND**
2. Patient must be followed by, and drug ordered by an Allergist/Immunologist, Rheumatologist, Pulmonologist, Neurologist, or appropriate specialist based on the organ/tissue involvement **AND**
3. Patient must have a diagnosis of eosinophilic granulomatosis with polyangiitis (EGPA)
   a. There must be a history or presence of asthma **AND**
   b. There must be a history or presence of blood eosinophil level of at least 10% or an absolute eosinophil count of more than 1000 cells per microliter (See links to eosinophil calculators in policy guidelines section below) **AND**
   c. There must be history of **two or more** of the following clinical findings: histopathological evidence of eosinophilic vasculitis via biopsy, motor deficit or nerve conduction abnormality, pulmonary infiltrates, sino-nasal abnormality, cardiomyopathy, glomerulonephritis, alveolar hemorrhage, palpable purpura, or positive test for antineutrophil cytoplasmic antibody (ANCA) **AND**
4. Provider must attest that the patient has 'Active*, Non-Severe* disease.' This criterion is based upon the most recent clinical guidelines published by the ACR/Vasculitis Foundation (2021). Current guidelines do not support use for 'Active, *Severe* disease.'

a. *Non-severe* disease is defined as vasculitis without life- or organ-threatening manifestations. Examples of symptoms in patients with non-severe disease include rhinosinusitis, asthma, mild systemic symptoms, uncomplicated cutaneous disease, mild inflammatory arthritis
   i. Remission induction: Nucala + corticosteroids **OR** Fasenra + corticosteroids are recommended over other traditional treatments (such as corticosteroids +/- methotrexate, azathioprine, or mycophenolate mofetil)
   ii. Relapsed disease: For patients receiving maintenance therapy with only low dose corticosteroids or methotrexate, azathioprine, or mycophenolate mofetil, Nucala **OR** Fasenra 'add-on' to these treatments is recommended over other interventions

b. *Severe* EGPA is defined as vasculitis with life-or organ-threatening manifestations (within 3 months), such as alveolar hemorrhage, glomerulonephritis, central nervous system vasculitis, mononeuritis multiplex, cardiac involvement, mesenteric ischemia, or limb/digit ischemia
   i. Remission induction: Cyclophosphamide or rituximab is recommended over Nucala and Fasenra
   ii. Remission maintenance: Methotrexate, azathioprine, or mycophenolate mofetil are recommended over Nucala and Fasenra **AND**

5. Nucala and Fasenra will not be approved for granulomatosis with polyangiitis (also known as GPA or Wegener's granulomatosis) or microscopic polyangiitis **AND**
6. Requests for Nucala **OR** Fasenra (office-administered, medical benefit) will require documentation of an inability to self-inject. ****This applies to New Start requests for all lines of business, except Medicare. Does NOT apply to Medicare B (Medicare Advantage)****
7. Initial approval will be for 6 months. Recertification will be for 2 years and require documentation of attainment and maintenance of remission. Remission defined as absence of clinical signs/symptoms attributed to EGPA while maintained on an oral corticosteroid dose no greater than 7.5 mg per day prednisone or equivalent. Given the heterogenous nature of this disease that may have multi-organ involvement, consideration may be given on recertification when there is additional subjective evidence or statement of medical necessity from provider showing clear improvement in symptoms attributed to the use of Nucala OR Fasenra which warrants continued use (such as reduced rate of relapse, corticosteroid dose reduction, and reduced eosinophil level).

Hypereosinophilic Syndrome (HES)

Based upon our assessment and review of the peer-reviewed literature, treatment with **Nucala** and **Fasenra** has been medically proven to be effective and therefore, **medically appropriate** for Hypereosinophilic Syndrome (HES) if **ALL** the following criteria are met:

1. Patient must be at least 12 years old **AND**
2. Must have a diagnosis of Hypereosinophilic Syndrome (HES) for ≥ 6 months, without an identifiable non-hematologic secondary cause. Please note, this excludes patients with non-hematologic secondary HES (such as drug hypersensitivity, parasitic helminth infection, HIV infection, non-hematologic malignancy, FIP1L1-PDGFRα kinase-positive HES, and eosinophilia of unknown clinical significance (unexplained HE, but without apparent complications/clinical manifestations related to organ/tissue infiltration)) **AND**
3. Patient must be followed by an Allergist/Immunologist, or an appropriate specialist based on the involved organ/tissue (ex. Pulmonologist for lung involvement) **AND**
4. Must have a blood eosinophil count of ≥ 1000 cells/microL within the last 6 weeks **AND**
5. Must have experienced ≥ 2 HES flares within the past 12 months (HES flare defined as HES-related worsening of clinical symptoms or blood eosinophil counts requiring escalation in therapy (ex. increased doses or addition of other drugs). Note: Background HES therapy includes, but is not limited to, chronic or episodic oral corticosteroids (ex. prednisone), immunosuppressive (ex. interferon alfa, methotrexate, cyclosporine, azathioprine), and/or cytotoxic therapy (ex. hydroxyurea, imatinib,

cyclophosphamide) **AND**

6. Requests for Nucala (office-administered, medical benefit) and Fasenra (office-administered, medical benefit) will require documentation of an inability to self-inject. ****This applies to New Start requests for all lines of business, except Medicare. Does NOT apply to Medicare B (Medicare Advantage)****
   a. For pediatric patients < 18 years of age, documentation must also include the inability of a caregiver to administer the medication **AND**
7. Initial approval will be for 6 months. Recertification will be for 2 years and require documentation of a decrease in the frequency/severity of HES flares compared to baseline. Given the heterogeneous nature of the disease and variability in affected organs, consideration may be given on recertification when there is additional subjective evidence or statement of medical necessity from provider showing clear improvement in symptoms attributed to the use of Nucala which warrants continued use of the drug (such as an improvement of symptoms, a reduction of background HES therapy, and/or a significant reduction in eosinophil count).

Atopic Dermatitis (AD)

Based upon our criteria and review of the peer-reviewed literature, treatment with **Dupixent, Adbry, Ebglyss and Nemluvio** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for moderate-severe atopic dermatitis. Therefore, they are considered **medically appropriate** if **all** the following criteria are met:

1. Must be prescribed by or in consultation with an Allergist/Immunologist, or Dermatologist **AND**
2. For **Dupixent**: must be ≥ 6 months of age. For **Adbry, Ebglyss and Nemluvio**, must be ≥ 12 years of age. **AND**
3. Must have a diagnosis of moderate to severe atopic dermatitis
   a. Must involve at least 10% body surface area
      i. Consideration will be given to those who have less than 10% body surface area involvement but have severe disease of the hands, feet, or other sensitive areas **OR** severe itch that has been unresponsive to topical therapies **AND**
   b. Must have evidence of functional impact on everyday activities **AND**
4. Must have had a trial and failure or contraindication to:
   a. Medium to higher potency prescription topical corticosteroid therapy (see **Table 4** in policy guidelines section)
      i. Adequate trial is defined as ≥ 28 days or for the maximum duration recommended by the product prescribing information (i.e., 14 days for super-potent topical corticosteroids), whichever is shorter **AND**
   b. Tacrolimus or pimecrolimus (Does not apply for children **less than** 2 years of age)
      i. Adequate trial is defined as ≥ 6 weeks based on prescribing information **AND**
   c. Treatment with at least one of the above therapies must have occurred within the previous 6 months.
5. Adbry, Ebglyss and Nemluvio will require documentation of serious side effects or drug failure with Dupixent **AND** Rinvoq
6. Dupixent, Adbry, Ebglyss and Nemluvio will not be approved in combination with another monoclonal antibody or Janus Kinase Inhibitor (such as Opzelura, Cibinqo or Rinvoq) as the efficacy and safety of these combinations uses have not been established. **AND**

Dupixent: Initial and subsequent approval duration is 2 years. Upon recertification, documentation of ongoing benefit in terms of disease improvement or stability is required.

7. **Adbry Adults** Approval Timeframes and Recertification Criteria

a. Initial Approval (Patients Weighing <100 kg): 6 months
b. First Recertification (After Initial 6 Months)
    i. For patients who achieve 'Clear' (IGA 0) or 'Almost Clear' (IGA 1)
        a) Coverage is conditional on initiation of a trial of extended dosing and will be approved for 1-year
            I. Patient must switch to 300 mg every 4 weeks for a minimum of 12 weeks (3 doses). If the patient does not initiate or complete this extended interval trial, further coverage will not be authorized.
                1) If response is lost, patients may revert to 300 mg every 2 weeks for the remainder of the approval timeframe. Documentation confirming the loss of response is required.
    ii. For patients that have not achieved IGA 0/1 but demonstrate improvement from baseline, coverage will be granted for an additional 6 months at 300 mg every 2 weeks
    iii. For patients that have not experienced any clinical improvement compared to baseline, further treatment will not be authorized
c. Subsequent/Ongoing Recertification
    i. If the patient achieved IGA 0/1 and completed extended interval trial, documentation of ongoing clinical benefit is required (e.g., sustained IGA 0/1, BSA/EASI improvement, or disease stability)
        a) Coverage will be granted for 1-year at the appropriate frequency (every 2 or every 4 weeks) based on documented success or failure of the extended dosing trial
    ii. If the patient achieved IGA 0/1 any time after the first recertification but has not completed extended interval trial
        a) Coverage is conditional on initiation of a trial of extended dosing and will be approved for 1-year
            I. Patient must switch to 300 mg every 4 weeks for a minimum of 12 weeks (3 doses). If the patient does not initiate or complete this extended interval trial, further coverage will not be authorized.
                1) If response is lost, patients may revert to 300 mg every 2 weeks for the remainder of the approval timeframe. Documentation confirming the loss of response is required.
    iii. If patient has not achieved IGA 0/1, but continues to show meaningful improvement
        a) Coverage will be granted in 6 months intervals and contingent upon documentation of ongoing clinical benefit is required (e.g., sustained IGA 0/1, BSA/EASI improvement, or disease stability)
    iv. After 2 years of continuous therapy without achieving IGA 0/1, the provider must submit a letter of medical necessity describing the ongoing need for Adbry
        a) **Weight ≥ 100kg:** Documentation of ongoing benefit in terms of disease improvement or stability is required. Approval duration is 2 years.

8. **Adbry 12-17 years old:** Initial and subsequent approval duration is 2 years. There will be no dose evaluation until the patient turns 18 years old. After 18 years old, dosing will be evaluated per Adbry adult dosing above. Upon recertification, documentation of ongoing benefit in terms of disease improvement or stability is required.
9. **Ebglyss**:
    a. Initial therapy is approved for 16 weeks: Ebglyss 500 mg (two 250 mg injections) at Week 0 and Week 2, followed by 250 mg every two weeks until Week 16
        i. If patient did not achieve 'Clear' (IGA 0) or 'Almost Clear' (IGA 1) skin, an extended 6 months of 250mg every two weeks following the initial therapy can be considered for one time only
    b. If patient achieved "Clear" (IGA 0) or "Almost Clear" (IGA 1) skin after the initial therapy: Maintenance therapy: Ebglyss 250mg once every eight weeks after initial therapy can be approved for 2 years at a time.

   i. If response is lost after 16 weeks of every 8-week dosing, patients may be approved for 250mg every 4 weeks for the 6 months. Documentation confirming the loss of response is required.
c. Upon recertification documentation of ongoing benefit in terms of disease improvement or stability is required.
d. QL: 1 prefilled pen or 1 prefilled syringe (2mL) per 56 days. Quantity greater than 2mL per 56 days may be provided as appropriate upon approval

10. **Nemluvio:**
    a. Initial therapy is approved for 16 weeks: The initial dose is Nemluvio 60 mg (two 30 mg injections), followed by 30 mg given every 4 weeks
       i. For patients that achieve 'Clear' (IGA 0) or 'Almost Clear' (IGA 1) skin after 16 weeks of treatment, a dosing frequency of 30mg *every 8 weeks* is recommended and will be approved. Approval duration is 2 years
          - Use Nemluvio with topical corticosteroids and/or topical calcineurin inhibitors. When the disease has sufficiently improved, discontinue use of topical therapies.
       ii. If documentation is provided that the patient is not 'Clear' (IGA 0) or 'Almost Clear' (IGA 1) after the initial therapy of 16 weeks but has had an improvement in disease while on the medication compared to baseline, a dosing frequency of 30mg *every 4 weeks* can be continued and approved. Approval duration is 2 years
       iii. After 2 years of continuous therapy without achieving IGA 0/1, the provider must submit a letter of medical necessity describing the ongoing need for Nemluvio
    b. If documentation indicates that the patient has not experienced any clinical improvement compared to baseline, further treatment will not be authorized.
    c. Quantity is limited to 1mL per 28 days.
    d. Subcutaneous Nemluvio will be approved as pharmacy benefit for self-injection

Chronic Rhinosinusitis with Nasal Polyps (CRSwNP)

Based upon our criteria and review of the peer-reviewed literature, treatment with **Nucala or Dupixent** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for chronic rhinosinusitis with nasal polyps. Therefore, it is considered **medically appropriate** if **all** the following criteria are met:

1. Must be followed by and drug ordered by an Allergist/Immunologist, or Otolaryngologist **AND**

2. Must have a diagnosis of chronic rhinosinusitis with nasal polyps (CRSwNP)
   a. Chronic is defined as having lasted for at least 12 weeks **AND**
   b. Must currently have nasal polyposis, confirmed by evidence (such as direct examination, nasal endoscopy, imaging studies (such as a sinus CT scan))
3. Must be ≥ 12 years of age for Dupixent **OR** ≥ 18 years of age for Nucala **AND**
4. Step therapy applies – Step therapy (a **AND** b) applies to New Starts for all lines of business, **including** Medicare Part B:
   a. Must have documented inadequate response despite at least 3 months of compliant use of mometasone nasal spray at a dose of 2 sprays in each nostril twice daily (compliance will be verified through pharmacy claims history. Note: each inhaler =17g = 120 sprays, therefore claims should reflect **34g/30 days** for the required dosing) **AND**
   b. Must have documented inadequate response despite at least 3 months of compliant use of Xhance nasal spray at a dose of 2 sprays in each nostril twice daily (compliance will be verified through pharmacy claims history. Note: each inhaler =16ml = 120 sprays, therefore claims should reflect **32ml/30 days** for the required dosing) **AND**
5. Must have had either:

   a. Prior nasal surgery **OR**
   b. Prior treatment with a course of systemic corticosteroids
6. Must be used in combination with an intranasal corticosteroid
   a. Dupixent or Nucala as monotherapy for this indication will not be authorized as both agents are only FDA approved as an add-on maintenance treatment
7. Requests for Nucala (office-administered, medical benefit) will require documentation of an inability to self-inject. ****This applies to New Start requestsfor all lines of business, except Medicare. Does NOT apply to Medicare B (Medicare Advantage) ****
8. Initial approval will be granted for 6 months. All recertifications will be for 2 years and will require documentation of continued use of an intranasal corticosteroid and clinical benefit from Dupixent or Nucala use (e.g., reduced nasal polyp size, improved nasal congestion, reduced sinus opacification, decreased sino-nasal symptoms, improved sense of smell)

Allergic Fungal Rhinosinusitis (AFRS)

Based upon our criteria and review of the peer-reviewed literature, treatment with Dupixent administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for Allergic Fungal Rhinosinusitis (AFRS). Therefore, it is considered medically appropriate if all the following criteria are met:

1. Must be prescribed by or in consultation with an Allergist/Immunologist, or Otolaryngologist **AND**
2. Must have a diagnosis of Allergic Fungal Rhinosinusitis (AFRS)
   a. Chronic is defined as having lasted for at least 12 weeks **AND**
   b. Must currently have nasal polyposis, confirmed by evidence such as a sinus CT scan **AND**
   c. Must have a history of nasal surgery
3. Must be at least 6 years of age and weigh at least 15kg **AND**
4. Step therapy applies – Step therapy (a AND b) applies to New Starts for all lines of business *except* Medicare Part B:
   a. [SoC] Must have documented inadequate response despite at least 3 months of compliant use of recommended mometasone nasal spray at a dose of 2 sprays in each nostril twice daily (compliance will be verified through pharmacy claims history. Note: each inhaler =17g = 120 sprays, therefore claims should reflect 34g/30 days for the required dosing) **AND**
   b. [Step] Must have documented inadequate response despite at least 3 months of compliant use of Xhance nasal spray at a dose of 2 sprays in each nostril twice daily (compliance will be verified through pharmacy claims history. Note: each inhaler =16ml = 120 sprays, therefore claims should reflect 32ml/30 days for the required dosing) **AND**
5. Initial approval will be granted for 6 months. All recertifications will be for 2 years and will require documentation of clinical benefit from Dupixent use (e.g., reduced nasal polyp size, improved nasal congestion, reduced sinus opacification, decreased sino-nasal symptoms, improved sense of smell)

Prurigo Nodularis (PN)

Based upon our criteria and review of the peer-reviewed literature, treatment with **Dupixent** and **Nemluvio** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for prurigo nodularis. Therefore, it is considered **medically appropriate** if **all** the following criteria are met:

1. Must be prescribed by or in consultation with an Allergist, Immunologist, Dermatologist or HIV specialist **AND**
2. Must be ≥ 18 years of age **AND**

3. Must have a diagnosis of Prurigo Nodularis (PN) for at least 3 months
    a. Provider must attest that patient currently has at least 20 PN nodules **AND**
4. **Dupixent**: Must have had a trial and failure or contraindication to medium to super-potent prescription topical corticosteroid therapy (see **Table 4** in policy guidelines section)
        i. Adequate trial is defined as ≥ 28 days or for the maximum duration recommended by the product prescribing information (i.e., 14 days for super-potent topical corticosteroids), whichever is shorter **AND**
        ii. Trial must have occurred within the previous 6 months **AND**
    a. Approved dosing: an initial dosage of 600mg (two 300mg SC injections) once, followed by maintenance dosage of 300mg SC every 2 weeks
5. **Nemluvio**: Must have tried at least **TWO** of the following topical treatments without treatment success: Medium to super-potent topical corticosteroid therapy (see **Table 4** in policy guidelines section), pimecrolimus, tacrolimus, or calcipotriol.
        i. Adequate trial is defined as ≥ 28 days or for the maximum duration recommended by the product prescribing information (i.e., 14 days for super-potent topical corticosteroids), whichever is shorter AND
        ii. Trial must have occurred within the previous 6 months **AND**
    a. Must have tried and failed **Dupixent**, or provide documentation why Dupixent cannot be used **AND**
    b. Approved dosing:
        i. Adult Patients Weighing < 90kg: an initial dosage of 60 mg (two 30mg SC injections), followed by 30 mg SC injection given every 4 weeks
        ii. Adult Patients Weighing ≥ 90kg: an initial dose of 60 mg (two 30 mg SC injections), followed by 60 mg SC injection given every 4 weeks
        iii. Quantity is limited to 1mL per 28 days.
    c. Subcutaneous Nemluvio will be approved as pharmacy benefit for self-injection
6. Initial approval will be for 6 months. All recertifications will be for 2 years and require documentation of an improvement in symptoms compared to baseline (such as decreased itch, decreased size/number of nodules).
7. Combination use of Nemluvio with Dupixent, Rinvoq, Otezla/XR, Cibingo, Opzulura or other biologics will not be approved as the efficacy and safety with these concurrent uses have not been established.

Eosinophilic Esophagitis (EoE)

Based upon our criteria and review of the peer-reviewed literature, treatment with **Dupixent** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for eosinophilic esophagitis. Therefore, it is considered **medically appropriate** if **all** the following criteria are met:

1. Must be at least 1 years of age **AND** weigh ≥ 15kg **AND**
2. Must be prescribed by a Gastroenterologist or Allergist/Immunologist **AND**
3. Must have a diagnosis of Eosinophilic Esophagitis with **both** the following:
    a. An upper endoscopy with an esophageal biopsy showing ≥ 15 eosinophils per high-power field (eos/hpf) (or 60 eosinophils per mm^2) **AND**
    b. The provider must attest other causes of symptoms/esophageal eosinophilia have been ruled out (including, but not limited to: GERD, hypereosinophilic syndrome, eosinophilic granulomatosis with polyangiitis) **AND**
4. The provider must attest that a dietary management strategy (such as an empiric elimination diet, a targeted allergen elimination diet, or an elemental diet) has been discussed and implemented, when appropriate **AND**

5. Must have had serious side effects or drug failure with a high-dose Proton Pump Inhibitor (such as pantoprazole, omeprazole, etc.) for at least 8 weeks **AND**
6. Must have had serious side effects or drug failure with a topical steroid treatment (such as swallowed fluticasone or budesonide) for at least 8 weeks **AND**
7. See Policy Guidelines for appropriate dosing based on patient's weight.
8. Approval Timeframe and Recertification Requirements
   a. Initial approval: 6 months
   b. First Recertification (after the initial 6-month period): Requires documentation of histologic remission defined as < 15 eos/hpf on endoscopy/biopsy after 6 months of starting treatment. Approval will be granted for 2 years if criteria is met.
   c. Continued/Subsequent Recertification (after the first recertification): Requires documentation of sustained clinical response to the initial Dupixent therapy. Approval will be granted for 2 years if criteria are met.

Bullous Pemphigoid (BP)

Based upon our criteria and review of the peer-reviewed literature, treatment with **Dupixent** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for Bullous Pemphigoid (BP). Therefore, it is considered medically appropriate if all the following criteria are met:

1. Must be prescribed by or in consultation with an Allergist/Immunologist, or Dermatologist **AND**
2. Patient must be at least 18 years of age **AND**
3. Must have confirmed diagnosis of bullous pemphigoid (BP) defined as following:
   a. Bullous Pemphigoid Disease Area Index (BPDAI) activity score of 24 or greater on a scale of 0 to 360 **AND**
   b. a weekly average Peak Pruritus numeric rating scale (NRS) score of 4 or greater on a scale of 0 to 10
4. Patient must have tried TWO of the following for at least 2 weeks without adequate symptom control or with severe side effects:
   a. An oral corticosteroid
   b. A tetracycline antibiotic such as doxycycline hyclate oral capsule
   c. mycophenolate mofetil
   d. Generic dapsone topical gel 5%
5. Provider attest patient will be provided concurrent use of an oral corticosteroid such as prednisone or prednisolone with Dupixent if approved, and an established plan to taper off the oral corticosteroid within week 16 upon favorable response to Dupixent
6. Approved dosing: Dupixent 600 mg SC on Day 1, followed by 300 mg every other week
7. Coverage Duration
   a. Initial coverage will be granted for 6 months
   b. Recertification (continuation) is two years if all the following criteria (i, ii, and iii) are met:
      i. Achieving oral corticosteroid dose reduction or completely tapered off
      ii. Adequate symptom control such as reduction in Peak Pruritus NRS, absence of disease relapse, or disease stability
      iii. documentation for ongoing clinical benefit
   c. After 2 years of continuous therapy without documentation of clinical benefits, the provider must submit a letter of medical necessity describing the ongoing need

Plaque Psoriasis (PsO)

Based upon our criteria and review of the peer-reviewed literature, treatment with **Icotyde** administered in accordance with FDA guidelines, has been medically proven to be an effective and well tolerated treatment for Plaque Psoriasis (PsO). Therefore, it is considered medically appropriate if all the following criteria are met:

1. The patient must be 12 years of age and older who weigh at least 40 kg **AND**
2. Must be prescribed by or in consultation with a Dermatologist or Rheumatologist **AND**
   a. The patient must have moderate to severe chronic plaque psoriasis that involves at least 10% of the body surface area. Consideration will be given to those who have less than 10% body surface area involvement but have severe disease of sensitive areas or areas causing significant disruption in normal activities (such as the hands, feet, face, genitalia) **AND**
      i. The patient must be a candidate for systemic therapy or phototherapy and meet for **ONE** of the following **(A or B)**
         A. The patient must have had a 3-month trial of systemic therapy (i.e., acitretin, methotrexate, or cyclosporine) that resulted in an inadequate response (failure). A 3-month trial will not be required if the member experienced serious side effects during a trial of one of the aforementioned agents **OR**
         B. The patient must have had a 3-month trial of Ultraviolet B (UVB) Phototherapy or Psoralen Ultraviolet A (PUVA) Phototherapy that resulted in an inadequate response (failure)
3. There must be documentation of drug failure or serious side effects to **TWO** of the following: Humira/Simlandi/Hadlima, Otezla/XR, Selarsdi/Yesintek, Skyrizi, Tremfya, Cosentyx, Enbrel
4. Quantity Limit: 30 tablets/30 days

HCPCS:

Cinqair	- J2786 [Injection, reslizumab,1 mg]
Exdensur	- J2361[Injection, depemokimab-ulaa,1 mg]
Fasenra	- J0517 [Injection, benralizumab,1 mg]
Nucala	- J2182 [Injection, mepolizumab,1 mg]

POLICY GUIDELINES:

1. Cinqair is administered by a healthcare professional and is covered under the medical benefit.
2. Fasenra prefilled syringe is administered by a healthcare professional and is covered under the medical benefit. Fasenra autoinjector (Fasenra PEN) is self-administered and is covered under the pharmacy benefit.
   a. If an authorization is added under one benefit, it will be terminated under the other. For example: if the member was approved under the medical benefit and now requesting coverage under the pharmacy benefit, the authorization on the medical benefit will be terminated when the pharmacy authorization is approved.
3. Dupixent prefilled syringes and pens are self-administered and are covered under the pharmacy benefit.
4. Adbry prefilled syringes are self-administered and are covered under the pharmacy benefit.
5. Nucala vial for injection is administered by a healthcare professional and is covered under the medical benefit. Nucala prefilled autoinjector (100mg/ml) and prefilled syringes (100mg/ml and 40mg/0.4ml) can be healthcare professional or self-administered and may be covered under the medical (healthcare professional) or pharmacy benefit (self-administered)
   a. If an authorization is added under one benefit, it will be terminated under the other. For example: if

the member was approved under the medical benefit and now requesting coverage under the pharmacy benefit, the authorization on the medical benefit will be terminated when the pharmacy authorization is approved.

6. Dosing will be approved in line with FDA approved dosing as follows:
   a. Nucala has indication-dependent dosing as follows:
      i. Eosinophilic asthma:
         A. Adults, adolescents, and children 12 years and older: 100 mg subcutaneously once every 4 weeks
         B. Patients aged 6 to 11 years: 40 mg subcutaneously once every 4 weeks.
      ii. EGPA or HES:
         A. 300mg subcutaneously once every 4 weeks (as 3 separate 100-mg injections)
      iii. CRSwNP
         A. 100 mg subcutaneously once every 4 weeks
      iv. COPD:
         A. 100mg/1mL SC once every 4 weeks
   b. Cinqair dosing for adults 18 years of age and older: 3 mg/kg intravenously once every 4 weeks.
   c. Fasenra has indication-dependent dosing as follows:
      i. Eosinophilic asthma:
         A. Dosing for adults, adolescents, and children 6 years and older who weigh at least 35 kg: 30 mg subcutaneously once every 4 weeks for the first 3 doses, then 30 mg subcutaneously once every 8 weeks thereafter
         B. Dosing for adolescent who are 6-11 years old and are LESS than 35 kg: 10 mg subcutaneously once every 4 weeks for the first 3 doses, then 10 mg subcutaneously once every 8 weeks thereafter
         C. Another loading dose will not be granted for patients who have received a loading dose under the pharmacy or medical benefit and request to switch to the other benefit for continued therapy.
      ii. EGPA: 30 mg subcutaneously once every 4 weeks
      iii. HES: 30 mg subcutaneously once every 4 weeks
   d. Adbry dosing for adults 18 years of age and older: 600mg (given as four 150mg injections) as a loading dose, then 300mg (given as two 150mg injections) every other week. A dosage of 300 mg every 4 weeks may be considered for patients below 100 kg who achieve clear or almost clear skin after 16 weeks of treatment.
   e. Dupixent is self-administered with indication-dependent dosing as follows:
      i. Atopic Dermatitis (AD):
         A. Adults-Initial dosage: 600 mg subcutaneously (given as two 300 mg injections)
         B. Maintenance dosage: 300 mg subcutaneously given once every other week
         C. Pediatric patients (6 months - 17 years):

Table 1: Dosage of DUPIXENT in Pediatric Patients 6 Months to 5 Years of Age with Atopic Dermatitis

Body Weight	Initial* and Subsequent Dosage
5 to less than 15 kg	200 mg (one 200 mg injection) every 4 weeks (Q4W)
15 to less than 30 kg	300 mg (one 300 mg injection) every 4 weeks (Q4W)

* For pediatric patients 6 months to 5 years of age with AD, no initial loading dose is recommended.

Table 2: Dosage of DUPIXENT in Pediatric Patients 6 Years of Age and Older with Atopic Dermatitis

Body Weight	Initial Loading Dose	Subsequent Dosage
15 to less than 30 kg	600 mg (two 300 mg injections)	300 mg every 4 weeks (Q4W)
30 to less than 60 kg	400 mg (two 200 mg injections)	200 mg every 2 weeks (Q2W)
60 kg or more	600 mg (two 300 mg injections)	300 mg every 2 weeks (Q2W)

ii. Eosinophilic or Oral-corticosteroid dependent Asthma:

Table 3: Dosage of DUPIXENT in Adult and Pediatric Patients 12 Years and Older with Asthma

Initial Loading Dose	Subsequent Dosage
400 mg (two 200 mg injections)	200 mg every 2 weeks (Q2W)
Or	
600 mg (two 300 mg injections)	300 mg every 2 weeks (Q2W)
Dosage for patients with oral corticosteroid-dependent asthma or with co-morbid moderate-to-severe atopic dermatitis or adults with co-morbid chronic rhinosinusitis with nasal polyps	
600 mg (two 300 mg injections)	300 mg every 2 weeks (Q2W)

Table 4: Dosage of DUPIXENT in Pediatric Patients 6 to 11 Years of Age with Asthma

Body Weight	Initial* and Subsequent Dosage
15 to less than 30 kg	300 mg every 4 weeks (Q4W)
≥30 kg	200 mg every 2 weeks (Q2W)

* For pediatric patients 6 to 11 years of age with asthma, no initial loading dose is recommended.

iii. Chronic rhinosinusitis with nasal polyps (CRSwNP):
   A. 300 mg subcutaneously given once every other week

iv. Prurigo Nodularis (PN):
   A. Initial dosage: 600 mg subcutaneously (given as two 300 mg injections)
   B. Maintenance dosage: 300 mg subcutaneously given once every other week

v. Chronic Obstructive Pulmonary Disease (COPD):
   A. 300 mg subcutaneously given once every other week

vi. Bullous Pemphigoid (BP):
   A. Initial dosage: 600 mg subcutaneously (given as two 300 mg injections)
   B. Maintenance dosage: 300 mg subcutaneously given once every other week

vii. Chronic Spontaneous Urticaria (CSU):
   A. Adult patients: Initial loading dose of 600mg (two 300mg injections), followed by 300mg given every 2 weeks.

B. Pediatric patients 2 years to 5 years of age: No initial loading dose is recommended
   - 5 to less than 15 kg: 200mg (one 200mg injection) every 4 weeks
   - 15 to less than 30 kg: 300mg (one 300mg injection) every 4 weeks

C. Pediatric patients 6 years to 17 years of age:
   - 15 to less than 30 kg: Initial loading dose of 600mg (two 300mg injections), followed by 300mg every 4 weeks
   - 30 to less than 60 kg: Initial loading dose of 400mg (two 200mg injections), followed by 200mg every 2 weeks
   - 60 kg or more: Initial loading dose of 600mg (two 300mg injections), followed by 300mg every 2 weeks

viii. Eosinophilic Esophagitis (EoE):

Table 5: Dosage of DUPIXENT in Adult and Pediatric Patients 1 Year of Age and Older with Eosinophilic Esophagitis

Body Weight	Recommended Dosage
15 to less than 30 kg	200 mg every 2 weeks (Q2W)
30 to less than 40 kg	300 mg every 2 weeks (Q2W)
40 kg or more	300 mg every week (QW)

ix. Allergic Fungal Rhinosinusitis (AFRS):

A. Adult patients: Dupixent 300 mg every 2 weeks

B. Pediatric patients 6 to 17 years of age:
   - Dupixent 300mg every 4 weeks for children with body weight 15 to less than 30kg
   - Dupixent 200 mg every 2 weeks for children with body weight 30 to less than 60kg
   - Dupixent 300mg every 2 weeks for children with body weight 60kg or more

f. Nemluvio has indication-dependent dosing as follows:

x. Prurigo Nodularis:
   - Adult Patients Weighing Less Than 90kg: The recommended subcutaneous dosage is an initial dose of 60 mg (two 30 mg injections), followed by 30 mg given every 4 weeks.
   - Adult Patients Weighing 90kg or More: The recommended subcutaneous dosage is an initial dose of 60 mg (two 30 mg injections), followed by 60 mg given every 4 weeks.

xi. Atopic Dermatitis:
   - 30 mg given every 4 weeks. After 16 weeks of treatment, for patients who achieve clear or almost clear skin, a dosage of 30 mg every 8 weeks is recommended.

g. Icotyde for Plaque Psoriasis in patients 12 years and older: 200 mg by mouth once daily

8. Cinqair will only be authorized when administered by a healthcare professional in the prescriber's office or within a supervised medical treatment facility. Because of the risk of anaphylaxis, patients should be closely observed for an appropriate period of time after administration and health care providers administering Cinqair should be prepared to manage anaphylaxis which can be life-threatening. Patients should also be informed of the signs and symptoms of anaphylaxis and instructed to seek immediate medical care should symptoms occur.
9. Request for concurrent use of Adbry, Nucala, Cinqair, Fasenra, Icotyde, Exdensur, Nemluvio and Dupixent with other inflammatory agents such as Xolair or Tezspire will be evaluated for safety and efficacy and subject to off-label review.
10. Adbry, Nucala, Cinqair, Fasenra, and Dupixent will not be authorized in the following circumstances:

a. Adbry is only approved for subcutaneous injection. Nucala is only approved for subcutaneous injection. Cinqair is only approved for intravenous infusion. Fasenra is only approved for subcutaneous injection. Dupixent is only approved for subcutaneous injection. Icotyde is only approved for oral administration. Exdensur is only approved for subcutaneous injection. Nemluvio is only approved for subcutaneous injection. Administration in any manner other than which drug is FDA-approved will not be authorized.
b. Relief of acute bronchospasm or status asthmaticus
c. Any non-FDA approved dosing regimen
d. Fasenra will not be approved for chronic rhinosinusitis with nasal polyps or eosinophilic esophagitis.

11. If Adbry, Nucala, Cinqair, Fasenra, Icotyde, Exdensur, Nemluvio or Dupixent therapy is initiated with samples and the member does not meet policy criteria for coverage (as outlined above) before the start of therapy, coverage will not be granted upon completion of samples.
12. Safety of concurrent use of Adbry, Nucala, Cinqair, Fasenra, Icotyde, Exdensur, Nemluvio and Dupixent with other monoclonal antibodies used to treat inflammation (TNF-inhibitors, interleukin antagonists, etc.) has not been established.
13. Utilization Management is contract dependent. Refer to specific contract/benefit language for exclusions.
    a. Coverage criteria may be dependent on the contract renewal date.
    b. Coverage of drugs listed in this policy are contract dependent.
    c. Not all contracts/benefits allow coverage of healthcare professional administered drugs as part of their pharmacy benefit.
    d. Not all contracts/benefits cover all medical infusible drugs.
    e. Not all policy criteria may apply if treatment of specific disease states or conditions is not a covered benefit.
14. Clinical documentation must be submitted for each request (initial and recertification [if applicable]) unless otherwise specified (e.g., provider attestation required). Supporting documentation includes, but is not limited to, progress notes documenting previous treatments and treatment history, diagnostic testing, laboratory test results, genetic testing or biomarker results, imaging and other objective or subjective measures of benefit. For recertification, continued approval requires documentation demonstrating that the requested product is providing ongoing benefit to the patient, evidenced by improvement or stability in disease state or condition, and that continued use remains medically necessary. Ongoing use of the requested product must continue align with the current policy's preferred formulary. Recertification reviews may result in a requirement to trial more cost-effective treatment alternatives as they become available (i.e., generics, biosimilars, or other guideline-supported treatment options). Requested dosing must remain consistent with FDA-approved or off-label/guideline-supported dosing recommendations.
15. This policy does not apply to Medicare Part D and D-SNP pharmacy benefits. The drugs in this policy may apply to all other lines of business including Medicare Advantage.
16. This policy is applicable to drugs that are included on a specific drug formulary (Pharmacy benefit only). If a drug referenced in this policy is non-formulary, please refer to the Non-Formulary Medication Exception Review Policy for review guidelines.
17. Dose and frequency should be in accordance with the FDA label or recognized compendia (for off-label uses). When services are performed in excess of established parameters, they may be subject to review for medical necessity.
18. For commercial contracts, medical necessity determinations align with the Certificate of Coverage issued by the Health Plan, which states that covered services must be clinically appropriate and not primarily for the convenience of the member, the member’s family, or the provider.

19. This policy is based on available evidence as of the last review date. Coverage determinations are subject to applicable plan documents, state and federal regulations, and individual patient circumstances. This policy does not constitute medical advice.
20. This policy is subject to ongoing revision. Newly marketed drugs and existing drugs with new indications may be subject to prior authorization until formal coverage criteria are established. Inclusion of a drug in this policy does not guarantee its current availability on the market, as some agents may be discontinued, withdrawn, or otherwise unavailable. As product status changes, drugs may be removed from the policy.
21. For members with Medicare Advantage, medications with a National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) will be covered pursuant to the criteria outlined by the NCD and/or LCD. NCDs/LCDs for applicable medications can be found on the CMS website at https://www.cms.gov/medicare-coverage-database/search.aspx. In the absence of a Medicare National Coverage Determination (NCD), Local Coverage Determination (LCD), or other Medicare coverage guidance, CMS permits a Medicare Advantage Organization (MAO) to establish its own coverage determinations in accordance with 42 CFR § 422.101(b)(6). Indications that have not been addressed by the applicable medication's LCD/NCD will be covered in accordance with criteria determined by the Health Plan (which may include review per the Health Plan's Off-Label Use of FDA Approved Drugs policy). Step therapy requirements may be imposed in addition to LCD/NCD requirements.
22. The following websites have eosinophil calculators for converting reported units:
    a. http://gsknucala.com/
    b. https://www.fasenrahcp.com/m/fasenra-eosinophil-calculator.html
    c. https://www.omnicalculator.com/health/eosinophil-count
    d. https://www.merckmanuals.com/medical-calculators/AbsEoCount.htm
23. All requests will be reviewed to ensure they are being used for an appropriate indication and may be subject to an off-label review in accordance with our Off-Label Use of FDA Approved Drugs Policy (Pharmacy-32).
24. All utilization management requirements outlined in this policy are compliant with applicable New York State insurance laws and regulations. Policies will be reviewed and updated as necessary to ensure ongoing compliance with all state and federally mandated coverage requirements.
25. Manufacturers may either discontinue participation in, or may not participate in, the Medicaid Drug Rebate Program (MDRP). Under New York State Medicaid requirements, physician-administered drugs must be produced by manufacturers that participate in the MDRP. Products made by manufacturers that do not participate in the MDRP will not be covered under Medicaid Managed Care/HARP lines of business. Drug coverage will not be available for any product from a non-participating manufacturer. For a complete list of New/Reinstated & Terminated Labelers please visit: https://www.medicaid.gov/medicaid/prescriptiondrugs/medicaid-drug-rebate-program/newreinstated-terminated-labeler-information/index.html
26. The requested site of care may impact approval timeframe and is subject to review.
27. Approval timeframes may be extended to align authorization periods for drugs administered as part of a multidrug regimen, including when regimen components are administered across different benefits. This provision does not apply when the approval timeframe reflects a drug-specific limitation on duration of therapy.

Line of Business	Initial approval	Continued approval
Commercial, Exchange, and SafetyNet (Medicaid, HARP, CHP, Essential Plan)	2 years	2 years
Medicare	2 years	2 years

Table 1

Estimated comparative daily doses for inhaled glucocorticoids in adolescents ≥12 years and adults

Drug	Low dose (total daily dose)	Medium dose (total daily dose)	High dose (total daily dose)*
Beclomethasone HFA (Qvar RediHaler product available in United States) Administer as 2 divided doses	80 to 160 mcg	>160 to 320 mcg	>320 to 640 mcg
40 mcg per actuation	2 or 4 inhalations	¶	¶
80 mcg per actuation	2 inhalations	4 inhalations	6 or 8 inhalations
Beclomethasone HFAΔ (Qvar product available in Canada, Europe, and elsewhere) Administer as 2 divided doses	100 to 200 mcg	>200 to 400 mcg	>400 to 800 mcg
50 mcg per actuation	2 to 4 inhalations	¶	¶
100 mcg per actuation	2 inhalations	4 inhalations	6 or 8 inhalations
Budesonide DPI (Pulmicort Flexhaler product available in United States) Administer as 2 divided doses	180 to 360 mcg	>360 to 720 mcg	>720 to 1440 mcg
90 mcg per actuation	2 or 4 inhalations	¶	¶
180 mcg per actuation	2 inhalations	4 inhalations	6 or 8 inhalations
Budesonide DPIΔ (Pulmicort Turbuhaler or Turbohaler product available in Canada, Europe, and elsewhere) Administer low doses (ie, ≤400 mcg/day) once daily; administer higher doses (ie, >400 mcg/day) as 2 to 4 divided doses	200 to 400 mcg	>400 to 800 mcg	>800 to 2400 mcg
100 mcg per actuation	2 to 4 inhalations	¶	¶
200 mcg per actuation	1 to 2 inhalations	3 to 4 inhalations	¶
400 mcg per actuation	1 inhalation	2 inhalations	3 to 6 inhalations
Ciclesonide HFA (Alvesco product available in United States, Europe, and elsewhere) United States: Administer as 2 divided doses Australia, Europe, and elsewhere: Administer lower doses (ie, 160 to 320 mcg/day) once daily; administer 640 mcg dose as 2 divided doses	160 mcg	320 mcg	640 mcg
80 mcg per actuation	2 inhalations	4 inhalations	¶
160 mcg per actuation	◇	2 inhalations	4 inhalations
Ciclesonide HFAΔ (Alvesco product available in Canada) Administer lower doses (eg, 100 to 400 mcg) once daily; administer 800 mcg dose as 2 divided doses	100 to 200 mcg	>200 to 400 mcg	>400 to 800 mcg
100 mcg per actuation	1 to 2 inhalations	3 to 4 inhalations	¶
200 mcg per acutation	1 inhalation	2 inhalations	3 to 4 inhalations

Fluticasone propionate HFA (Flovent HFA product available in United States) Administer as 2 divided doses	176 to 220 mcg	>220 to 440 mcg	>440 to 1760 mcg
44 mcg per actuation	4 inhalations	¶	¶
110 mcg per actuation	2 inhalations	4 inhalations	¶
220 mcg per actuation	◇	2 inhalations	4 to 8 inhalations
Fluticasone propionate HFAΔ (Flovent HFA product available in Canada; Flixotide Evohaler product available in Europe and elsewhere) Administer as 2 divided doses	100 to 250 mcg	>250 to 500 mcg	>500 to 2000 mcg
50 mcg per actuation	2 to 4 inhalations	¶	¶
125 mcg per actuation	2 inhalations	4 inhalations	¶
250 mcg per actuation	◇	2 inhalations	4 to 8 inhalations
Fluticasone propionate DPI (Flovent Diskus product available in United States and Canada; Flixotide Accuhaler product available in Europe and elsewhere) Administer as 2 divided doses	100 to 250 mcg	>250 to 500 mcg	>500 to 2000 mcg
50 mcg per actuation	2 to 4 inhalations	¶	¶
100 mcg per actuation	2 inhalations	4 inhalations	¶
250 mcg per actuation	◇	2 inhalations	4 to 8 inhalations
500 mcg per actuation (strength not available in United States)	◇	◇	2 or 4 inhalations
Fluticasone propionate DPI (Armonair Digihaler product available in United States; Aermony Respiclick product available in Canada) Administer as 2 divided doses	110 mcg	226 mcg	464 mcg
55 mcg per actuation	2 inhalations	¶	¶
113 mcg per actuation	◇	2 inhalations	¶
232 mcg per actuation	◇	◇	2 inhalations
Fluticasone furoate DPI (Arnuity Ellipta product available in United States, Canada, Australia, and elsewhere, but not available in Europe or UK) Administer once daily **NOTE:** Inhaled fluticasone furoate has a greater anti-inflammatory potency per microgram than fluticasone propionate inhalers. Thus, fluticasone furoate is administered at a lower daily dose and used only once daily.	50 mcg (by use of pediatric DPI, which is off-label in adolescents and adults)	100 mcg	200 mcg
50 mcg per actuation	1 inhalation	¶	¶
100 mcg per actuation	◇	1 inhalation	2 inhalations
200 mcg per actuation	◇	◇	1 inhalation
Mometasone DPI (Asmanex Twisthaler product available in United States) May administer lower doses (ie, 220 to 440 mcg/day) once daily; administer 880 mcg dose as 2 divided doses	220 mcg	>220 to 440 mcg	>440 to 880 mcg
110 mcg per actuation	2 inhalations	¶	¶
220 mcg per actuation	1 inhalation	2 inhalations	4 inhalations

Mometasone DPI (Asmanex Twisthaler product available in United States) May administer lower doses (ie, 220 to 440 mcg/day) once daily; administer 880 mcg dose as 2 divided doses	220 mcg	>220 to 440 mcg	>440 to 880 mcg
110 mcg per actuation	2 inhalations	¶	¶
220 mcg per actuation	1 inhalation	2 inhalations	4 inhalations
Mometasone HFA (Asmanex HFA product available in United States) Administer as 2 divided doses	200 mcg	>200 to 400 mcg	>400 to 800 mcg
100 mcg per actuation	2 inhalations	4 inhalations	¶
200 mcg per actuation	◇	2 inhalations	4 inhalations
Mometasone DPIΔ (Asmanex Twisthaler product available in Canada, Europe, and elsewhere) May administer lower doses (ie, 200 to 400 mcg/day) once daily; administer 800 mcg dose as 2 divided doses	200 mcg	>200 to 400 mcg	>400 to 800 mcg
200 mcg per actuation	1 inhalation	2 inhalations	¶
400 mcg per actuation	◇	1 inhalation	2 inhalations

- **The most important determinant of appropriate dosing is the clinician's judgment of the patient's response to therapy.** The clinician must monitor the patient's response on several clinical parameters and adjust the dose accordingly. The stepwise approach to therapy emphasizes that once control of asthma is achieved, the dose of medication should be carefully titrated to the minimum dose required to maintain control, thus reducing the potential for adverse effects.
- Suggested total daily doses for low, medium, and high dose inhaled glucocorticoid regimens are based on daily doses recommended by Global Initiative for Asthma (GINA), National Asthma Education and Prevention Program (NAEPP), and/or product labeling[1-5]. This is not a table of equivalence.
- Depending on the specific product, total daily doses are administered once or divided and given twice daily. Refer to local product information or a clinical drug reference (eg Lexicomp).
- Some doses are outside the approved product information recommendations.

DPI: dry powder inhaler; HFA: hydrofluoroalkane propellant metered dose inhaler.

* Evidence for additional improvement with dose increases >1000 mcg/day is limited.

¶ Select alternate preparation with higher mcg/actuation to improve convenience.

Δ Products shaded in light gray color are not available in the United States but are available widely elsewhere.

◇ Select preparation with fewer mcg/actuation.

Table 2

Usual doses of combined inhaled glucocorticoids and bronchodilators

Medication	Low dose	Medium dose	High dose
ICS-SABA combination			
Budesonide-albuterol HFA (Brand name: Airsupra)*			
NOTE: Not used for maintenance therapy.			
Acute symptom relief: Budesonide-albuterol (80 mcg/90 mcg) 2 inhalations as needed (usual maximum: 12 inhalations/day).			
ICS-LABA combinations			
Beclomethasone [beclometasone]-formoterol DPI or HFA (Not available in United States or Canada, but available elsewhere [sample brand names: Formodual, Fostair, Foster])¶Δ			
100 mcg/6 mcg	1 inhalation twice a day	2 inhalations twice a day	
200 mcg/6 mcg			2 inhalations twice a day
Budesonide-formoterol HFA (Brand name: Symbicort)¶			
80 mcg/4.5 mcg	2 inhalations twice a day		
160 mcg/4.5 mcg		2 inhalations twice a day	
Fluticasone furoate-vilanterol DPI (Brand name: Breo Ellipta)Δ			
NOTE: Inhaled fluticasone furoate has a greater anti-inflammatory potency per microgram than fluticasone propionate inhalers. Thus, fluticasone furoate is administered at a lower daily dose and used only **once** daily.			
50 mcg/25 mcg◇	1 inhalation once daily		
100 mcg/25 mcg		1 inhalation once daily	
200 mcg/25 mcg			1 inhalation once daily
Fluticasone propionate-formoterol MDI (Not available in United States or Canada, but available elsewhere [sample brand name: Flutiform])			
50 mcg/5 mcg	2 inhalations twice daily		
125 mcg/5 mcg		2 inhalations twice daily	
250 mcg/10 mcg			2 inhalations twice daily
Fluticasone propionate-salmeterol DPI (Brand names: Advair Diskus, Wixela Inhub)Δ			
100 mcg/50 mcg	1 inhalation twice a day		
250 mcg/50 mcg		1 inhalation twice a day	
500 mcg/50 mcg			1 inhalation twice a day
Fluticasone propionate-salmeterol HFA (Brand name: Advair HFA)			
45 mcg/21 mcg	2 inhalations twice a day		
115 mcg/21 mcg		2 inhalations twice a day	
230 mcg/21 mcg			2 inhalations twice a day
Fluticasone propionate-salmeterol DPI (Brand names: AirDuo RespiClick, AirDuo Digihaler)Δ§			
55 mcg/14 mcg	1 inhalation twice a day		
113 mcg/14 mcg	1 inhalation twice a day	1 inhalation twice a day	
232 mcg/14 mcg			1 inhalation twice a day
Mometasone-formoterol HFA (Brand name: Dulera)			
100 mcg/5 mcg		2 inhalations twice a day	
200 mcg/5 mcg			2 inhalations twice a day
Mometasone-indacaterol DPI (Brand name: Atectura Breezhaler; available in Canada)Δ			
80 mcg/150 mcg	1 inhalation (capsule) once a day		
160 mcg/150 mcg		1 inhalation (capsule) once a day	
320 mcg/150 mcg			1 inhalation (capsule) once a day
ICS-LAMA-LABA combinations¥			
Fluticasone furoate-umeclidinium-vilanterol DPI (Brand name: Trelegy Ellipta)Δ			
100 mcg/62.5 mcg/25 mcg		1 inhalation once daily	
200 mcg/62.5 mcg/25 mcg			1 inhalation once daily
Mometasone-glycopyrrolate (glycopyrronium)-indacaterol DPI (Brand name: Enerzair Breezhaler; available in Canada)*Δ			
160 mcg/50 mcg/150 mcg			1 inhalation (capsule) once a day

Do not exceed the maximum number of inhalations/puffs per day listed in the table due to the risk of toxicity from an excess dose of long-acting beta-agonist (ie, salmeterol, formoterol, or vilanterol). Brand names and dose per puff or per inhalation of commercially available fixed dose combinations are according to United States prescribing information, unless otherwise noted. Consult local product information before use.

ICS: inhaled glucocorticoid (inhaled corticosteroid); SABA: short-acting beta-agonist; LABA: long-acting beta-agonist; LAMA: long-acting muscarinic antagonist; HFA: metered dose inhaler with hydrofluoroalkane propellant; DPI: dry powder inhaler; SMI: soft mist inhaler.

* Not approved for use in patients <18 years old.

¶ When using ICS-formoterol as reliever, use one to two inhalations as needed. Maximum daily dose of maintenance and rescue is 12 inhalations.

Δ DPI contains lactose which may have small amounts of milk protein.

◇ Fluticasone furoate-vilanterol 50 mcg/25 mcg DPI is approved for use in patients 5 to 11 years old; use in adolescents and adults is off-label.

§ In AirDuo inhalers, the daily dose of salmeterol is approximately one-fourth of the dose in Advair, and the daily dose of fluticasone is approximately one-half that of the comparable low-, medium-, and high-dose strengths of Advair.

¥ Alternatively, tiotropium SMI (Brand name: Spiriva Respimat) can be used with an ICS or ICS-LABA inhaler. The dose in asthma is two inhalations (1.25 mcg/inhalation) once daily.

Reference: Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention. https://ginasthma.org/wp-content/uploads/2023/05/GINA-2023-Full-Report-2023-WMS.pdf. Updated 2023 (Accessed on June 13, 2023).

UpToDate®

Table 3

Estimated comparative daily doses for inhaled glucocorticoids in children

Drug	Low daily dose		Medium daily dose		High daily dose	
	Child 0 to 4	Child 5 to 11	Child 0 to 4	Child 5 to 11	Child 0 to 4	Child 5 to 11
Beclomethasone HFA 40 or 80 mcg/puff	NA	40 mcg/puff - 1 to 2 puffs twice per day	NA	40 mcg/puff - 2 to 4 puffs twice per day 80 mcg/puff - 1 to 2 puffs twice per day	NA	80 mcg/puff - 3 to 4 puffs twice per day
Budesonide DPI* (breath activated) 90 or 180 mcg/inhalation	NA	90 mcg/inhalation - 1 to 2 inhalations twice per day	NA	180 mcg/inhalation - 1 to 2 inhalations twice per day	NA	180 mcg/inhalation - 3 to 4 inhalations twice per day
Budesonide nebulization suspension¶ 0.25 mg/2 mL, 0.5 mg/2 mL, or 1 mg/2 mL	0.25 to 0.5 mg once daily or as 2 divided doses	0.5 mg once daily or as 2 divided doses	0.75 to 1 mg once daily or as 2 or 3 divided doses	1 mg once daily or as 2 divided doses	1.25 to 2 mg once daily or as 2 divided doses	2 mg once daily or as 2 divided doses
Ciclesonide HFAΔ 80 or 160 mcg/puff	NA	80 mcg/puff - 1 to 2 puffs once daily	NA	80 mcg/puff - 3 to 4 puffs once daily	NA	80 mcg/puff - 5 to 6 puffs once daily or as 2 divided doses 160 mcg/puff - 3 puffs once daily or as 2 divided doses
Fluticasone HFA◇ 44, 110, or 220 mcg/puff	44 mcg/puff - 2 puffs twice per day◇	44 mcg/puff - 1 to 2 puffs twice per day	44 mcg/puff - 2 to 4 puffs twice per day 110 mcg/puff - 1 puff in AM and 2 puffs in PM	44 mcg/puff - 2 to 4 puffs twice per day 110 mcg/puff - 1 puff in AM and 2 puffs in PM	110 mcg/puff - 2 puffs twice per day 220 mcg/puff - 1 puff twice per day	110 mcg/puff - 2 puffs twice per day 220 mcg/puff - 1 puff twice per day
Fluticasone DPI (breath activated)§ 50, 100, or 250 mcg/inhalation	NA	50 mcg/inhalation - 1 to 2 inhalations twice per day	NA	50 mcg/inhalation - 3 to 4 inhalations twice per day 100 mcg/inhalation - 1 inhalation in AM and 2 inhalations in PM to 2 inhalations twice per day	NA	100 mcg/inhalation - 2 inhalations in AM and 3 inhalations in PM 250 mcg/inhalation - 1 inhalation twice per day
Mometasone aerosol DPI (breath activated)* 110 or 220 mcg/inhalation	NA	110 mcg/inhalation - 1 inhalation once daily	NA	110 mcg/inhalation - 2 to 3 inhalations once daily	NA	110 mcg/inhalation - 4 inhalations once daily or 2 inhalations twice per day 220 mcg/inhalation - 2 inhalations once daily or 1 inhalation twice per day
Mometasone HFA MDI 50, 100, or 200 mcg/puff	NA	50 mcg/puff - 1 puff once or twice per day	NA	50 mcg/puff - 2 to 3 puffs twice per day 100 mcg/puff - 1 puff twice per day	NA	100 mcg/puff - 2 puffs twice per day 200 mcg/puff - 1 inhalation twice per day

Some doses may be outside approved package labeling, especially in the high-dose range. Doses shown and strengths (ie, mcg per puff or inhalation) are based upon product descriptions approved in the United States, which may differ from how strengths are described for products available in other countries. Consult local product information before use.

HFA: hydrofluoroalkane; NA: not approved and no data available for this age group; DPI: dry-powder inhaler; AM: in morning; PM: in evening; US FDA: US Food and Drug Administration; MDI: metered-dose inhaler.

* Contains milk protein.

¶ Budesonide suspension is compatible with albuterol, ipratropium, and levalbuterol nebulizer solutions in the same nebulizer. Use only jet nebulizers as ultrasonic nebulizers are ineffective for suspensions.

Δ Ciclesonide is not approved by the US FDA for use in children under 12. It is approved for use in children 6 years of age and older in Canada, some European countries, and elsewhere.

◇ For fluticasone HFA, the low dose for children <4 years is higher than for children 5 to 11 years of age due to lower dose delivered with facemask and data on efficacy in young children.

§ Contains lactose.

Data from:

1. National Heart, Blood, and Lung Institute Expert Panel Report 3 (EPR 3): Guidelines for the Diagnosis and Management of Asthma. NIH Publication no. 08-4051, 2007.
2. Global Initiative for Asthma (GINA). Global Strategy for Asthma Management and Prevention. Updated 2012. Available at www.ginasthma.org.

Table 4

Comparison of representative topical corticosteroid preparations (classified according to the United States system)

Potency group*	Corticosteroid	Vehicle type/form	Brand names (United States)	Available strength(s), percent (except as noted)
Super-high potency (group 1)	Betamethasone dipropionate, augmented	Ointment (optimized)	Diprolene	0.05
		Gel, lotion	[Generic only]	0.05
	Clobetasol propionate	Cream, ointment	Temovate	0.05
		Gel, solution (scalp)	[Generic only]	0.05
		Cream	Tasoprol	0.05
		Cream (emollient base)	Temovate E¶	0.05
		Lotion, shampoo, spray aerosol	Clobex	0.05
		Foam aerosol	Olux, Olux-E, Tovet	0.05
		Lotion	Impeklo	0.05
		Ointment	Clobetavix	0.05
		Shampoo	Clodan	0.05
		Solution (scalp)	Cormax¶	0.05
	Diflucortolone valerate (not available in United States)	Ointment, oily cream	Nerisone Forte (United Kingdom, others)	0.3
	Fluocinonide	Cream	Vanos	0.1
	Flurandrenolide	Tape (roll)	Cordran	4 mcg/cm^2
High potency (group 2)	Amcinonide	Ointment	Cyclocort¶, Amcort¶	0.1
	Betamethasone dipropionate	Ointment	Diprosone¶	0.05
		Cream, augmented formulation (AF)	Diprolene AF	0.05
	Clobetasol propionate	Cream	Impoyz	0.025
	Desoximetasone	Cream, ointment, spray	Topicort	0.25
		Gel	Topicort	0.05
	Diflorasone diacetate	Ointment	ApexiCon¶, Florone¶	0.05
		Cream (emollient)	ApexiCon E	0.05
	Fluocinonide	Cream, gel, ointment, solution	Lidex¶	0.05
	Halcinonide	Cream, ointment, solution	Halog	0.1
	Halobetasol propionate	Lotion	Bryhali	0.01
High potency (group 3)	Amcinonide	Cream	Cyclocort¶, Amcort¶	0.1
		Lotion	Amcort¶	0.1
	Betamethasone dipropionate	Cream (hydrophilic emollient)	Diprosone¶	0.05
	Betamethasone valerate	Ointment	Valisone¶	0.1
		Foam	Luxiq	0.12
	Desoximetasone	Cream, ointment	Topicort, Topicort LP¶	0.05
	Diflorasone diacetate	Cream	Florone¶, Psorcon	0.05
	Diflucortolone valerate (not available in United States)	Cream, oily cream, ointment	Nerisone (United Kingdom, others)	0.1
	Fluocinonide	Cream (aqueous emollient)	Lidex-E¶	0.05
	Fluticasone propionate	Ointment	Cutivate¶	0.005
	Mometasone furoate	Ointment	Elocon¶	0.1
	Triamcinolone acetonide	Cream, ointment	Aristocort HP¶, Kenalog¶, Triderm	0.5

Medium potency (group 4)	Betamethasone dipropionate	Spray	Sernivo	0.05
	Clocortolone pivalate	Cream	Cloderm	0.1
	Fluocinolone acetonide	Ointment	Synalar	0.025
	Flurandrenolide	Ointment	Cordran	0.05
	Fluticasone propionate	Cream	Cutivate¶	0.05
	Hydrocortisone valerate	Ointment	Westcort¶	0.2
	Mometasone furoate	Cream, lotion, solution	Elocon¶	0.1
	Triamcinolone acetonide	Cream	Kenalog¶, Triderm	0.1
		Ointment	Kenalog¶	0.1
		Ointment	Trianex, Tritocin	0.05
		Aerosol spray	Kenalog	0.2 mg per 2 second spray
		Dental paste	Oralone	0.1
Lower-mid potency (group 5)	Betamethasone dipropionate	Lotion	Diprosone¶	0.05
	Betamethasone valerate	Cream	Beta-Val¶, Valisone¶	0.1
	Desonide	Ointment	DesOwen¶, Tridesilon¶	0.05
		Gel	Desonate, DesRx	0.05
	Fluocinolone acetonide	Cream	Synalar	0.025
	Flurandrenolide	Cream, lotion	Cordran, Nolix	0.05
	Fluticasone propionate	Lotion	Beser, Cutivate	0.05
	Hydrocortisone butyrate	Cream, lotion	Locoid, Locoid Lipocream	0.1
		Ointment, solution	[Generic only]	0.1
	Hydrocortisone probutate	Cream	Pandel	0.1
	Hydrocortisone valerate	Cream	Westcort¶	0.2
	Prednicarbate	Cream (emollient), ointment	Dermatop¶	0.1
	Triamcinolone acetonide	Lotion	Kenalog¶	0.1
		Ointment	Kenalog¶	0.025
Low potency (group 6)	Alclometasone dipropionate	Cream, ointment	Aclovate¶	0.05
	Betamethasone valerate	Lotion	Beta-Val¶, Valisone¶	0.1
	Desonide	Cream	DesOwen, Tridesilon	0.05
		Lotion	DesOwen¶, LoKara¶	0.05
		Foam	Verdeso	0.05
	Fluocinolone acetonide	Cream, solution	Synalar	0.01
		Shampoo	Capex	0.01
		Oil$^{\Delta}$	Derma-Smoothe/FS Body, Derma-Smoothe/FS Scalp	0.01
	Triamcinolone acetonide	Cream, lotion	Kenalog¶, Aristocort¶	0.025
Least potent (group 7)	Hydrocortisone (base, ≥2%)	Cream	Ala-Cort, Hytone¶, Nutracort¶	2.5
		Ointment	Hytone¶	2.5
		Lotion	Hytone¶, Ala Scalp, Scalacort DK	2
		Solution	Texacort	2.5
	Hydrocortisone (base, <2%)	Ointment	Cortaid¶, Cortizone 10, Hytone¶, Nutracort¶	1
		Cream	Ala-Cort, Cortaid¶, Cortizone 10, Hytone¶, KeriCort, Synacort¶	1
		Gel	Cortizone 10	1
		Lotion	Aquanil HC, Cortizone 10, Sarnol-HC	1
		Spray	Cortaid¶	1
		Solution	Cortaid¶, Noble¶, Scalp Relief, Scalpicin	1

* Listed by potency according to the United States classification system: group 1 is the most potent, group 7 is the least potent. Other countries use a different classification system with only 4 or 5 groups.

¶ Inactive United States brand name for specific product; brand may be available outside United States. This product may be available generically in the United States.

Δ 48% refined peanut oil.

Data from:

1. *Lexicomp Online. Copyright © 1978-2022 Lexicomp, Inc. All Rights Reserved.*
2. *Tadicherla S, Ross K, Shenefelt D. Topical corticosteroids in dermatology. Journal of Drugs in Dermatology 2009; 12:1093.*
3. *U.S. Food & Drug Administration Approved Drug Products with Therapeutic Equivalence (Orange Book). Available at: https://www.accessdata.fda.gov/scripts/cder/ob/default.cfm (Accessed on June 18, 2017).*
4. *The British Association of Dermatologists' information on topical corticosteroids – established and alternative proprietary names, potency, and discontinuation. British Association of Dermatologists. Available at: https://www.bad.org.uk/shared/get-file.ashx?id=3427&itemtype=document (Accessed on April 26, 2021).*

UPDATES:

Date:	Revision:
11/12/2026	Revised
09/14/2026	Revised
08/31/2026	Revised
08/25/2026	Revised as approved by P&T Committee 8/13/2026
08/13/2026	Reviewed / Approved P&T Committee
07/28/2026	Revised
06/12/2026	Revised
06/04/2026	Revised
06/01/2026	Revised
05/22/2026	Revised
03/27/2026	Revised
03/26/2026	Revised
02/12/2026	Reviewed / Approved P&T Committee
01/23/2026	Revised
11/19/2025	Revised
11/13/2025	Reviewed / Approved P&T Committee
09/02/2025	Revised
08/14/2025	Reviewed / Approved P&T Committee
08/08/2025	Revised
08/05/2025	Revised
07/28/2025	Revised
05/08/2025	Revised
03/06/2025	Revised
02/10/2025	Revised
01/23/2025	Revised
01/01/2025	Revised
12/09/2024	Revised
11/22/2024	Revised
11/21/2024	P&T Committee Review / Approval
11/07/2024	Revised
10/30/2024	Revised
07/05/2024	Revised
05/07/2024	Revised
04/11/2024	Revised
02/19/2024	Revised
01/26/2024	Revised
01/08/2024	Revised
11/30/2023	P&T Committee Approval
07/13/2023	Revised
06/28/2023	Revised
05/25/2023	Revised
03/20/2023	Revised
2/08/2023	Revised
11/17/2022	P&T Committee Approval
10/27/2022	Revised

8/24/2022	Revised
8/15/2022	Revised
6/28/2022	Revised
6/14/2022	Revised
4/2/2022	Revised
2/22/2022	Revision
1/1/2022	Revision
11/18/2021	P&T Committee Approval
11/2/2021	Revision
8/6/2021	Revision
5/23/2021	Revision
4/22/2021	Revision
11/2020	Revision & P&T Committee Approval
10/20	Revision
9/20	Revision
8/20	Revision
6/20	Revision
4/20	Revision
10/19	Revision
9/19	Revision
7/19	Revision
6/19	Revision
5/19	Revision
3/19	Revision
2/19	P&T Committee Approval
1/19	Revision
11/18	Revision
9/18	Revision
3/18	Revision
2/18	Revision
12/17	Revision
7/17	Revision
4/16	Revision
3/16	Revision
1/16	Revision
12/15	Created

REFERENCES:

1. Nucala® subcutaneous injection [prescribing information]. GlaxoSmithKline LLC, Philadelphia, PA 19112; revised 1/2022.

2. Pavord I, Korn S, Howarth P, et al. Mepolizumab for severe eosinophilic asthma (DREAM): a multicentre, double-blind, placebo-controlled trial. *The Lancet.* 2012; Volume 380, No. 9842: 651– 659.

3. Ortega H, Liu M, Pavord I, et al. Mepolizumab treatment in patients with severe eosinophilic asthma (MENSA). *N Engl J Med*. 2014; 371: 1198-1207.

4. Patterson MF, Borish L, Kennedy JL. The past, present, and future of monoclonal antibodies to IL- 5 and eosinophilic asthma: a review. *J Asthma Allergy.* 2015; 8:125-134.

5. Global Initiative for Asthma (GINA); Global Strategy for Asthma Management and Prevention; 2022. Available at http://www.ginasthma.org. Accessed June 9th, 2022.
6. Bel E, Wenzel S, Thompson P, et al. Oral Glucocorticoid-Sparing Effect of Mepolizumab in Eosinophilic Asthma. *N Engl J Med*. 2014; 371:1189-1197.
7. Xolair® subcutaneous injection [prescribing information]. South San Francisco, CA and East Hanover, NJ: Genentech, Inc. and Novartis Pharmaceuticals Corporation; September 2018.
8. 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.
9. Cinqair® intravenous infusion [prescribing information]. Teva Respiratory, LLC. Frazer, PA 19355; revised 3/2016.
10. National Asthma Education and Prevention Program Expert Panel 3. Expert panel report 3: guidelines for the diagnosis and management of asthma. Bethesda (MD): National Institutes of Health. National Heart, Lung, and Blood Institute; 2007 Aug. NIH Publication No. 07-4051.
11. Castro M, Zangrilli J, Wechsler ME. Reslizumab for inadequately controlled asthma with elevated blood eosinophil counts: results from two multicentre, parallel, double-blind, randomised, placebo- controlled, phase 3 trials. *Lancet Respir Med.* 2015 May;3(5):355-66.
12. Teva Pharmaceutical Industries. [Press Release]. Teva Announces FDA Approval of CINQAIR® (reslizumab) Injection. Available at: http://www.tevapharm.com/news/teva_announces_fda_approval_of_cinqair_reslizumab_injection_ 03_16.aspx. Accessed April 7th, 2016].
13. Food and Drug Administration. Pulmonary-Allergy Drugs Advisory Committee (PADAC) Meeting. Meeting Minutes. Available at: http://www.fda.gov/downloads/advisorycommittees/committeesmeetingmaterials/drugs/pulmonary-allergydrugsadvisorycommittee/ucm487402.pdf. Accessed April 12th, 2016.
14. Food and Drug Administration. Pulmonary-Allergy Drugs Advisory Committee (PADAC) Meeting. FDA Briefing Document. Available at: http://www.fda.gov/downloads/advisorycommittees/committeesmeetingmaterials/drugs/pulmonary-allergydrugsadvisorycommittee/ucm475759.pdf. Accessed April 12th, 2016.
15. National Heart Lung Blood Institute. Asthma Care Quick Reference: Diagnosing and Managing Asthma. Washington, DC: U.S. Department of Health and Human Services, 2012; NIH publication no. 12-5075.
16. Food and Drug Administration. [Press Release, 12/12/2017]. FDA approves first drug for Eosinophilic Granulomatosis with Polyangiitis, a rare disease formerly known as the Churg- Strauss Syndrome. Available at: https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm588594.htm. Accessed December 19th, 2017.
17. Fasenra® subcutaneous injection [prescribing information]. AstraZeneca Pharmaceuticals LP, Wilmington, DE 19850; 10/2019.
18. Villa-Forte, Alexandra. [Merck Manual Online]. Eosinophilic Granulomatosis with Polyangiitis (EGPA) (Churg-Strauss Syndrome). Available at: https://www.merckmanuals.com/professional/musculoskeletal-and-connective-tissue- disorders/vasculitis/eosinophilic-granulomatosis-with-polyangiitis-egpa. Accessed December 21st, 2017.
19. M.E. Wechsler, et al. Mepolizumab or Placebo for Eosinophilic Granulomatosis with Polyangiitis. *N Engl J Med.* 2017;376:1921-32.
20. Dupixent subcutaneous injection [prescribing information]. Sanofi-Aventis U.S. LLC (Bridgewater, NJ

08807)/Regeneron Pharmaceuticals, Inc. (Tarrytown, NY 10591); revised 9/2022.

21. The American Academy of Allergy, Asthma, & Immunology. Inhaled Corticosteroids. Available at: https://www.aaaai.org/tools-for-the-public/drug-guide/inhaled-corticosteroids. Accessed June 9th, 2022.

22. Estimated comparative daily doses for inhaled glucocorticoids in adolescents ≥ 12 years and adults. In: Post TW, ed. UpToDate. UpToDate; 2023. Accessed July 13, 2023.

23. Usual doses of combined inhaled glucocorticoids and bronchodilators. In: Post TW, ed. UpToDate. UpToDate; 2023. Accessed July 13, 2023.
24. Estimated comparative daily doses for inhaled glucocorticoids in children. In: Post TW, ed. UpToDate. UpToDate; 2023. Accessed July 13, 2023.

25. Orlandi RR, Kingdom TT, Hwang PH, et al. International Consensus Statement on Allergy and Rhinology: Rhinosinusitis. *Int Forum Allergy Rhinol*. 2016 Feb;6 Suppl 1:S22-209.

26. Roufosse F, Klion AD, and Weller PF. Hypereosinophilic Syndromes: Treatment. In: *UpToDate*, Post TW (Ed), UpToDate, Waltham, MA. Accessed June 9th, 2022.

27. Eichenfield LF, et al. Guidelines of Care for the Management of Atopic Dermatitis Section 2: Management and Treatment of Atopic Dermatitis with topical therapies. *J Am Acad Dermatol*. 2014 July; 71(1):116–132.

28. Sidbury R, et al. Guidelines of Care for the Management of Atopic Dermatitis Section 3: Management and Treatment with Phototherapy and Systemic Agents. *J Am Acad Dermatol*. 2014 August; 71(2):327–349.

29. Eichenfield LF, et al. Current Guidelines for the Evaluation and Management of Atopic Dermatitis: A Comparison of the Joint Task Force Practice Parameter and American Academy of Dermatology Guidelines. *J Allergy Clin Immunol*. 2017 April; 139(4):S49-S57.

30. The American Academy of Allergy, Asthma, & Immunology. Nasal Polyps. Available at: https://www.aaaai.org/conditions-and-treatments/library/allergy-library/nasal-polyps. Accessed October 8th, 2020.

31. Peters AT, et al. Diagnosis and Management of Rhinosinusitis: A Practice Parameter Update. *Ann Allergy Asthma Immunol*. 2014;113:347–85.

32. Rosenfeld RM, et al. Clinical Practice Guideline (Update): Adult Sinusitis. *Otolaryngol Head Neck Surg*. 2015 April;152(2 suppl):S1-S39.
33. Groh M, et al. Eosinophilic Granulomatosis with Polyangiitis (Churg-Strauss) (EGPA) Consensus Task Force Recommendations for Evaluation and Management. *European Journal of Internal Medicine*. 2015 September; 26(7):545-553.

34. Yates M, et al. EULAR/ERA-EDTA Recommendations for the Management of ANCA-Associated Vasculitis. *Ann Rheum Dis*. 2016;75:1583-1594.
35. Butt NM, et al. Guideline for the Investigation and Management of Eosinophilia. *British Journal of Haematology*. 2017 January; 176(4):553-572.

36. The American Academy of Allergy, Asthma, & Immunology. Hypereosinophilic Syndrome (HES). Available at: https://www.aaaai.org/conditions-and-treatments/related-conditions/hypereosinophilic-syndrome. Accessed October 8th, 2020.

37. American Partnership for Eosinophilic Disorders (Apfed). Hypereosinophilic Syndromes. Available at:

https://apfed.org/about-ead/hypereosinophilic-syndrome. Accessed October 8th, 2020.

38. Wollenberg A, et al. Consensus-based European guidelines for treatment of atopic eczema (atopic dermatitis) in adults and children: part I. *J Eur Acad Dermatol Venereol*. 2018;32(5):657- 682.

39. Wollenberg A, et al. Consensus-based European guidelines for treatment of atopic eczema (atopic dermatitis) in adults and children: part II. *J Eur Acad Dermatol Venereol*. 2018;32(6):850- 878.

40. Shomali W, Gotlib J. World Health Organization-defined eosinophilic disorders: 2019 update on diagnosis, risk stratification, and management. *Am J Hematol*. 2019;94(10):1149-1167.

41. 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 Rheumatol*. 2021 Aug;73(8):1366-1383.

42. Adbry® subcutaneous injection [prescribing information]. Madison, NJ: Leo; December 2023.

43. The National Eczema Association. Eczema stats. Available at: https://nationaleczema.org/research/eczema-facts/. Accessed on February 3rd, 2021.

44. Bieber T. Interleukin-13: targeting an underestimated cytokine in atopic dermatitis. *Allergy*. 2020;75(1):54-62.

45. Bachert C, et. al. EUFOREA expert board meeting on uncontrolled severe chronic rhinosinusitis with nasal polyps (CRSwNP) and biologics: Definitions and management. *J Allergy Clin Immunol*. 2021 Jan;147(1):29-36.

46. Fokkens WJ, et al. European position paper on rhinosinusitis and nasal polyps 2020. *Rhinology.* 2020;58(29 suppl):1-481.

47. Hirano I, et al. AGA Institute and the Joint Task Force on Allergy-Immunology Practice Parameters Clinical Guidelines for the Management of Eosinophilic Esophagitis. *Gastroenterology*. 2020;158(6):1776-86.

48. Katzka DA. Eosinophilic esophagitis*. Ann. Intern. Med*. 2020;May 5;172(9):ITC65-ITC80.

49. The American College of Gastroenterology. Eosinophilic Esophagitis. Available at: https://gi.org/topics/eosinophilic-esophagitis/. Accessed on June 9th, 2022.

50. The American Academy of Allergy, Asthma, & Immunology. Eosinophilic Esophagitis. Available at: https://www.aaaai.org/Conditions-Treatments/related-conditions/eosinophilic-esophagitis. Accessed June 9th, 2022.
51. Watsky, K. Prurigo Nodularis. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. Accessed October 27th, 2022.

52. Elmariah S, et al. Practical approaches for diagnosis and management of prurigo nodularis: United States expert panel consensus. *J Am Acad Dermatol.* 2021;84(3):747-760.
53. Comparison of representative topical corticosteroid preparations (classified according to the United States system). In: *UpToDate*, Post TW (Ed), UpToDate, Waltham, MA. Accessed October 27th, 2022.
54. NEMLUVIO (nemolizumab-ilto) subcutaneous injection [prescribing information]. Galderma Laboratories, L.P., 06/2025.
55. EXDENSUR (depemokimab-ulaa) subcutaneous injection [prescribing information]. GlaxoSmithKline LLC., 12/ 2025
56. ICOTYDE™ (icotrokinra) tablets [prescribing information]. Janssen Biotech, Inc.03/2026