

Cytokine and CAM Antagonists: IL-4/IL-13 Inhibitors

Medical policy no. 66.27.00.AB-4
Year

Effective Date: Month, 1,

Related medical policies:

Policy Number	Policy Name
66.27.00.AA	Cytokine and CAM Antagonists: Tumor Necrosis Factor (TNF) Inhibitors
66.27.00.AC	Cytokine and CAM Antagonists: IL-6 Inhibitors
66.27.00.AD	Cytokine and CAM Antagonists: IL-12/IL-23 Inhibitors
66.27.00.AE	Cytokine and CAM Antagonists: IL-17 Inhibitors
66.27.00.AF	Cytokine and CAM Antagonists: Oral PDE-4 Inhibitors
66.27.00.AG	Cytokine and CAM Antagonists: T-Lymphocyte Inhibitors
66.27.00.AH	Cytokine and CAM Antagonists: Janus Associated Kinase (JAK) Inhibitors
66.27.00.AI	Cytokine and CAM Antagonists: IL-1 Inhibitors
66.27.00.AJ	Cytokine and CAM Antagonists: Integrin Receptor Antagonists
66.27.00.AK	Cytokine and CAM Antagonists: S1-P Receptor Modulator

Note: New-to-market drugs included in this class based on the Apple Health Preferred Drug List are non-preferred and subject to this prior authorization (PA) criteria. Non-preferred agents in this class require an inadequate response or documented intolerance due to severe adverse reaction or contraindication to at least TWO preferred agents. If there is only one preferred agent in the class documentation of inadequate response to ONE preferred agent is needed. If a drug within this policy receives a new indication approved by the Food and Drug Administration (FDA), medical necessity for the new indication will be determined on a case-by-case basis following FDA labeling.

To see the list of the current Apple Health Preferred Drug List (AHPDL), please visit: <https://www.hca.wa.gov/assets/billers-and-providers/apple-health-preferred-drug-list.xlsx>

Medical necessity

Drug	Medical Necessity
Dupilumab (Dupixent) Tralokinumab (Adbry)	IL-4 and IL-13 inhibitors may be considered medically necessary in patients who meet the criteria described in the clinical policy below.

	<p>If all criteria are not met, the clinical reviewer may determine there is a medically necessary need and approve on a case-by-case basis. The clinical reviewer may choose to use the reauthorization criteria when a patient has been previously established on therapy and is new to Apple Health.</p> <p>Patients new to Apple Health or new to an MCO who are requesting regimens for continuation of therapy are reviewed following the reauthorization criteria listed below.</p>
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Clinical policy:

Clinical Criteria	
<p>Atopic dermatitis (AD) Dupilumab (Dupixent) Tralokinumab (Adbry)</p>	<p>Dupilumab (Dupixent) may be approved when all the following documented criteria are met:</p> <ol style="list-style-type: none"> 1. Patient is 6 months of age or older; AND 2. Prescribed by, or in consultation with an allergist, dermatologist or an immunologist; AND 3. Not used in combination with another Cytokine and CAM medication; AND 4. Diagnosis of moderate to severe atopic dermatitis; AND 5. Patient meets one of the following: <ol style="list-style-type: none"> a. Body surface area (BSA) involvement of at least 10%; OR b. Disease severity scale scoring demonstrating severe chronic atopic dermatitis (e.g., Investigator’s Global Assessment (IGA) score of 3 or greater; Eczema Area and Severity Index (EASI), Patient Oriented Eczema Measure (POEM), etc.); AND 6. Patient is experiencing functional impairment due to atopic dermatitis, which may include, but is not limited to: <ol style="list-style-type: none"> a. Activities of daily living (ADLs); OR b. Skin infections; OR c. Sleep disturbances; AND 7. History of failure, defined as the inability to achieve or maintain remission to at LEAST TWO of the following groups unless contraindicated or clinically inappropriate [minimum trial of 28-days each]: <ol style="list-style-type: none"> a. Group 1: Topical corticosteroids of at least medium/moderate potency (e.g. clobetasol, betamethasone, halobetasol) b. Group 2: Topical calcineurin inhibitors (e.g. pimecrolimus cream, tacrolimus ointment) c. Group 3: Topical PDE-4 inhibitors (e.g. crisaborole). <p>Tralokinumab (Adbry) may be approved when all the following documented criteria are met:</p> <ol style="list-style-type: none"> 1. Criteria 2-7 is met; AND 2. Patient is 12 years of age or older, AND

	<p>3. Treatment with dupilumab (Dupixent) has been ineffective, contraindicated, or not tolerated [minimum trial of 16 weeks].</p> <p>If ALL criteria are met, the request will be authorized for 6 months.</p> <p>Criteria (Reauthorization)</p> <p>Dupilumab (Dupixent), tralokinumab (Adbry) may be approved when all the following criteria are met:</p> <ol style="list-style-type: none"> 1. Not used in combination with another Cytokine and CAM medication; AND 2. Documentation is submitted demonstrating disease stability, or a positive clinical response defined by both (a and b) of the following: <ol style="list-style-type: none"> a. At least ONE of the following: <ol style="list-style-type: none"> i. Reduction in body surface area involvement of at least 20%; OR ii. Achieved or maintained clear or minimal disease from baseline (equivalent to IGA score of 0 or 1); OR iii. Experienced or maintained a decrease in EASI score of at least 50%; AND b. An improvement in functional impairment (e.g., improvement in ADLs, skin infections, or sleep disturbance). <p>If ALL criteria are met, the request will be authorized for 12 months.</p>
<p>Asthma Dupilumab (Dupixent)</p>	<p>Dupilumab (Dupixent) may be approved when all the following documented criteria are met:</p> <ol style="list-style-type: none"> 1. Patient is 6 years of age or older, AND 2. Prescribed by, or in consultation with an allergist, ENT (ear, nose, throat), immunologist, or pulmonologist; AND 3. Not used in combination with another Cytokine and CAM medication; AND 4. Patient has MODERATE asthma as defined by one of the following: <ol style="list-style-type: none"> a. Daily symptoms; OR b. Nighttime awakenings > 1x/week but not nightly; OR c. SABA (e.g. albuterol, levalbuterol) use for symptom control occurs daily; OR d. Some limitation to normal activities; OR e. Lung function (percent predicted FEV1) >60%, but <80%; OR

- f. Exacerbations requiring oral systemic corticosteroids are generally more frequent and intense relative to mild asthma; **OR**
- 5. Patient has **SEVERE** asthma as defined by one of the following:
 - a. Symptoms throughout the day; **OR**
 - b. Nighttime awakenings, often 7x/week; **OR**
 - c. SABA (e.g. albuterol, levalbuterol) use for symptom control occurs several times per day; **OR**
 - d. Extremely limited normal activities; **OR**
 - e. Lung function (percent predicted FEV1) <60%; **OR**
 - f. Exacerbations requiring oral systemic corticosteroids are generally more frequent and intense relative to moderate asthma; **AND**
- 6. Patient must have asthma with an eosinophilic phenotype defined as blood eosinophils ≥ 150 cells/ μ L within the last 12 months; **AND**
- 7. Patient must have two or more exacerbations in the previous year requiring daily oral corticosteroids for at least 3 days (in addition to the regular maintenance therapy defined below); **OR**
- 8. Patient is dependent on oral corticosteroids for asthma control; **AND**
- 9. Patient is currently being treated with:
 - a. A medium- to high-dose, or maximally tolerated inhaled corticosteroid (ICS) [e.g., budesonide, fluticasone, mometasone]; **AND**
 - i. One additional asthma controller medication (e.g., long-acting beta-2 agonist [LABA] {e.g., Serevent Diskus}, long-acting muscarinic antagonist [LAMA] {e.g., Spiriva Respimat}, leukotriene receptor antagonist [e.g., Singulair], or theophylline); **OR**
 - b. A maximally tolerated ICS/LABA combination product (e.g., Advair, Airduo, Breo, Dulera, Symbicort); **AND**
- 10. Asthma controller medications (e.g., Advair, Airduo, Breo, Dulera, Symbicort) will be continued with the use of Dupixent, unless contraindicated

If ALL criteria are met, the request will be authorized for **12 months**.

Criteria (Reauthorization)

Dupilumab (Dupixent) may be approved when all the following documented criteria are met:

	<ol style="list-style-type: none"> 1. Not used in combination with another Cytokine and CAM medication; AND 2. Documentation is submitted demonstrating disease stability or a positive clinical response (e.g., reduced asthma exacerbations, FEV1, reduced systemic corticosteroid requirements, reduced hospitalizations); AND 3. Asthma controller medications (e.g., ICS/LABA product listed above) will be continued with the use of dupilumab (Dupixent), unless contraindicated <p>If ALL criteria are met, the request will be authorized for 12 months.</p>
<p>Chronic rhinosinusitis with nasal polyposis (CRSwNP) Dupilumab (Dupixent)</p>	<p>Dupilumab (Dupixent) may be approved when all the following documented criteria are met:</p> <ol style="list-style-type: none"> 1. Patient is 18 years of age or older, AND 2. Prescribed by, or in consultation with an allergist, ENT (ear, nose, throat), immunologist, or otolaryngologist; AND 3. Not used in combination with another Cytokine and CAM medication; AND 4. Diagnosis of chronic rhinosinusitis with nasal polyposis (CRSwNP); AND 5. Diagnosis of bilateral sinonasal polyposis as evidenced by an endoscopy or computed tomography (CT); AND 6. Patient has impaired Health-Related Quality of Life due to ongoing nasal congestion, blockage, or obstruction with moderate to severe symptom severity; AND 7. Patient has at least <u>one</u> of the following symptoms: <ol style="list-style-type: none"> a. Nasal discharge; OR b. Facial pain or pressure; OR c. Reduction or loss of smell; AND 8. History of failure, contraindication, or intolerance to either of the following: <ol style="list-style-type: none"> a. Intranasal corticosteroids [minimum trial of two months]; OR b. Oral systemic corticosteroid therapy within the last 12 months; AND 9. Background intranasal corticosteroid (e.g., beclomethasone [Qnasl], budesonide [Rhinocort], ciclesonide [Omnaris; Zetonna], flunisolide, fluticasone [Flonase], mometasone [Nasonex], triamcinolone [Nasacort]) will be continued with the use of Dupixent, unless contraindicated <p>If ALL criteria are met, the request will be authorized for 12 months.</p>
	<p>Criteria (Reauthorization) Dupilumab (Dupixent) may be approved when all the following documented criteria are met:</p>

	<ol style="list-style-type: none"> 1. Not used in combination with another Cytokine and CAM medication; AND 2. Documentation is submitted demonstrating disease stability or a positive clinical response (e.g., improvement in nasal congestion/obstruction severity, reduction in nasal polyps); AND 3. Background intranasal corticosteroid (e.g., beclomethasone [Qnasl], budesonide [Rhinocort], ciclesonide [Omnaris; Zetonna], flunisolide, fluticasone [Flonase], mometasone [Nasonex], triamcinolone [Nasacort]) will be continued with the use of dupilumab (Dupixent), unless contraindicated <p>If ALL criteria are met, the request will be authorized for 12 months.</p>
<p>Eosinophilic esophagitis (EoE) Dupilumab (Dupixent)</p>	<p>Dupilumab (Dupixent) may be approved when all the following documented criteria are met:</p> <ol style="list-style-type: none"> 1. Patient is 1 year of age or older, AND 2. Prescribed by, or in consultation with an allergist, gastroenterologist, or ENT (ear, nose, throat); AND 3. Not used in combination with another Cytokine and CAM medication; AND 4. Diagnosis of Eosinophilic Esophagitis (EoE); AND 5. Patient weighs at least 15 kg (33 lbs); AND 6. Patient meets all the following: <ol style="list-style-type: none"> a. Symptoms consistent with eosinophilic esophagitis (e.g., dysphagia, food impaction, vomiting, central chest and upper abdominal pain, etc.); AND b. Eosinophil-predominant inflammation, consisting of a peak value of ≥ 15 eos/hpf or ~ 60 eosinophils/mm², as confirmed by endoscopic biopsy; AND c. Underlying cause of the patient's condition is NOT considered to be any other allergic condition(s) or other form(s) of esophageal eosinophilia; AND 7. Patient has experienced persistent EoE symptoms during or following an adequate trial of dietary restriction (e.g., empiric elimination diet) [minimum trial of 2 months]; AND 8. History of failure, contraindication, or intolerance with at least one agent to ALL the following classes: <ol style="list-style-type: none"> a. Proton pump inhibitors (PPIs) [minimum trial of 2 months]; AND b. Swallowed topical corticosteroids (e.g., fluticasone, budesonide) [minimum trial of 12 weeks] <p>If ALL criteria are met, the request will be authorized for 12 months.</p> <p>Criteria (Reauthorization)</p>

	<p>Dupilumab (Dupixent) may be approved when all the following documented criteria are met:</p> <ol style="list-style-type: none"> 1. Not used in combination with another Cytokine and CAM medication; AND 1. Documentation is submitted demonstrating disease stability or a positive clinical response (e.g., improvement in dysphagia/vomiting/abdominal pain, reduction in eosinophils). <p>If ALL criteria are met, the request will be authorized for 12 months.</p>
<p>Prurigo nodularis Dupilumab (Dupixent)</p>	<p>Dupilumab (Dupixent) may be approved when all the following documented criteria are met:</p> <ol style="list-style-type: none"> 1. Patient is 18 years of age or older, AND 2. Prescribed by, or in consultation with an allergist, dermatologist or immunologist; AND 3. Not used in combination with another Cytokine and CAM medication; AND 4. Diagnosis of moderate to severe prurigo nodularis based on all the following: <ol style="list-style-type: none"> a. Presence of ≥ 20 nodules for at least 3 months; AND b. Worst-Itch Numeric Rating Scale (WI-NRS) score of at least 7; AND c. Underlying cause of prurigo nodularis is not considered to be drug-induced or caused by other medical conditions, such as dermatillomania; AND 5. Treatment with at least one medium to very high potency topical corticosteroid has been ineffective, not tolerated, or contraindicated [minimum trial of 4 weeks]; AND 6. History of failure or intolerance to ONE of the following, unless ALL are contraindicated: <ol style="list-style-type: none"> a. Topical calcineurin inhibitors (e.g. pimecrolimus cream, tacrolimus ointment) [minimum trial of 3 weeks]; OR b. Topical vitamin D analogue (e.g., calcipotriene) [minimum trial of 3 weeks]; OR c. Phototherapy (UVA or PUVB) [minimum trial of 1 month]; OR d. Systemic immunosuppressants (e.g. methotrexate or cyclosporine) [minimum trial of 3 weeks]. <p>If ALL criteria are met, the request will be authorized for 6 months.</p>
	<p>Criteria (Reauthorization)</p> <p>Dupilumab (Dupixent) may be approved when all the following documented criteria are met:</p>

	<ol style="list-style-type: none"> 1. Not used in combination with another Cytokine and CAM medication; AND 2. Documentation is submitted demonstrating disease stability or a positive clinical response (e.g., reduced itching/pruritus, improved skin appearance, reduction in number of nodules, etc.). <p>If ALL criteria are met, the request will be authorized for 12 months.</p>
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Dosage and quantity limits

Drug	Indication	FDA Approved Dosing	Dosage Form and Quantity Limit
Adbry	Atopic dermatitis (moderate to severe)	<ul style="list-style-type: none"> • 600 mg subQ followed by 300 mg every other week • 300 mg (2 syringes)/28 days may be considered for patients under 100 kg who achieve clear skin 	150 mg prefilled syringe (PFS) 300 mg auto injector First Month: 6 syringes/28 days Maintenance: 4 syringes/28 days
Dupilixent	Asthma (moderate to severe)	<p>Adult:</p> <ul style="list-style-type: none"> • 400 mg subQ once followed by 200 mg every other week or 600 mg subQ once followed by 300 mg every other week • (Oral corticosteroid-dependent asthma) 600 mg subQ once followed by 300 mg every other week <p>Pediatric:</p> <ul style="list-style-type: none"> • 6 to 11 years, 15 – 30 kg: 100 mg subQ every other week or 300 mg every 4 weeks • 6 to 11 years, 30 kg or greater: 200 mg subQ every other week 	200 mg/1.14mL pen or PFS or 300 mg/2mL pen or PFS <p style="text-align: center;">Adult:</p> <p>First Month: 4 (200mg <u>OR</u> 300mg) syringes/pens (4.56mL <u>OR</u> 8ml)/42 days Maintenance: 2 (200mg <u>OR</u> 300mg) syringes/pens (2.28mL <u>OR</u> 4ml)/28 days</p> <p style="text-align: center;">Pediatric (6-11 years of age):</p> <p>No Loading Dose Maintenance:</p> <ul style="list-style-type: none"> • 15 to less than 30 kg: 1 (200mg/1.14mL) syringes (2.28mL)/28 days; OR 1 (300mg/2mL) syringes/pens (2mL)/28days • 30 kg or more: 2 (200mg/1.14mL) syringes/pens (2.28mL)/28 days

		<ul style="list-style-type: none"> 12 years or older: follow adult dosing 	
	Atopic Dermatitis (moderate to severe);	<p>Adults</p> <ul style="list-style-type: none"> 600 mg subQ once followed by 300 mg every other week <p>Pediatric</p> <ul style="list-style-type: none"> 6 months to 5 years, 5 – 15 kg: 200 mg every 4 weeks 6 months to 5 years, 15 – 30 kg: 300 mg every 4 weeks 6 years or older, 15 – 30 kg: 600 mg subQ once followed by 300 mg every 4 weeks 6 years or older, 30 – 60 kg: 400 mg subQ once followed by 200 mg every other week 6 years or older, 60 kg or more: 600 mg subQ once followed by 300 mg every other week 	<p>Adult:</p> <p>First Month: 4 (300mg) syringes/pens (8 mL)/28 days Maintenance: 2 (300mg) syringes/pens (4 mL)/28 days</p> <p>Pediatric (6 – 17 years of age):</p> <p>First Month:</p> <ul style="list-style-type: none"> 15 to less than 30 kg: 2 (300mg) syringes/pens (4 mL)/28 days 30 to less than 60 kg: 4 (200mg) syringes/pens (4.56 mL)/28 days 60 kg or more: 4 (300mg) syringes/pens (8 mL)/28 days <p>Maintenance:</p> <ul style="list-style-type: none"> 15 to less than 30 kg: 1 (300mg) syringes/pens (2 mL)/28 days 30 to less than 60 kg: 2 (200mg) syringes/pens (2.28 mL)/28 days 60 kg or more: 2 (300mg) syringes/pens (4 mL)/28 days <p>Pediatric (6 months – 5 years of age):</p> <p>No Loading Dose</p> <p>Maintenance:</p> <ul style="list-style-type: none"> 5 to less than 15kg: 2 (200mg) syringe/pen (2.28mL)/56 days 15 to less than 30kg: 2 (300mg) syringes/pens (4mL)/56 days
	Atopic Dermatitis and comorbid Asthma (moderate to severe)	<p>Adults</p> <ul style="list-style-type: none"> 600 mg subQ once followed by 300 mg every other week <p>Pediatric</p> <ul style="list-style-type: none"> 6 to 11 years, 15 – 30 kg: 600 mg subQ once followed by 300 mg every 4 weeks 6 to 11 years, 30 kg – 60 kg: 400 mg subQ once followed by 200 mg every other week 6 to 11 years, 60 kg or greater: 600 mg subQ once followed by 300 mg every other week 	

		<ul style="list-style-type: none"> 12 years or older: follow adult dosing 	
	Chronic Rhinosinusitis with Nasal Polyposis	300 mg subQ every other week	2 (300mg) syringes/pens (4 mL)/28 days
	Eosinophilic Esophagitis	<p>Pediatric Patients 1 year and older, weighing at least 15 kg</p> <ul style="list-style-type: none"> 15-30 kg: 200 mg subQ every other week 30-40 kg: 300 mg subQ every other week 40 kg or greater: 300 mg subQ every week <p>Adult dosing: 300 mg subQ every week</p>	<p>Pediatric Patients (1 Year and Older)</p> <p>No Loading Dose</p> <p>Maintenance:</p> <ul style="list-style-type: none"> 15 to less than 30kg: 2 (200mg) syringes/pens (2.28 mL)/28 days 30 to less than 40kg: 2 (300mg) syringes/pens (2 mL)/28 days 40kg and more: 4 (300mg) syringes/pens (8mL)/28 days <p>Adult dosing: 4 (300mg) syringes/pens (8mL)/28 days</p>
	Prurigo Nodularis	600 mg subQ once followed by 300 mg every other week	<p>First month: 4 (300mg) syringes/pens (8 mL)/28 days</p> <p>Maintenance: 2 (300mg) syringes/pens (4 mL)/28 days</p>

Coding:

HCPCS Code	Description
<HCPCS Code>	N/A

Background:

Atopic dermatitis

Treatments for mild-to-moderate AD include topical corticosteroids (TCS), topical calcineurin inhibitors (TCI), phototherapy, and/or crisaborole (Eucrisa) – a PDE4 inhibitor. Symptomatic treatments include oral and topical antihistamines and sleep aids for nighttime pruritus. Treatment choice between these products is dependent on severity, location, and other patient specific factors (e.g., allergies, age). According to [American Academy of Dermatology \(AAD\) guidelines](#), TCIs may be preferable to TCS in patients with recalcitrance to steroids, sensitive areas involved, steroid-induced atrophy, and long-term uninterrupted topical steroid use. Treatment for moderate to severe disease not amenable to topicals includes systemic immunosuppressants (e.g., corticosteroids, cyclosporine, methotrexate, azathioprine, mycophenolate mofetil), JAK inhibitors (e.g., abrocitinib, upadacitinib), and dupilumab (Dupixent). Currently, there are no head to head trials evaluating safety and/or efficacy differences or superiority between biologic therapies in atopic dermatitis.

Asthma

Asthma is a chronic respiratory condition caused by inflammation of the airways, where inflammation triggers airway narrowing and subsequent difficulty breathing. The etiology of asthma is unclear though epidemiology has attributed genetic susceptibility, race, host factors (i.e., obesity, nutrition, infection, allergic sensitization), and environmental exposures to increased disease burden. Of the approximately 339 million individuals with asthma globally (25 million in the United States), up to 10% have severe asthma. Per the [Global Initiative for Asthma \(GINA\) guidelines](#) first line treatment includes ICS-formoterol inhalers. In those with poor control, such as moderate to severe asthma, patients may require high dose inhaled corticosteroids (ICS), or continuous to near continuous oral glucocorticoids to maintain asthma control. Biologic therapies have been developed to target pathways involved with asthma phenotypes (i.e., allergic asthma and eosinophilic asthma). Allergic asthma is associated with allergic rhinitis, atrophy, and elevated immunoglobulin E (IgE) levels and impacts nearly-half of all asthma patients. Biologics to target these mediators include IL-5, anti-IL-5R, anti-IL-4R anti-IL-13, and anti-IgE therapies.

Chronic rhinosinusitis with nasal polyposis

Chronic rhinosinusitis (CRS) is broadly defined as an inflammatory disorder of the paranasal sinuses and linings of the nasal passages that lasts 12 weeks or longer. CRS may present abruptly, begin as a nonspecific upper respiratory infection or acute sinusitis that fails to resolve, or develop slowly and insidiously over months or years. CRS with nasal polyps (CRSwNP) is characterized by the presence of bilateral nasal polyps in the middle meatus. Nasal polyps are translucent, yellowish-gray to white, glistening masses composed of gelatinous inflammatory material, which may form in the nasal cavity or paranasal sinuses. [The American Academy of Allergy, Asthma, and Immunology \(AAAAI\), American College of Allergy, Asthma, and Immunology \(ACAAI\), and Joint Council of Allergy, Asthma, and Immunology \(JCAAI\) 2014 guidelines](#) recommend short-term treatment with oral steroids in patients with CRSwNP “because it decreases nasal polyp size and symptoms”. Additionally, guidelines recommend both intranasal corticosteroids and omalizumab for treatment of CRSwNP. Dupilumab (Dupixent) approval was based on results from two phase 3 pivotal trials, SINUS-24 and SINUS-52. Dupilumab in combination with mometasone nasal spray demonstrated an improvement in nasal congestion/obstruction severity as compared to the placebo arm.

Prurigo nodularis

Prurigo nodularis (PN) is distinct from other pruritic disorders as its core symptoms include presence of multiple firm, nodular lesions distributed symmetrically on the trunk, arms, and/or legs with chronic pruritus lasting greater than 6 weeks in duration. Clinical experience and expert consensus guidelines (i.e. [Practical approaches for diagnosis and management of prurigo nodularis: United States expert panel consensus](#), [Diagnostic and treatment algorithm for chronic nodular prurigo](#)) recommend the use of the following treatment modalities with goals to reduce pruritus and reduce/heal nodules. Topical steroids are often used as first line therapies and, alternatively, intralesional corticosteroid injections for thick PN nodules. Calcineurin inhibitors and capsaicin may be used in recalcitrant disease or when corticosteroids are not appropriate. Narrowband ultraviolet B (UVB) phototherapy is occasionally used as an adjunct therapy for patients unresponsive to topical pharmacotherapy. Systemic therapies (e.g. oral immunosuppressants such as methotrexate or cyclosporine) have been used off label with success and also recommended per consensus guidelines. Dupilumab (Dupixent) is the first FDA-approved treatment for adults with PN and its approval was based on two phase 3 randomized, double blind, placebo-controlled trials which demonstrated a significantly higher response rate in patients with at least a four-point reduction in worse itch score (WI-NRS).

Eosinophilic esophagitis

Eosinophilic esophagitis (EoE) is a chronic, immune/antigen-mediated esophageal disease characterized clinically by symptoms related to esophageal dysfunction and histologically by eosinophil-predominant inflammation. A diagnosis of EoE is made when all of the following are present: symptoms related to esophageal dysfunction (e.g., dysphagia, food impaction, abdominal pain), eosinophil-predominant inflammation on esophageal biopsy, characteristically consisting of a peak value of ≥ 15 eosinophils per high power field (HPF) (or 60 eosinophils per mm²), and exclusion of other conditions that may be contributing to symptoms of EoE. Dietary restriction is used as a first-line strategy to combat EoE symptoms, including dysphagia and abdominal pain. The [American Gastroenterological Association \(AGA\) and the Joint Task Force on Allergy-Immunology Practice Parameters \(JTF\) guidelines](#) strongly recommend treatment with swallowed topical steroids; supported therapies in this class include fluticasone and budesonide. Guidelines also conditionally recommend the use of proton pump inhibitors (PPIs) which have been considered as a standard of care for EoE and the clinical trials for Dupixent required previous trial of an 8-week treatment with high dose PPI. Dupilumab (Dupixent) is the first medication to gain FDA approval for this indication and its approval was based on the Liberty EoE TREET trial, which demonstrated a statistically significant improvement in patients achieving histological remission.

References

1. Dupixent [Prescribing Information]. Tarrytown, NY and Bridgewater, NJ: Regeneron Pharmaceuticals, Inc and Sanofi Genzyme. September 2022.
2. Sidbury R, et al. Guidelines of care for the management of atopic dermatitis: section 4. Prevention of disease flares and use of adjunctive therapies and approaches. *J Am Acad Dermatol* 2014;71:1218-1233.
3. Wollenberg A, et al. ETFAD/EADV Eczema task force 2015 position paper on diagnosis and treatment of atopic dermatitis in adult and paediatric patients. *J EADV* 2016;30:729-747.
4. UpToDate, Inc. Management of severe refractory atopic dermatitis (eczema). UpToDate [database online]. Waltham, MA. Updated Dec 2016. Accessed January 18, 2017.
5. Totri CR, et al. Prescribing practices for systemic agents in the treatment of severe pediatric atopic dermatitis in the US and Canada: the PeDRA TREAT survey. *J Am Acad Dermatol*. 2017 Feb;76(2):281-285.
6. Solomon, CG and Hopkins C. Chronic Rhinosinusitis with Nasal Polyps. *N Engl J Med* 2019;381:55-63
7. Rosenfeld RM, Piccirillo JF, Chandrasekhar SS, et al. Clinical Practice Guideline (Update): Adult Sinusitis. *American Academy of Otolaryngology – Head and Neck Surgery* 2015, Vol.152(2S) S1-S39.
8. Institute for Clinical and Economic Review (ICER): Biologic Therapies for Treatment of Asthma Associated with Type 2 Inflammation: Effectiveness, Value, and Value-Based Price Benchmarks. December 2018.

Available at: https://icer-review.org/wp-content/uploads/2018/04/ICER_Asthma_Final_Report_122018-1.pdf

9. Institute for Clinical and Economic Review (ICER): Dupilumab and Crisaborole for Atopic Dermatitis: Effectiveness and Value. June 2017. Available at: https://icer-review.org/wp-content/uploads/2016/10/MWCEPAC_ATOPIC_FINAL_EVIDENCE_REPORT_060717.pdf
10. Simpson EL, Paller AS, Siegfried EC et al. Efficacy and safety of dupilumab in adolescents with uncontrolled moderate to severe atopic dermatitis a phase 3 randomized clinical trial. *JAMA Dermatol* 2020;156(1):44-56. Available from: <https://pubmed.ncbi.nlm.nih.gov/31693077/>
11. Paller AS, Siegfried EC, Thaci D et al. Efficacy and safety of dupilumab with concomitant topical corticosteroids in children 6 to 11 years old with severe atopic dermatitis: a randomized, double blinded, placebo-controlled phase 3 trial. *J Am Acad Dermatol* 2020; S0190-9622(20)31152-X. Available from: <https://pubmed.ncbi.nlm.nih.gov/32574587/>
12. UpToDate, Inc. Topical corticosteroids: Use and adverse effects. UpToDate [database online]. Waltham, MA. Updated Feb 2020. Accessed March 12, 2021.
13. National Institute for Health and Care Excellence (NICE). Dupilumab for treating moderate to severe atopic dermatitis. NICE. Published August 1, 2018.
14. UpToDate, Inc. Clinical manifestations and diagnosis of eosinophilic esophagitis (EoE). UpToDate [database online]. Waltham, MA. Updated Jun 2022. Accessed July 11, 2022.
15. UpToDate, Inc. Dietary management of eosinophilic esophagitis. UpToDate [database online]. Waltham, MA. Updated Aug 2020. Accessed July 11, 2022.
16. UpToDate, Inc. Treatment of eosinophilic esophagitis. UpToDate [database online]. Waltham, MA. Updated Jun 2022. Accessed July 11, 2022.
17. Hirano I, Chan ES, Rank MA, et al. AGA Institute and the Joint Task Force on Allergy-Immunology Practice Parameters Clinical Guidelines for the Management of Eosinophilic Esophagitis. *Gastroenterology*. 2020;158:1776-1786.
18. Dellon et al. Updated international consensus diagnostic criteria for eosinophilic esophagitis: Proceedings of the AGREE conference. *Gastroenterology*. 2018 October; 155(4):1022-1033.
19. Dellon et al. Dupilumab Improves Clinical and Histologic Aspects of Disease in Adult and Adolescent Patients with Eosinophilic Esophagitis at Week 24: Weekly and Every 2 Weeks' Results from Part B of the 3-Part Liberty EoE TREET Study. Poster. 2021.
20. Dellon et al. The Efficacy and Safety of Dupilumab in Adult and Adolescent Patients with Eosinophilic Esophagitis: Results from Part A of a Randomized, Placebo-Controlled Three-Part, Phase 3 Study. Poster presented at the 34th Annual Eastern Allergy Conference; Palm Beach, FL; June 2021.
21. Study of dupilumab for the treatment of patients with prurigo nodularis, inadequately controlled on topical prescription therapies or when those therapies are not advisable (LIBERTY-PN PRIME). ClinicalTrials.gov identifier: NCT04183335. February 17, 2022. Accessed October 10, 2022. <https://clinicaltrials.gov/ct2/show/NCT04183335>.
22. Study of dupilumab for the treatment of patients with prurigo nodularis, inadequately controlled on topical prescription therapies or when those therapies are not advisable (PRIME2). ClinicalTrials.gov identifier: NCT04202679. September 28, 2022. Accessed October 10, 2022. <https://clinicaltrials.gov/ct2/show/NCT04202679>

23. Elmariah S, Kim B, Berger T, 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. doi:10.1016/j.jaad.2020.07.025
24. Ständer HF, Elmariah S, Zeidler C, et al. Diagnostic and treatment algorithm for chronic nodular prurigo. *J Am Acad Dermatol*. 2020;82(2):460-468. doi:10.1016/j.jaad.2019.07.022
25. Ständer S, Pereira MP, Berger T, et al. IFSI-guideline on chronic prurigo including prurigo nodularis. *Itch*. 2020;5(4):e42-e42.
26. Pereira MP, Steinke S, Zeidler C, et al. European academy of dermatology and venereology European prurigo project: expert consensus on the definition, classification and terminology of chronic prurigo. *J Eur Acad Dermatol Venereol*. 2018;32(7):1059-1065.
27. UpToDate, Inc. Prurigo nodularis. UpToDate [database online]. Waltham, MA. Updated May 2022. Accessed October 10, 2022.
28. Wollenberg A., Blauvelt A., Guttman-Yassky E., et al. Tralokinumab for moderate-to-severe atopic dermatitis: results from two 52-week, randomized, double-blind, multicenter, placebo-controlled phase III trials (ECZTRA 1 and ECZTRA 2). *Br J Dermatol*. 2020 Sep 30. doi: 10.1111/bjd.19574. Epub ahead of print. PMID: 33000465.
29. Silverberg JI, Toth D, Bieber T, Alexis AF. Tralokinumab plus topical corticosteroids for the treatment of moderate-to-severe atopic dermatitis: results from the double-blind, randomized, multicentre, placebo-controlled phase III ECZTRA 3 trial. *Br J Dermatol*. 2020 Sep 30. doi: 10.1111/bjd.19573. Epub ahead of print. PMID: 33000503.
30. American Academy of Dermatology – Guidelines of Care for the Management of Atopic Dermatitis (2014). Available at: <https://www.aad.org/patient/clinical-quality/guidelines/atopic-dermatitis>
31. Eichenfield L., Tom, W., Chamlin S., et al. Guidelines of care for the management of atopic dermatitis. *JAAD*. 2014 Feb 1. 70(2): 338-351.
32. Clinical Review Report: Dupilumab (Dupixent): (Sanofi-Aventis Canada Inc.): Indication: Moderate-to-severe atopic dermatitis (AD) [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2018 Jul. Appendix 5, Validity of Outcomes Measures. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK539234/>

History

Approved Date	Effective Date	Version	Action and Summary of Changes
MM/DD/YYYY	MM/DD/YYYY	XX.XX.XX-X	Pending Approval (draft/unpublished version) -Updated clinical criteria for indication A to require Lab A. -Added indication for X. -Added new products in class which include Drug A and Drug B. -Updating dosing for Drug A. -Updating language at header note to include “If a drug within this policy receives a new indication approved by the Food and Drug Administration (FDA), medical necessity for the new indication will be determined on a case-by-case basis following FDA labeling.”
MM/DD/YYYY	MM/DD/YYYY	XX.XX.XX-X	Approved by HCA.

			Updated dosing limits for expanded indication for drug X.
MM/DD/YYYY	MM/DD/YYYY	XX.XX.XX-X	Approved by DUR Board.