

Reference number(s)
1690-A

# Specialty Guideline Management

## Dupixent

### Products Referenced by this Document

Drugs that are listed in the following table include both brand and generic and all dosage forms and strengths unless otherwise stated. Over-the-counter (OTC) products are not included unless otherwise stated.

Brand Name	Generic Name
Dupixent	dupilumab

### Indications

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

#### FDA-approved Indications

Indicated for:

- Treatment of patients aged 6 months and older with moderate-to-severe atopic dermatitis whose disease is not adequately controlled with topical prescription therapies or when those therapies are not advisable. Dupixent can be used with or without topical corticosteroids.
- Add-on maintenance treatment in patients aged 6 years and older with moderate-to-severe asthma characterized by an eosinophilic phenotype or with oral corticosteroid dependent asthma.
- Add-on maintenance treatment in patients aged 12 years and older with inadequately controlled chronic rhinosinusitis with nasal polyps (CRSwNP).
- Treatment of adult and pediatric patients aged 1 year and older, weighing at least 15 kg, with eosinophilic esophagitis (EoE).
- Treatment of adult patients with prurigo nodularis (PN).
- Add-on maintenance treatment of adult patients with inadequately controlled chronic obstructive pulmonary disease (COPD) and an eosinophilic phenotype.

#### Limitations of Use

Not indicated for the relief of acute bronchospasm or status asthmaticus.

Reference number(s)
1690-A

## Compendial Uses

- Immune checkpoint inhibitor-related toxicities

All other indications are considered experimental/investigational and not medically necessary.

## Documentation

Submission of the following information is necessary to initiate the prior authorization review:

### Atopic dermatitis

#### Initial requests:

- Chart notes or medical record documentation showing affected area(s) and body surface area (where applicable).
- Chart notes, medical record documentation, or claims history of prerequisite therapies including response to therapy. If prerequisite therapies are not advisable, documentation of why therapies are not advisable for the member.

#### Continuation requests:

Chart notes or medical record documentation that the member has experienced a positive clinical response to therapy as evidenced by low disease activity or improvement in signs or symptoms of atopic dermatitis.

### Asthma

#### Initial requests:

- Chart notes or medical record documentation showing baseline blood eosinophil count (where applicable).
- Chart notes, medical record documentation, or claims history supporting previous medications tried including drug, dose, frequency, and duration.

#### Continuation requests:

Chart notes or medical record documentation supporting improvement in asthma control.

### Chronic rhinosinusitis with nasal polyps (CRSwNP)

#### Initial requests:

- Chart notes or medical record documentation showing nasal endoscopy, anterior rhinoscopy, or computed tomography (CT) details (e.g., polyps location, size), or Meltzer Clinical Score or endoscopic nasal polyp score (NPS) (where applicable).
- Chart notes, medical record documentation, or claims history supporting previous medications tried. If therapy is not advisable, documentation of clinical reason to avoid therapy.

Reference number(s)
1690-A

### Continuation requests:

Chart notes or medical record documentation supporting positive clinical response.

## Eosinophilic esophagitis (EoE)

### Initial requests:

- Chart notes or medical record documentation showing endoscopic biopsy details including intraepithelial esophageal eosinophil count.
- Chart notes, medical record documentation, or claims history supporting previous medications tried. If therapy is not advisable, documentation of clinical reason to avoid therapy.

### Continuation requests:

Chart notes or medical record documentation supporting positive clinical response.

## Prurigo Nodularis (PN)

### Initial requests:

- Chart notes or medical record documentation of symptoms (e.g., pruritus, nodular lesions).
- Chart notes, medical record documentation, or claims history of prerequisite therapies including response to therapy. If therapy is not advisable, documentation of clinical reason to avoid therapy.

### Continuation requests:

Chart notes or medical record documentation supporting positive clinical response.

## Chronic obstructive pulmonary disease (COPD)

### Initial requests:

- Chart notes or medical record documentation demonstrating clinical signs and/or symptoms of COPD.
- Chart notes, medical record documentation, or claims history of prerequisite therapies including response to therapy. If therapy is not advisable, documentation of clinical reason to avoid therapy.
- Chart notes or medical record documentation showing absolute blood eosinophil count prior to initiating therapy with the requested medication.
- Chart notes or medical record documentation of moderate or severe exacerbations within the last year.

### Continuation requests:

Chart notes or medical record documentation supporting positive clinical response.

## Prescriber Specialties

This medication must be prescribed by or in consultation with one of the following:

- Atopic dermatitis: dermatologist or allergist/immunologist

Reference number(s)
1690-A

- Asthma: allergist/immunologist or pulmonologist
- Chronic rhinosinusitis with nasal polyps: allergist/immunologist or otolaryngologist
- Eosinophilic esophagitis: gastroenterologist or allergist/immunologist
- Prurigo nodularis: dermatologist or allergist/immunologist
- Chronic obstructive pulmonary disease: pulmonologist or allergist/immunologist
- Immune checkpoint inhibitor-related toxicity: dermatologist, hematologist or oncologist

## Coverage Criteria

### Atopic dermatitis

Authorization of 4 months may be granted for members 6 months of age or older who have previously received a biologic (e.g., Adbry) or targeted synthetic drug (e.g., Cibinqo, Rinvoq) indicated for moderate-to-severe atopic dermatitis in the past year.

Authorization of 4 months may be granted for treatment of moderate-to-severe atopic dermatitis in members 6 months of age or older when both of the following criteria are met:

- Affected body surface is greater than or equal to 10% body surface area OR crucial body areas (e.g., hands, feet, face, neck, scalp, genitals/groin, intertriginous areas) are affected.
- Member meets either of the following:
  - Member has had an inadequate treatment response with either of the following in the past year:
    - A medium potency to super-high potency topical corticosteroid (see Appendix A)
    - A topical calcineurin inhibitor
  - The use of medium potency to super-high potency topical corticosteroid and topical calcineurin inhibitor are not advisable for the member (e.g., due to contraindications, prior intolerances, potency not appropriate for member's age).

### Asthma

Authorization of 6 months may be granted for members 6 years of age or older who have previously received a biologic drug (e.g., Nucala, Cinqair) indicated for asthma in the past year.

Authorization of 6 months may be granted for treatment of moderate-to-severe asthma in members 6 years of age or older when all of the following criteria are met:

- Member has uncontrolled asthma as demonstrated by experiencing at least one of the following within the past year:
  - Two or more asthma exacerbations requiring oral or injectable corticosteroid treatment
  - One or more asthma exacerbation(s) resulting in hospitalization or emergency medical care visit(s)
  - Poor symptom control (frequent symptoms or reliever use, activity limited by asthma, night waking due to asthma)

Reference number(s)
1690-A

- Member meets either of the following criteria:
  - Member has a baseline blood eosinophil count of at least 150 cells per microliter and inadequate asthma control despite current treatment with both of the following medications at optimized doses:
    - Medium-to-high-dose inhaled corticosteroid
    - Additional controller (i.e., long-acting beta<sub>2</sub>-agonist, long-acting muscarinic antagonist, leukotriene modifier, or sustained-release theophylline)
  - Member has inadequate asthma control despite current treatment with all of the following medications at optimized doses (Members should be receiving treatment with inhaled corticosteroid and additional controller for at least the previous 3 months, and oral glucocorticoids for most days during the previous 6 months [e.g., 50% of days, 3 steroid bursts in the previous 6 months]):
    - High-dose inhaled corticosteroid
    - Additional controller (i.e., long-acting beta<sub>2</sub>-agonist, long-acting muscarinic antagonist, leukotriene modifier, or sustained-release theophylline)
    - Oral glucocorticoids (at least 5 mg per day of prednisone/prednisolone or equivalent).
- Member will continue to use maintenance asthma treatments (e.g., inhaled corticosteroid, additional controller) in combination with the requested medication.

## Chronic rhinosinusitis with nasal polyps (CRSwNP)

Authorization of 6 months may be granted for members 12 years of age or older who have previously received a biologic drug (e.g., Nucala, Xolair) indicated for CRSwNP in the past year.

Authorization of 6 months may be granted for treatment of CRSwNP in members 12 years of age or older when all of the following criteria are met:

- Member has bilateral nasal polyposis and chronic symptoms of sinusitis despite intranasal corticosteroid treatment for at least 2 months unless contraindicated or not tolerated.
- Member has CRSwNP despite one of the following:
  - Prior sino-nasal surgery
  - Prior treatment with systemic corticosteroids within the last two years was ineffective, unless contraindicated or not tolerated
- Member has one of the following:
  - A bilateral nasal endoscopy, anterior rhinoscopy, or computed tomography (CT) showing polyps reaching below the lower border of the middle turbinate or beyond in each nostril.
  - Meltzer Clinical Score of 2 or higher in both nostrils.
  - A total endoscopic nasal polyp score (NPS) of at least 5 with a minimum score of 2 for each nostril.
- Member has symptoms of nasal blockage, congestion, or obstruction plus one of the following additional symptoms:
  - Rhinorrhea (anterior/posterior)
  - Reduction or loss of smell

Reference number(s)
1690-A

- Facial pain or pressure
- Member will continue to use a daily intranasal corticosteroid while being treated with the requested medication, unless contraindicated or not tolerated.

## Eosinophilic esophagitis (EoE)

Authorization of 6 months may be granted for treatment of EoE in members 1 year of age or older, weighing at least 15 kg, when all of the following criteria are met:

- Member meets either of the following:
  - Member is 1 year of age to less than 11 years of age and has clinical manifestations of disease (e.g., vomiting, heartburn, abdominal pain, food refusal, failure to thrive).
  - Member is 11 years of age or older and has history of an average of at least 2 episodes of dysphagia (with intake of solids) per week.
- Diagnosis has been confirmed by esophageal biopsy as characterized by 15 or more intraepithelial esophageal eosinophils per high power field.
- Member has had an inadequate treatment response to both of the following:
  - Proton pump inhibitor
  - Systemic corticosteroid or oral topical corticosteroid therapies (e.g., budesonide, fluticasone [powder or suspension for inhalation] swallowed), unless contraindicated or not tolerated

## Prurigo Nodularis

Authorization of 6 months may be granted for treatment of prurigo nodularis in members 18 years of age or older when all of the following criteria are met:

- Member has pruritus lasting at least 6 weeks.
- Member has history or signs of repeated itch-scratch cycle (e.g., scratching, picking, or rubbing).
- Member has a minimum of 20 nodular lesions.
- Member meets either of the following:
  - Member has had an inadequate response to one of the following:
    - A medium to super-high potency topical corticosteroid (see Appendix A)
    - A topical calcineurin inhibitor
    - Phototherapy (e.g., UVB, PUVA)
    - Pharmacologic treatment with methotrexate or cyclosporine
  - Member has had an intolerance or a clinical reason to avoid either of the following:
    - Medium to super-high potency topical corticosteroid (see Appendix A) and topical calcineurin inhibitor
    - Pharmacologic treatment with methotrexate and cyclosporine (see Appendix B)

Reference number(s)
1690-A

## Chronic obstructive pulmonary disease (COPD)

Authorization of 12 months may be granted for treatment of COPD in members 18 years of age or older when all of the following criteria are met:

- Diagnosis has been confirmed by spirometry showing forced expiratory volume in one second (FEV<sub>1</sub>)/forced vital capacity (FVC) less than 0.7 post-bronchodilation.
- Member demonstrates classic signs or symptoms of COPD (e.g., dyspnea, wheezing, chest tightness, fatigue, activity limitation, cough with or without sputum production, chronic bronchitis).
- Member has an absolute blood eosinophil count of at least 300 cells per microliter prior to initiating therapy with the requested medication.
- Member has inadequately controlled COPD as demonstrated by experiencing either of the following in the last year:
  - At least two moderate exacerbations resulting in treatment with systemic glucocorticoids, antibiotics, or both.
  - One or more severe exacerbation(s) requiring hospitalization or an emergency medical care visit.
- Member meets either of the following:
  - Member is currently receiving maintenance inhaled triple therapy (i.e., inhaled corticosteroid [ICS], long-acting muscarinic antagonist [LAMA], and long-acting beta<sub>2</sub>-agonist [LABA]).
  - Member is currently receiving a LAMA and LABA, and has a contraindication to ICS.
- Member will continue to use maintenance COPD treatments (e.g., ICS with LAMA and LABA, LAMA and LABA) in combination with the requested medication.

## Immune checkpoint inhibitor-related toxicity

Authorization of 6 months may be granted for treatment of immune checkpoint inhibitor-related toxicity when the member has a refractory case of immune-therapy related severe (G3) pruritis.

Authorization of 12 months may be granted for treatment of immune checkpoint inhibitor-related toxicity when the requested medication will be used as additional therapy for moderate (G2) or severe (G3) bullous dermatitis.

## Continuation of Therapy

### Atopic dermatitis

Authorization of 12 months may be granted for members 6 months of age or older (including new members) who are using the requested medication for moderate-to-severe atopic dermatitis when the member has achieved or maintained a positive clinical response as evidenced by low disease activity (i.e., clear or almost clear skin), or improvement in signs and symptoms of atopic dermatitis (e.g., redness, itching, oozing/crusting).

### Asthma

Authorization of 12 months may be granted for continuation of treatment of moderate-to-severe asthma in members 6 years of age or older when both of the following criteria are met:

Reference number(s)
1690-A

- Asthma control has improved on the requested medication as demonstrated by at least one of the following:
  - A reduction in the frequency or severity of symptoms and exacerbations
  - A reduction in the daily maintenance oral corticosteroid dose
- Member will continue to use maintenance asthma treatments (e.g., inhaled corticosteroid, additional controller) in combination with the requested medication.

## Chronic rhinosinusitis with nasal polyps (CRSwNP)

Authorization of 12 months may be granted for continuation of treatment of CRSwNP in members 12 years of age or older when both of the following are met:

- Member has achieved or maintained a positive clinical response with the requested medication as evidenced by improvement in signs and symptoms of CRSwNP (e.g., improvement in nasal congestion, nasal polyp size, loss of smell, anterior or posterior rhinorrhea, sino-nasal inflammation, hyposmia or facial pressure or pain, or reduction in corticosteroid use).
- Member will continue to use a daily intranasal corticosteroid while being treated with the requested medication, unless contraindicated or not tolerated.

## Eosinophilic Esophagitis (EoE)

Authorization of 12 months may be granted for continuation of treatment of EoE in members 1 year of age or older, weighing at least 15 kg, when member has achieved or maintained a positive clinical response with the requested medication as evidenced by improvement in signs and symptoms of EoE (e.g., dysphagia, heartburn, chest pain, emesis).

## Prurigo Nodularis

Authorization of 12 months may be granted for members 18 years of age or older (including new members) who are using the requested medication for prurigo nodularis when the member has achieved or maintained a positive clinical response as evidenced by either of the following:

- Low disease activity (i.e., clear or almost clear skin)
- Reduction in pruritis intensity and improvement in extent and severity of nodular lesions

## Chronic obstructive pulmonary disease (COPD)

Authorization of 12 months may be granted for continuation of treatment of COPD in members 18 years of age or older when both of the following criteria are met:

- Member has achieved or maintained a positive clinical response as evidenced by improvement in signs and symptoms of COPD (e.g., decrease in exacerbations, improvement in pre-bronchodilator FEV<sub>1</sub>) or stabilization of disease.
- Member will continue to use maintenance COPD treatments (e.g., ICS with LAMA and LABA, LAMA and LABA) in combination with the requested medication.



Reference number(s)
1690-A

## Immune checkpoint inhibitor-related toxicities

All members (including new members) requesting authorization for continuation of therapy for severe (G3) pruritis must meet all requirements in the coverage criteria section.

Authorization of 12 months may be granted for all members (including new members) who are using the requested medication for moderate (G2) or severe (G3) bullous dermatitis and who achieve or maintain a positive clinical response as evidenced by low disease activity or improvement in signs and symptoms of the condition.

## Other

For all indications: Member cannot use the requested medication concomitantly with any other biologic drug or targeted synthetic drug for the same indication.

Note: If the member is a current smoker or vaper, they should be counseled on the harmful effects of smoking and vaping on pulmonary conditions and available smoking and vaping cessation options.

## Appendix

### Appendix A: Table. Relative potency of select topical corticosteroid products

Potency	Drug	Dosage form	Strength
Super-high potency (Group 1)	Augmented betamethasone dipropionate	Ointment, Lotion, Gel	0.05%
Super-high potency (Group 1)	Clobetasol propionate	Cream, Gel, Ointment, Solution, Cream (emollient), Lotion, Shampoo, Foam, Spray	0.05%
Super-high potency (Group 1)	Fluocinonide	Cream	0.1%
Super-high potency (Group 1)	Flurandrenolide	Tape	4 mcg/cm <sup>2</sup>
Super-high potency (Group 1)	Halobetasol propionate	Cream, Lotion, Ointment, Foam	0.05%
High potency (Group 2)	Amcinonide	Ointment	0.1%
High potency (Group 2)	Augmented betamethasone dipropionate	Cream	0.05%
High potency (Group 2)	Betamethasone dipropionate	Ointment	0.05%
High potency (Group 2)	Clobetasol propionate	Cream	0.025%

Reference number(s)
1690-A

Potency	Drug	Dosage form	Strength
High potency (Group 2)	Desoximetasone	Cream, Ointment, Spray	0.25%
High potency (Group 2)	Desoximetasone	Gel	0.05%
High potency (Group 2)	Diflorasone diacetate	Ointment, Cream (emollient)	0.05%
High potency (Group 2)	Fluocinonide	Cream, Ointment, Gel, Solution	0.05%
High potency (Group 2)	Halcinonide	Cream, Ointment	0.1%
High potency (Group 2)	Halobetasol propionate	Lotion	0.01%
High potency (Group 3)	Amcinonide	Cream, Lotion	0.1%
High potency (Group 3)	Betamethasone dipropionate	Cream, hydrophilic emollient	0.05%
High potency (Group 3)	Betamethasone valerate	Ointment	0.1%
High potency (Group 3)	Betamethasone valerate	Foam	0.12%
High potency (Group 3)	Desoximetasone	Cream, Ointment	0.05%
High potency (Group 3)	Diflorasone diacetate	Cream	0.05%
High potency (Group 3)	Fluocinonide	Cream, aqueous emollient	0.05%
High potency (Group 3)	Fluticasone propionate	Ointment	0.005%
High potency (Group 3)	Mometasone furoate	Ointment	0.1%
High potency (Group 3)	Triamcinolone acetonide	Cream, Ointment	0.5%
Medium potency (Group 4)	Betamethasone dipropionate	Spray	0.05%
Medium potency (Group 4)	Clocortolone pivalate	Cream	0.1%
Medium potency (Group 4)	Fluocinolone acetonide	Ointment	0.025%
Medium potency (Group 4)	Flurandrenolide	Ointment	0.05%
Medium potency (Group 4)	Hydrocortisone valerate	Ointment	0.2%

Reference number(s)
1690-A

Potency	Drug	Dosage form	Strength
Medium potency (Group 4)	Mometasone furoate	Cream, Lotion, Solution	0.1%
Medium potency (Group 4)	Triamcinolone acetonide	Cream	0.1%
Medium potency (Group 4)	Triamcinolone acetonide	Ointment	0.05% and 0.1%
Medium potency (Group 4)	Triamcinolone acetonide	Aerosol Spray	0.2 mg per 2-second spray
Lower-mid potency (Group 5)	Betamethasone dipropionate	Lotion	0.05%
Lower-mid potency (Group 5)	Betamethasone valerate	Cream	0.1%
Lower-mid potency (Group 5)	Desonide	Ointment, Gel	0.05%
Lower-mid potency (Group 5)	Fluocinolone acetonide	Cream	0.025%
Lower-mid potency (Group 5)	Flurandrenolide	Cream, Lotion	0.05%
Lower-mid potency (Group 5)	Fluticasone propionate	Cream, Lotion	0.05%
Lower-mid potency (Group 5)	Hydrocortisone butyrate	Cream, Lotion, Ointment, Solution	0.1%
Lower-mid potency (Group 5)	Hydrocortisone probutate	Cream	0.1%
Lower-mid potency (Group 5)	Hydrocortisone valerate	Cream	0.2%
Lower-mid potency (Group 5)	Prednicarbate	Cream (emollient), Ointment	0.1%
Lower-mid potency (Group 5)	Triamcinolone acetonide	Lotion	0.1%
Lower-mid potency (Group 5)	Triamcinolone acetonide	Ointment	0.025%
Low potency (Group 6)	Alclometasone dipropionate	Cream, Ointment	0.05%
Low potency (Group 6)	Betamethasone valerate	Lotion	0.1%
Low potency (Group 6)	Desonide	Cream, Lotion, Foam	0.05%
Low potency (Group 6)	Fluocinolone acetonide	Cream, Solution, Shampoo, Oil	0.01%
Low potency (Group 6)	Triamcinolone acetonide	Cream, lotion	0.025%

Reference number(s)
1690-A

Potency	Drug	Dosage form	Strength
Least potent (Group 7)	Hydrocortisone (base, greater than or equal to 2%)	Cream, Ointment, Solution	2.5%
Least potent (Group 7)	Hydrocortisone (base, greater than or equal to 2%)	Lotion	2%
Least potent (Group 7)	Hydrocortisone (base, less than 2%)	Cream, Ointment, Gel, Lotion, Spray, Solution	1%
Least potent (Group 7)	Hydrocortisone (base, less than 2%)	Cream, Ointment	0.5%
Least potent (Group 7)	Hydrocortisone acetate	Cream	2.5%
Least potent (Group 7)	Hydrocortisone acetate	Lotion	2%
Least potent (Group 7)	Hydrocortisone acetate	Cream	1%

## Appendix B: Examples of Clinical Reasons to Avoid Pharmacologic Treatment with Methotrexate or Cyclosporine

- Clinical diagnosis of alcohol use disorder, alcoholic liver disease or other chronic liver disease
- Drug interaction
- Risk of treatment-related toxicity
- Pregnancy or currently planning pregnancy
- Breastfeeding
- Significant comorbidity prohibits use of systemic agents (e.g., liver or kidney disease, blood dyscrasias, uncontrolled hypertension)
- Hypersensitivity
- History of intolerance or adverse event

## References

1. Dupixent [package insert]. Tarrytown, NY: Regeneron Pharmaceuticals, Inc.; September 2024.
2. Sidbury R, Alikhan A, Bercovitch L, et al. Guidelines of care for the management of atopic dermatitis in adults with topical therapies. *J Am Acad Dermatol.* 2023;89(1):e1-e20.
3. Simpson EL, Bieber T, Guttman-Yassky E, et al. Two phase 3 trials of dupilumab versus placebo in atopic dermatitis. *N Engl J Med.* 2016;375:2335-2348.
4. Castro M, Corren J, Pavord ID, et al. Dupilumab Efficacy and Safety in Moderate-to-Severe Uncontrolled Asthma. *N Engl J Med.* 2018;378(26):2486-2496.
5. Rabe KF, Nair P, Brusselle G, et al. Efficacy and Safety of Dupilumab in Glucocorticoid-Dependent Severe Asthma. *N Engl J Med.* 2018;378(26):2475-2485.

Reference number(s)
1690-A

6. Global Initiative for Asthma (GINA). Global Strategy for Asthma Management and Prevention. 2023 update. Available at: [https://ginasthma.org/wp-content/uploads/2023/07/GINA-Full-Report-23\\_07\\_06-WMS.pdf](https://ginasthma.org/wp-content/uploads/2023/07/GINA-Full-Report-23_07_06-WMS.pdf). Accessed March 14, 2024.
7. Topical Corticosteroids. Drug Facts and Comparisons. Facts & Comparisons [database online]. St. Louis, MO: Wolters Kluwer Health Inc; September 1, 2023. Accessed November 2, 2023.
8. ClinicalTrials.gov. National Library of Medicine (US). Identifier NCT02912468, A Controlled Clinical Study of Dupilumab in Patients with Nasal Polyps (SINUS-24) 2016 Sep 23. Available from: <https://clinicaltrials.gov/ct2/show/NCT02912468>.
9. ClinicalTrials.gov. National Library of Medicine (US). Identifier NCT02898454, A Controlled Clinical Study of Dupilumab in Patients with Nasal Polyps (SINUS-52) 2016 Sep 13. Available from: <https://clinicaltrials.gov/ct2/show/NCT02898454>.
10. Fishbein AB, Silverberg, JI, Wilson EJ, et al. Update on atopic dermatitis: Diagnosis, severity assessment, and treatment selection. *J Allergy Clin Immunol Pract*. 2020;8(1): 91-101.
11. Cloutier MM, Dixon AE, Krishnan JA, et al. Managing asthma in adolescents and adults: 2020 asthma guideline update from the National Asthma Education and Prevention Program. *JAMA*. 2020;324(22): 2301-2317.
12. Bachert C, Han JK, Wagenmann M, 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;147(1):29-36.
13. Lucendo AJ, Molina-Infante J, Arias A, et al. Guidelines on eosinophilic esophagitis: evidence-based statements and recommendations for diagnosis and management in children and adults. *United European Gastroenterol J*. 2017;5(3):355-358.
14. Gonsalves NP, Aceves S. Diagnosis and treatment of eosinophilic esophagitis. *J Allergy Clin Immunol*. 2020;145(1):1-7.
15. ClinicalTrials.gov. National Library of Medicine (US). Identifier NCT03633617. Study to determine the efficacy and safety of Dupilumab in Adult and Adolescent Patients with Eosinophilic Esophagitis (EoE) 2022 May 27. Available from: <https://clinicaltrials.gov/ct2/show/NCT03633617>.
16. ClinicalTrials.gov. National Library of Medicine (US). Identifier NCT03346434, Safety, Pharmacokinetics and Efficacy of Dupilumab in Patients ≥6 months to <6 years with Moderate-to-Severe Atopic Dermatitis (Liberty AD PRESCHOOL) 2022 Jun 10. Available from: <https://clinicaltrials.gov/ct2/show/NCT03346434>.
17. WJ Fokkens, VJ Lund, C Hopkins, et al. European Position Paper on Rhinosinusitis and Nasal Polyps 2020. *Rhinology*. 2020;58(Suppl S29):1-464.
18. Hopkins C. Chronic Rhinosinusitis with Nasal Polyps. *N Engl J Med*. 2019;381(1):55-63.
19. ClinicalTrials.gov. National Library of Medicine (US). Identifier NCT04183335. 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). February 17, 2022. Available from: <https://clinicaltrials.gov/ct2/show/NCT04183335>.
20. ClinicalTrials.gov. National Library of Medicine (US). Identifier NCT04202679. 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). September 28, 2022. Available from: <https://clinicaltrials.gov/ct2/show/NCT04202679>.
21. 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.
22. 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.
23. Cyclosporine. Drug Facts and Comparisons. Facts & Comparisons [database online]. St. Louis, MO: Wolters Kluwer Health Inc; October 4, 2022. Accessed November 7, 2023.

Reference number(s)
1690-A

24. Methotrexate. Drug Facts and Comparisons. Facts & Comparisons [database online]. St. Louis, MO: Wolters Kluwer Health Inc; October 4, 2022. Accessed November 7, 2023.
25. The NCCN Drugs & Biologics Compendium® © 2023 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed March 15, 2024.
26. NCCN Clinical Practice Guidelines in Oncology® (NCCN Guidelines®). Management of Immune Checkpoint-Related Toxicities. Version 1.2024. Available at: [www.nccn.org](http://www.nccn.org). Accessed March 15, 2024.
27. ClinicalTrials.gov. National Library of Medicine (US). Identifier NCT04394351. Study to Investigate the Efficacy and Safety of Dupilumab in Pediatric Patients With Active Eosinophilic Esophagitis (EoE) (EoE KIDS). June 05, 2023. Available from: <https://clinicaltrials.gov/ct2/show/NCT04394351>.
28. Lucendo AJ, Sánchez-Cazalilla M. Adult versus pediatric eosinophilic esophagitis: important differences and similarities for the clinician to understand. *Expert Rev Clin Immunol*. 2012;8(8):733-45.
29. Global Initiative for Chronic Obstructive Lung Disease (GOLD). Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease (2024 Report). Available at: <https://goldcopd.org/2024-gold-report/>. Accessed October 2024.
30. Bhatt SP, Rabe KF, Hanania NA, et al. Dupilumab for COPD with Type 2 Inflammation Indicated by Eosinophil Counts. *N Engl J Med*. 2023;389(3):205-214.
31. ClinicalTrials.gov. National Library of Medicine (US). Identifier NCT04456673. Pivotal Study to Assess the Efficacy, Safety and Tolerability of Dupilumab in Patients with Moderate to Severe COPD with Type 2 Inflammation (NOTUS). Last updated March 25, 2024. Accessed October 3, 2024. Available from: <https://clinicaltrials.gov/ct2/show/NCT04456673>.