

Targeted Immune Modulators for Severe Asthma and Atopic Dermatitis

Goal(s):

- Promote use that is consistent with national clinical practice guidelines, medical evidence, and OHP-funded conditions. Allow case-by-case review for members covered under the EPSDT program.
- Promote use of cost-effective products.

Length of Authorization:

- Up to 12 months

Requires PA:

- All targeted immune modulators with indications for severe asthma, atopic dermatitis, or other indications (see **Table 2** below) for both pharmacy and physician-administered claims.
- This PA does not apply to topical agents for inflammatory skin conditions which are subject to separate clinical PA criteria.

Covered Alternatives:

- Current PMPDP preferred drug list per OAR 410-121-0030 at www.orpdl.org
- Searchable site for Oregon FFS Drug Class listed at www.orpdl.org/drugs/

Table 1. Maximum Adult Doses for Inhaled Corticosteroids

High Dose Corticosteroids:	Maximum Dose
Qvar (beclomethasone)	320 mcg BID
Pulmicort Flexhaler (budesonide)	720 mcg BID
Alvesco (ciclesonide)	320 mcg BID
Arnuity Ellipta (fluticasone furoate)	200 mcg daily
Armonair (fluticasone propionate)	232 mcg BID
Flovent HFA (fluticasone propionate)	880 mcg BID
Flovent Diskus (fluticasone propionate)	1000 mcg BID
Asmanex Twisthaler (mometasone)	440 mcg BID
Asmanex HFA (mometasone)	400 mcg BID
High Dose Corticosteroid / Long-acting Beta-agonists	Maximum Dose
Symbicort (budesonide/formoterol)	320/9 mcg BID
Advair Diskus (fluticasone/salmeterol)	500/50 mcg BID
Advair HFA (fluticasone/salmeterol)	460/42 mcg BID
Wixela Inhub (fluticasone/salmeterol)	500/50 mcg BID
AirDuo Digihaler (fluticasone/salmeterol)	232/14 mcg BID
Airduo RespiClick (fluticasone/salmeterol)	232/14 mcg BID
Breo Ellipta (fluticasone/vilanterol)	200/25 mcg daily
Dulera (mometasone/formoterol)	400/10 mcg BID

Table 2. FDA-approved Indications and Ages

Generic Name/ BRAND NAME	Eosinophilic Asthma	Moderate to Severe Allergic Asthma	Difficult To Treat, Severe Asthma*	Chronic Rhinosinusitis with Nasal Polyposis (CRSwNP)	Eosinophilic Esophagitis	Atopic Dermatitis (AD)	Other
Abrocitinib CIBINQO						≥12 yrs	
Benralizumab	≥12 yrs						

FASENRA							
Dupilumab DUPIXENT	≥6 yrs (or with oral corticosteroid dependent asthma)			≥18 yrs	≥12 yrs & weighing ≥40 kg	≥6 months	PN ≥18 yrs
Mepolizumab NUCALA	≥6 yrs			≥18 yrs			HES ≥ 12 yrs EPGA ≥18 yrs
Omalizumab XOLAIR		≥6 yrs		≥18 yrs			CSU ≥ 12 yrs
Reslizumab CINQAIR	≥18 yrs						
Tezepelumab TEZSPIRE			≥ 12 yrs				
Tralokinumab ADBRY						≥18 yrs	

*Difficult to treat, severe asthma is defined as asthma with poor symptom control on high-dose inhaled corticosteroid-long-acting beta agonist (ICS-LABA) or maintenance oral corticosteroids (OCS).
Abbreviations: CSU = Chronic spontaneous urticaria; EPGA = Eosinophilic Granulomatosis with Polyangiitis; HES = Hyper-eosinophilic Syndrome; PN = prurigo nodularis

Table 3. Abrocitinib Dosing Adjustments for Atopic Dermatitis

Assessment	Recommended Dose
CYP2C19 Poor Metabolizer	50 mg once daily and may increase to 100 mg once daily after 12 weeks if inadequate response to 50 mg once daily
GFR 30 to 59 mL/min	Start with 50 mg once daily and may increase to 100 mg once daily after 12 weeks if inadequate response to 50 mg once daily
GFR < 30 mL/min	Use is not recommended
Severe hepatic impairment (Child-Pugh Class C)	Use is not recommended

Table 4. FDA-Approved Dosing for Monoclonal Antibodies Used to Treat Severe Asthma Phenotypes

Generic Name	Brand Name	Asthma Indication	Initial Dose and Administration Route	Maintenance Dose and Administration Route
Benralizumab	FASENRA	Severe asthma with an eosinophilic phenotype	30 mg SC every 4 weeks for the first 3 doses	30 mg SC every 8 weeks
Dupilumab	DUPIXENT	Add on maintenance treatment for moderate to severe asthma with an eosinophilic phenotype or with oral corticosteroid dependent asthma	Ages 6 to 11 yo: An initial loading dose is not necessary Ages ≥ 12 yo : 400 mg to 600 mg SC x 1 dose	Ages 6 – 11 yo (weight 15 to 30 kg) 100 mg SC every 2 weeks OR 300 mg SC every 4 weeks Ages ≥ 12 yo: 200 to 300 mg SC every 2 weeks
Mepolizumab	NUCALA	Severe asthma with an eosinophilic phenotype	N/A	Ages ≥ 6 – 11 yo: 40 mg SC every 4 weeks Ages ≥ 12 yo: 100 mg SC every 4 weeks
Omalizumab	XOLAIR	Moderate to severe persistent asthma and positive allergy testing	N/A	75 to 375 mg SC every 2 to 4 weeks based on weight and serum IgE levels
Reslizumab	CINQAIR	Severe asthma with an eosinophilic phenotype	N/A	3 mg/kg IV infusion every 4 weeks
Tezepelumab	TEZSPIRE	Severe asthma	N/A	210 mg SC every 4 weeks

Abbreviations: IgE = immunoglobulin E; IV = intravenous; kg = kilogram; mg = milligram; N/A = Not Applicable; SC = subcutaneous; yo = years old

Table 5. Dupilumab Dosing by Indication

Indication	Dose (Subcutaneous)
Atopic Dermatitis in adults	600 mg followed by 300 mg every 2 weeks

Atopic Dermatitis in pediatric patients (aged 6 to 17 years)	600 mg followed by 300 mg every 4 weeks (15 to 29 kg) 400 mg followed by 200 mg every 2 weeks (30 to 59 kg) 600 mg followed by 300 mg every 2 weeks (≥ 60 kg)
Asthma in adults and adolescents (aged 12 years and older)	400 mg followed by 200 mg every 2 weeks or 600 mg followed by 300 mg every 2 weeks
Asthma in pediatric patients (aged 6 to 11 years)	100 mg every 2 weeks or 300 mg every 4 weeks (15 to 29 kg) 200 mg every 2 weeks (≥ 30 kg)
Chronic rhinosinusitis with nasal polyps in adults	300 mg every other week
Eosinophilic esophagitis in adults and adolescents (aged 12 years and older)	300 mg once a week
Prurigo nodularis in adults	600 mg followed by 300 mg given every 2 weeks

Approval Criteria		
1. What diagnosis is being treated?	Record ICD10 code.	
2. Is the request for an FDA-approved indication and indications (Table 2)?	Yes: Go to #3	No: Pass to RPh. Deny; medical appropriateness.
3. Is the diagnosis an OHP-funded diagnosis? <u>Note:</u> chronic idiopathic urticaria and mild-to-moderate atopic dermatitis are not OHP-funded conditions	Yes: Go to #4	No: Current age ≥ 21 years: Pass to RPh. Deny; not funded by the OHP. Current Age < 21 years: Go to #4
4. Is the request for dupilumab?	Yes: Go to # 5	No: Go to #6
5. If the request is for dupilumab, is the dose appropriate for the indication (Table 5)?	Yes: Go to #6	No: Pass to RPh. Deny; medical appropriateness.
6. Is the request for continuation of therapy?	Yes: Go to Renewal Criteria	No: Go to #7
7. Does the patient have a concurrent prescription for EpiPen [®] or equivalent so they are prepared to manage delayed anaphylaxis if it occurs after monoclonal antibody therapy?	Yes: Go to #8	No: Pass to RPh. Deny; medical appropriateness.

Approval Criteria

<p>8. Is the diagnosis Severe Atopic Dermatitis (AD)? Severe disease is defined as:¹</p> <ul style="list-style-type: none"> • Having functional impairment as indicated by Dermatology Life Quality Index (DLQI) \geq 11 or Children's Dermatology Life Quality Index (CDLQI) \geq 13 (or severe score on other validated tool) AND one or more of the following: <ul style="list-style-type: none"> ○ At least 10% body surface area involved, or ○ Hand, foot, face, or mucous membrane involvement 	<p>Yes: Go to #9</p>	<p>No: Go to #17</p>
<p>9. Is the medication being prescribed by or in consultation with a dermatologist, allergist, or a provider who specializes in care of atopic dermatitis?</p>	<p>Yes: Go to #10</p>	<p>No: Pass to RPh. Deny; medical appropriateness</p>
<p>10. Is the request for abrocitinib?</p>	<p>Yes: Go to #11</p>	<p>No: Go to #16</p>
<p>11. Are baseline labs (platelets, lymphocytes, lipids) documented?</p> <p>*Note: Abrocitinib therapy should not be initiated if platelet count is $<$ 150,000/mm³, absolute lymphocyte count is $<$ 500/mm³, absolute neutrophil count is $<$ 1,000/mm³, or hemoglobin is $<$ 8 g/dL</p>	<p>Yes: Go to #12</p> <p>Document Lab and Date Obtained: Platelets: _____ Lymphocytes: _____ Lipids: _____ Hemoglobin: _____</p>	<p>No: Pass to RPh. Deny; medical appropriateness</p>
<p>12. Is the patient currently taking other targeted immune modulators or oral immunosuppressants?</p>	<p>Yes: Pass to RPh. Deny; medical appropriateness.</p>	<p>No: Go to #13</p>
<p>13. If the patient has renal or hepatic impairment has the dose been adjusted as described in Table 3?</p>	<p>Yes: Go to #14</p>	<p>No: Pass to RPh. Deny; medical appropriateness</p>
<p>14. Is the patient taking a strong CYP2C19 inhibitor, CYP2C9 inhibitor, CYP2C9 inducer, CYP2C19 inducer, or antiplatelet inhibitor?</p>	<p>Yes: Go to #15</p>	<p>No: Go to #16</p>

Approval Criteria

<p>15. If the patient is taking a strong CYP2C19 inhibitor (e.g., fluvoxamine, fluoxetine), or CYP2C9 inhibitor (e.g., fluconazole, amiodarone), or CYP2C9 inducer (e.g., rifampin, phenobarbital), or CYP2C19 inducer (carbamazepine), or antiplatelet agent has the abrocitinib dose been adjusted in Table 3 or has the interacting drug been discontinued if necessary?</p> <p>*Note: agents with antiplatelet properties (NSAIDs, SSRIs, etc.) should not be used during the first 3 months of abrocitinib therapy. Do not use aspirin at doses \geq 81 mg/day with abrocitinib during the first 3 months of therapy.</p>	<p>Yes: Go to #16</p>	<p>No: Pass to RPh. Deny; medical appropriateness</p>
<p>16. Does the patient have a documented contraindication or failed 4-week trial of either one the following treatments:</p> <ul style="list-style-type: none"> • Moderate to high potency topical corticosteroid (e.g., clobetasol, desoximetasone, desonide, mometasone, betamethasone, halobetasol, fluticasone, or fluocinonide) in combination with a topical calcineurin inhibitor (e.g., tacrolimus) OR • Oral immunomodulator therapy (e.g., cyclosporine, methotrexate, or oral corticosteroids)? 	<p>Yes: Document drug and dates trialed and intolerances (if applicable):</p> <p>1. _____(dates)</p> <p>2. _____(dates)</p> <p>Approve for length of treatment; maximum 6 months.</p>	<p>No: Pass to RPh. Deny; medical appropriateness</p>
<p>17. Is the request for eosinophilic granulomatosis with polyangiitis (EGPA, formerly known as Churg-Strauss Syndrome) for at least 6 months that is refractory to at least 4 weeks of oral corticosteroid therapy (equivalent to oral prednisone or prednisolone 7.5 to 50 mg per day)?</p>	<p>Yes: Approve for 12 months.</p> <p>Mepolizumab dose: 300 mg (3 x 100mg syringes) every 4 weeks</p>	<p>No: Go to #18</p>

Approval Criteria

<p>18. Is the request for the treatment of a patient with hypereosinophilic syndrome (HES) with a duration of 6 months or greater without an identifiable non-hematologic secondary cause?</p>	<p>Yes: Approve for 12 months.</p> <p>Mepolizumab dose: 300 mg (3 x 100mg syringes) every 4 weeks</p>	<p>No: Go to #19</p>
<p>19. Is the request for treatment of nasal polyps?</p>	<p>Yes: Go to #20</p>	<p>No: Go to #22</p>
<p>20. Is the prescriber an otolaryngologist, or allergist who specializes in treatment of chronic rhinosinusitis with nasal polyps?</p>	<p>Yes: Go to #21</p>	<p>No: Pass to RPh. Deny; medical appropriateness</p>
<p>21. Has the patient failed medical therapy with intranasal corticosteroids (2 or more courses administered for 12 to 26 weeks)?</p>	<p>Yes: Approve for 6 months</p>	<p>No: Pass to RPh. Deny; medical appropriateness</p>
<p>22. Is the request for treatment of severe asthma?</p>	<p>Yes: Go to #23</p>	<p>No: Go to #30</p>
<p>23. Is the prescriber a pulmonologist or an allergist who specializes in management of severe asthma?</p>	<p>Yes: Go to #24</p>	<p>No: Pass to RPh. Deny; medical appropriateness</p>
<p>24. Has the patient experienced one of the following:</p> <ul style="list-style-type: none"> • at least 4 asthma exacerbations requiring systemic corticosteroids in the previous 12 months OR • taking continuous oral corticosteroids at least the equivalent of prednisolone 5 mg per day for the previous 6 months OR • at least 1 hospitalization or ≥ 2 emergency department (ED) visits in the past 12 months while receiving a maximally-dosed inhaled corticosteroid (Table 1) AND 2 additional controller drugs (i.e., long-acting inhaled beta-agonist, montelukast, zafirlukast, tiotropium)? 	<p>Yes: Go to #25</p> <p>Document number asthma exacerbations over the previous 12 months or oral corticosteroid dose over the previous 6 months or number of hospitalizations or ED visits in the past 12 months _____.</p> <p>This is the baseline value to compare to in renewal criteria.</p>	<p>No: Pass to RPh. Deny; medical appropriateness.</p>

Approval Criteria

25. Has the patient been adherent to current asthma therapy in the past 12 months?	Yes: Go to #26	No: Pass to RPh. Deny; medical appropriateness.
26. Is the patient currently receiving another monoclonal antibody (e.g., dupilumab, omalizumab, mepolizumab, benralizumab, reslizumab, tezepelumab etc.)?	Yes: Pass to RPh. Deny; medical appropriateness.	No: Go to #27
27. Is the request for tezepelumab?	Yes: Approve for up to 12 months.	No: Go to #28
28. Is the request for omalizumab and can the prescriber provide documentation of allergic IgE-mediated asthma diagnosis, confirmed by a positive skin test or in vitro reactivity to perennial allergen?	Yes: Approve once every 2-4 weeks for up to 12 months. Document test and result: _____	No: Go to #29
29. Is the request for asthma with an eosinophilic phenotype and can the prescriber provide documentation of one of the following biomarkers: <ul style="list-style-type: none"> • severe eosinophilic asthma, confirmed by blood eosinophil count ≥ 150 cells/μL OR • fractional exhaled nitric oxide (FeNO) ≥ 25 ppb in the past 12 months? 	Yes: Approve up to 12 months, based on dosing outlined in Table 4 . Document eosinophil count (or FeNO date): _____	No: Pass to RPh. Deny; medical appropriateness.
30. Is the request for treatment of eosinophilic esophagitis?	Yes: Go to #31	No: Go to #32
31. Does the patient have a documented contraindication or failed trial of the following treatments: <ul style="list-style-type: none"> • Proton pump therapy for at least 8 weeks OR • Corticosteroid therapy with local administration of fluticasone multi-use inhaler for at least 8 weeks (use nasal inhaler and swallow contents of the spray). 	Yes: Document drug and dates trialed and intolerances (if applicable): _____ (dates) Approve for length of treatment; maximum 6 months.	No: Pass to RPh. Deny; medical appropriateness

Approval Criteria

<p>32. Is there documentation that the condition is of sufficient severity that it impacts the patient's health (e.g., quality of life, function, growth, development, ability to participate in school, perform activities of daily living, etc)?</p>	<p>Yes: Go to #33</p>	<p>No: Pass to RPh. Deny; medical necessity.</p>
<p>33. Is there documentation from the provider that alternative treatments for the condition are inappropriate, unavailable, or ineffective?</p>	<p>Yes: Approve for 12 months.</p>	<p>No: Pass to RPh. Deny; medical appropriateness.</p>

Renewal Criteria

<p>1. Is the request to renew therapy for atopic dermatitis?</p>	<p>Yes: Go to #2</p>	<p>No: Go to #3</p>
<p>2. Have the patient's symptoms improved with targeted immune modulator therapy?</p> <ul style="list-style-type: none"> • at least a 50% reduction in the Eczema Area and Severity Index score (EASI 50) from when treatment started OR • at least a 4-point reduction in the Dermatology Life Quality Index (DLQI) from when treatment started OR • at least a 2-point improvement on the Investigators Global Assessment (IGA) score? 	<p>Yes: Approve for 12 months</p>	<p>No: Pass to RPh. Deny; medical appropriateness.</p>
<p>3. Is the request to renew therapy for asthma?</p>	<p>Yes: Go to #4</p>	<p>No: Go to #6</p>
<p>4. Is the patient currently taking an inhaled corticosteroid and 2 additional controller drugs (i.e., long-acting inhaled beta-agonist, montelukast, zafirlukast, tiotropium)?</p>	<p>Yes: Go to #5</p>	<p>No: Pass to RPh. Deny; medical appropriateness.</p>
<p>5. Has the number of emergency department (ED) visits or hospitalizations in the last 12 months been reduced from baseline, or has the patient reduced their systemic corticosteroid dose by $\geq 50\%$ compared to baseline?</p>	<p>Yes: Approve for up to 12 months.</p>	<p>No: Pass to RPh. Deny; medical appropriateness.</p>

Renewal Criteria

6. Is the request to renew therapy for another FDA approved indication?	Yes: Go to #7	No: Pass to RPh. Deny; medical appropriateness.
7. Have the patient's symptoms improved with therapy?	Yes: Approve for 12 months	No: Pass to RPh. Deny; medical appropriateness.

1. Oregon Health Evidence Review Commission. Coverage Guidance and Reports. <http://www.oregon.gov/oha/hpa/csi-herc/pages/index.aspx> Accessed May 2, 2023..
2. National Institute for Health and Care Excellence (NICE) Guidance. Mepolizumab for Treating Severe Eosinophilic Asthma. <https://www.nice.org.uk/guidance/ta671> February 2021.
3. National Institute for Health and Care Excellence (NICE) Guidance. Dupilumab for Treating Severe Asthma with Type 2 Inflammation. <https://www.nice.org.uk/guidance/ta751> December 2021
4. Global Initiative for Asthma. Global strategy for asthma management and prevention (2021 update). 2021. <https://ginasthma.org/wp-content/uploads/2021/05/GINA-Main-Report-2021-V2-WMS.pdf>

P&T Review: 6/23 (DM); 10/22 (DM) 6/22 (DM); 8/21 (DM); 10/20 (KS), 7/19; 7/18; 7/16
 Implementation: 7/1/23; 1/1/23; 7/1/22; 1/1/22; 9/1/21; 8/19/19, 8/15/18, 8/16