MEDICATION COVERAGE POLICY Health Plan Mountain Valley





Policy:	Asthma/COPD	P&T DATE	9/10/2024
CLASS:	Respiratory Disorders	REVIEW HISTORY	6/23, 5/22, 2/21, 2/20,
LOB:	Medi-Cal	(MONTH/YEAR)	2/19, 12/17,12/16, 5/15,

This policy has been developed through review of medical literature, consideration of medical necessity, generally accepted medical practice standards, and approved by the Health Plan Pharmacy and Therapeutic Advisory Committee.

Effective 1/1/2022, the Pharmacy Benefit is regulated by Medi-Cal Rx. Please visit https://medicalrx.dhcs.ca.gov/home/ for portal access, formulary details, pharmacy network information, and updates to the pharmacy benefit. All medical claims require that an NDC is also submitted with the claim. If a physician administered medication has a specific assigned CPT code, that code must be billed with the correlating NDC. If there is not a specific CPT code available for a physician administered medication, the use of unclassified CPT codes is appropriate when billed with the correlating NDC.

OVERVIEW

Asthma is a reversible, chronic, inflammatory disorder that involves narrowing of the respiratory airways leading to wheezing, chest tightness, and shortness of breath. Inhaled corticosteroids are the mainstay of therapy and the goal of treatment is to reverse airway obstruction and maintain respiratory control. Chronic obstructive pulmonary disease (COPD) is another chronic airway disorder. Unlike asthma, COPD is not reversible. The goal of COPD management is to slow disease progression. COPD is managed with a combination of inhaled corticosteroids and anticholinergics. Some patients exhibit both features of asthma and COPD; this is called Asthma-COPD Overlap Syndrome (ACOS). The below criteria, limits, and requirements for asthma & COPD agents are in place to ensure appropriate use and to help members achieve control of their Asthma or COPD.

Table 1: Available Asthma/COPD Medications

CPT	Generic Name	Strength &	Pharmacy	Medical Benefit		
code	(Brand Name)	Dosage form	Benefit	(restrictions)		
	Single Agents					
	Short Acting Beta Agonist (SABA)					
	Albuterol	90 mcg/act	Yes	No		
	Albuterol (ProAir HFA, Proventil HFA, ProAir Digihaler (108 mcg/act), ProAir Respiclick, Ventolin HFA)	90 mcg/act	Yes	No		
	Albuterol Syrup	2 mg/5 mL Syrup	Yes	No		
	Albuterol Sulfate IR, ER Tablets (Vospire ER)	2 mg, 4 mg IR Tablet 4 mg, 8 mg ER Tablet	Yes	No		
	Ephedrine/ Guaifenesin Tablets (Primatene Asthma)	12.5/200 mg Tablets	Yes	No		
	Learning to the second of the	45 mcg/act	Yes	No		
	Levalbuterol (Xopenex HFA)	Xopenex HFA	Yes	No		
	Metaproterenol	10 mg/5 mL Syrup, 10 mg, 20 mg Tablet	Yes	No		
Short Acting Anticholinergic (SAMA)						
	Ipratropium (Atrovent HFA)	17 mcg/act	Yes	No		
	Atrovent HFA	17 mcg/act	Yes	No		

Long Acting Beta Agonist (LABA)				
	Salmeterol Xinafoate (Serevent Diskus)	50 mcg/act	Yes	No
	Formoterol Fumarate (Foradil)	12 mcg Inhalation Capsule	Yes	No
	Indacaterol Maleate (Arcapta Neohaler)	75 mcg/act	Yes	No
	Olodaterol Hydrochloride (Striverdi Respimat)	2.5 mcg/act	Yes	No
	Long Actin	g Anticholinergic (LA	MA)	
	Tiotropium Bromide (Spiriva)	Handihaler: 18 mcg Inhalation Capsule Respimat: 2.5 mcg/act	Yes	No
	Tiotropium Bromide (Spiriva Respimat)	1.25mcg/act	Yes	No
	Aclidinium Bromide (Tudorza Pressair)	400 mcg/act	Yes	No
	Glycopyrrolate (Seebri Neohaler)	15.6mcg	Yes	No
	Umeclidinium Bromide (Incruse Ellipta)	62.5 mcg/act	Yes	No
	In	haled Corticosteroid	(ICS)	
	Beclomethasone dipropionate (Qvar Redihaler)	40 mcg/act 80 mcg/act	Yes	No
	Budesonide (Pulmicort Flexhaler)	90 mcg/act	Yes	No
	Budesonide (Pulmicort Flexhaler)	180 mcg/act	Yes	No
	Ciclesonide (Alvesco)	80 mcg/act 160 mcg/act	Yes	No
	Flunisolide (Aerospan)	80 mcg/act	Yes	No
	Fluticasone furoate (Arnuity Ellipta)	100 mcg/act 200 mcg/act	Yes	No
	Fluticasone propionate (Flovent HFA/Diskus)	Diskus: 50 mcg/act 100 mcg/act 250 mcg/act HFA: 44 mcg/act 110 mcg/act 220 mcg/act	Yes	No
	Fluticasone propionate (ArmonAir Respiclick)	55 mcg 113 mcg 232 mcg	Yes	No
	Mometasone furoate (Asmanex Twisthaler)	110 mcg/act (30 doses) 220 mcg/act (30, 60, or 120 doses)	Yes	No
	Mometasone furoate (Asmanex HFA)	100 mcg/act 200 mcg/act	Yes	No

Table 1: Available Asthma/COPD Medications (continued)

CPT code	vailable Asthma/COPD Medications (co Generic Name (Brand Name)	Strength & Dosage form	Pharmacy Benefit	Medical Benefit (restrictions)
		Combination Agent	ts	
	i	ort Acting Combinat	ion	
	Ipratropium/Albuterol (Combivent Respimat)	20 mcg/100 mcg	Yes	No
	Budesonide / Albuterol (Airsupra)	90-80 mcg/ACT	Yes	No
	L	ong Acting Combinat	ion	
	Budesonide/Formoterol (Symbicort)	80 mcg/4.5mcg 160 mcg/4.5 mcg	Yes	No
		Respiclick: 55/14 mcg 113/14 mcg 232/14 mcg		No
	Fluticasone/Salmeterol (AirDuo Respiclick, Advair Diskus or HFA)	Diskus: 100 mcg/50 mcg 250 mcg/50 mcg 500 mcg/50 mcg HFA: 45 mcg/21mcg 115 mcg/21mcg 230 mcg/21 mcg	Yes	No
	Fluticasone/Vilanterol (Breo Ellipta)	100 mcg-25 mcg 200 mcg-25 mcg	Yes	No
	Aclidinium/Formoterol (Duklir)	400 mcg - formoterol 12 mcg	Yes	No
	Fluticasone, Umeclidinium, and Vilanterol (Trelegy Ellipta)	100 mcg/ 62.5 mcg/25 mcg	Yes	No
	Mometasone/ Formoterol (Dulera)	100 mcg-5mcg 200 mcg-5mcg	Yes	No
	Tiotropium/ Otodaterol (Stiolto Respimat)	2.5 mcg-2.5 mcg	Yes	No
	Umeclidinium/ Vilanterol (Anoro Ellipta)	62.5 mcg-25 mcg	Yes	No
	Glycopyrrolate/ Indacaterol (Utibron Neohaler)	27.5 mcg-15.6 mcg	Yes	No
	Glycopyrrolate/ Formoterol (Bevespi Aerosphere)	9 mcg-4.8 mcg	Yes	No
	Budesonide/ Glycopyrrolate / Formoterol (Breztri Aerosphere)	160-9-4.8 mcg/ACT	Yes	No
	Leukotrio	ne Receptor Antagoi	nist	
	Montelukast Sodium (Singulair)	4 mg, 5 mg Chewable Tablet 10 mg Tablet	Yes	No
		4 mg Oral Granules	Yes	No
	Zafirlukast (Accolate)	10 mg, 20 mg Tablet	Yes	No
		oxygenase Inhibitor		
	Zileuton (Zyflo, Zyflo CR)	600 mg Tablet 600 mg ER Tablet	Yes	No

	Xanthine/Phosphodiesterase Enzyme Inhibitor, Nonselective					
	Theophylline (Theo-24, Elixophyllin, Theochron)	80mg/15mL Oral Elixir/Solution 100 mg, 200 mg, 300 mg, ER Cap (Theo- 24) 100 mg, 200 mg, 300 mg ER Tab (Theochron, 12-hr) 400 mg, 600 mg ER Tab (24-hr) 450 mg ER Tab (Theochron, 12-hr)	Yes	No		
	Theophylline (Theo-24)	400 mg ER Cap	Yes	No		
		PDE-4 Inhibitor				
	Roflumilast (Daliresp)	250 mcg, 500 mcg Tablet	Yes	No		
	Phosphodiesterase-3 Enzy	me/Phosphodiesterase	-4 Enzyme Inhibit	or		
	Ensifentrine (Ohtuvayre)	3 mg/2.5 mL Suspension	Yes	No		
	Monoclona	al Antibody, Anti-Asth	matic			
	Dupilumab (Dupixent)	200 mg/1.14 ml, 300 mg/2 ml syringe	Yes	No		
J2357	Omalizumab (Xolair)	75 mg/ 0.5 ml, 150 mg/ ml prefilled syringes and autoinjectors	Yes	No*		
	Manalinumah	100 mg Vial Autoinjector 100		Yes. PA, QL. See criteria below.		
J2182	Mepolizumab (Nucala)	mg/ml Prefilled syringes	Yes	No No		
	Daniel I.	100 mg/ml				
J0517	Benralizumab (Fasenra)	30mg Injection	Yes	Yes. PA, QL. See criteria below.		
J2786	Reslizumab (Cinqair)	100 mg/10 mL IV Solution	Yes	Yes. PA, QL. See criteria below.		
J2356	Tezepelumab (Tezspire)	210MG/1.91ML Prefilled Syringe	Yes	Yes. PA, QL. See criteria below.		
	Solution for Nebulization					
	Short Acting Beta Agonist (SABA)					
J7611 J7613	Albuterol Sulfate	0.63 mg/3 mL 1.25 mg/3 mL 2.5 mg/0.5 mL (0.083%) 2.5 mg/3 mL 5 mg/mL (0.5%)	Yes	Yes		
J7607 J7612 J7614 J7615	Levalbuterol Hydrochloride	0.31 mg/3 mL 0.63 mg/3 mL 1.25 mg/3 mL 1.25 mg/0.5 mL	Yes	No		

Short Acting Anticholinergic					
J7644		0.02% Nebulization		No	
J7645	Ipratropium Bromide	Solution	Yes		
invalid	Long A	Lacting Anticholinergic	•		
	Revefenacin	175 mcg		No	
J7677	(Yupelri)	Nebulization solution	Yes		
		Acting Combination			
17.	Ipratropium/Albuterol	0.5 mg/3 mg (2.5 mg		No	
J7620	(Duoneb)	Base)/3 mL	Yes		
	Inh	aled Corticosteroid			
J7626		0.25 mg/2 mI		No	
J7627	Budesonide	0.25 mg/2 mL 0.5 mg/2 mL	Yes		
J7633	Budesomae	1 mg/2 mL	100		
J7634	Long A	Acting Antimuscarinic	•		
	Dong 1			No	
J7642	Glycopyrrolate	25 mcg vial	Yes		
J7643	(Lonhala Magnair)	25 mcg viai	165		
invalid	Y	Astina Data Associat			
	Formoterol Fumarate Dihydrate	-Acting Beta Agonist	Yes	No	
J7606	(Perforomist)	20 mcg/2 mL	res	NO	
15.05	Arformoterol	45 (0.1	Yes	No	
J7605	(Brovana)	15 mcg/2 ml			
	Genera	l Inhalation Solution	S		
		0.9%	Yes	No	
		Nebusal 3%	Yes	No	
	Sodium chloride Vials	3%	Yes	No	
		Hyper-Sal 3.5%	Yes	No	
		Hyper-Sal 7% Vial 7%	Yes Yes	No No	
	M:	ast Cell Stabilizer	res	NU	
	Cromolyn Sodium	20 mg/2 mL	Yes	No	
	·		163	140	
Medical Equipment Peak Air Peak Flow Meter, Spacer					
			Yes	No	
	Peak Flow Meter				
	Inhaler, Assist Devices	Large Medium	Yes	No	
	(Spacer, bag or reservoir, with or without mask, for use with metered dose inhaler)	Small			
Nebulizer					
				Yes,	
E0570	Nebulizer machine		No	Restricted to Health	
				Plan-preferred vendor.	
Varies	Nebulizer accessories		No	Yes, Restricted to Health	
varies	Nebulizer accessories		INU	Plan-preferred vendor.	
	ı	i			

PA = Prior Authorization, QL = Quantity Limit

EVALUATION CRITERIA FOR APPROVAL/EXCEPTION CONSIDERATION

Below are the coverage criteria and required information for agents with medical benefit restrictions. This coverage criteria has been reviewed and approved by the Health Plan Pharmacy & Therapeutics (P&T) Advisory Committee. For agents that do not have established prior authorization criteria, Health Plan will

^{*}Per the package insert, *initial* administration may require physician administration and may be reviewed via the medical benefit.

make the determination based on Medical Necessity criteria as described in Health Plan Medical Review Guidelines (UM06).

Mono	clonal Antibody				
	Mepolizumab (Nucala), Reslizumab (Cinqair), Benralizumab (Fasenra), Dupilumab (Dupixent)				
Mepoli	Zumab (Nucala) Coverage Criteria: Nucala is reserved for patients ages 6 and older, with poorly controlled, severe eosinophilic asthma with baseline serum eosinophil counts of either ≥ 150 cells/μL at initiation of treatment or ≥ 300 cells/μL in the past 12 months AND 2 or more exacerbations in the past 12 months, despite being compliant with dose-optimized [1] High-dose Inhaled Corticosteroids (ICS) + [2] A second controller (e.g. Long-Acting Beta-2 Agonist (LABA), Long-Acting Muscarinic Antagonist (LAMA), leukotriene modifier, systemic corticosteroids). Must be prescribed by an allergist. Nucala must not be used as monotherapy. Limits: None Required Information for Approval: Patients must meet all of the following criteria: ○ Diagnosis of asthma				
	 Eosinophil level of either ≥ 150 cells/µL at initiation of treatment or ≥ 300 cells/µL in the past 12 months 2 or more exacerbations in the past 12 months, despite being compliant with dose-optimized [1] Inhaled Corticosteroids (ICS) + [2] A second controller (Long-Acting Beta-2 Agonist (LABA), Long-Acting Muscarinic Antagonist (LAMA), leukotriene modifier, systemic corticosteroids) 				
Benral	izumab (Fasenra)				
0	Coverage Criteria: Fasenra is reserved for patients ages 6 and older, with poorly controlled, severe eosinophilic asthma with baseline serum eosinophil counts of either ≥ 150 cells/µL at initiation of treatment or ≥ 300 cells/µL in the past 12 months AND 2 or more exacerbations in the past 12 months, despite being compliant with dose-optimized [1] High-dose Inhaled Corticosteroids (ICS) + [2] A second controller (e.g. Long-Acting Beta-2 Agonist (LABA), Long-Acting Muscarinic Antagonist (LAMA), leukotriene modifier, systemic corticosteroids). Must be prescribed by an allergist. Fasenra must not be used as monotherapy. Limits: None				
	Required Information for Approval: Patients must meet all of the following criteria:				
	 Diagnosis of asthma Eosinophil level of either ≥ 150 cells/μL at initiation of treatment or ≥ 300 cells/μL in the past 12 months 2 or more exacerbations in the past 12 months, despite being compliant with dose-optimized 				
	[1] Inhaled Corticosteroids (ICS) + [2] A second controller (Long-Acting Beta-2 Agonist (LABA), Long-Acting Muscarinic Antagonist (LAMA), leukotriene modifier, systemic corticosteroids)				
	Other Notes: Initial approval is 12 months. Continuing approval will require updated clinic notes with documented therapeutic response in the form of improved symptomology.				
Reslizu	ımab (Cinqair)				
	Coverage Criteria: Cinqair is reserved for patients ages 18 and older, with poorly controlled, severe eosinophilic asthma with baseline serum eosinophil counts of either ≥ 150 cells/ μ L at initiation of treatment or ≥ 300 cells/ μ L in the past 12 months AND 2 or more exacerbations in the past 12 months, despite being compliant with dose-optimized [1] High-dose Inhaled Corticosteroids (ICS) +				

[2] A second controller (e.g. Long-Acting Beta-2 Agonist (LABA), Long-Acting Muscarinic Antagonist (LAMA), leukotriene modifier, systemic corticosteroids). Must be prescribed by an allergist. Cinqair

☐ **Required Information for Approval:** Patients must meet all of the following criteria:

Diagnosis of asthma

must not be used as monotherapy.

☐ Limits: None

- o Eosinophil level of either ≥ 150 cells/ μL at initiation of treatment or ≥ 300 cells/ μL in the past 12 months
- 2 or more exacerbations in the past 12 months, despite being compliant with dose-optimized
 [1] Inhaled Corticosteroids (ICS) + [2] A second controller (Long-Acting Beta-2 Agonist
 (LABA), Long-Acting Muscarinic Antagonist (LAMA), leukotriene modifier, systemic corticosteroids)

Tezepelumab (Tezspire)

- Coverage Criteria: Tezspire is reserved for patients ages 12 and older, with severe asthma AND 2 or more exacerbations in the past 12 months, despite being compliant with dose-optimized [1] High-dose Inhaled Corticosteroids (ICS) + [2] A second controller (e.g. Long-Acting Beta-2 Agonist (LABA), Long-Acting Muscarinic Antagonist (LAMA), leukotriene modifier, systemic corticosteroids). Must be prescribed by an allergist. Tezspire must not be used as monotherapy. Must not be used with anti-IgE, anti-IL4, or anti-IL5 monoclonal antibody agents.
- ☐ Limits: None
- ☐ **Required Information for Approval:** Patients must meet all of the following criteria:
 - o Diagnosis of asthma
 - 2 or more exacerbations in the past 12 months, despite being compliant with dose-optimized [1] Inhaled Corticosteroids (ICS) + [2] A second controller (Long-Acting Beta-2 Agonist (LABA), Long-Acting Muscarinic Antagonist (LAMA), leukotriene modifier, systemic corticosteroids)

Medical Equipment

Nebulizer

Nebulizer

- Coverage Criteria: NoneLimits: 1 per lifetime
- Required Information for Approval: N/A

CLINICAL JUSTIFICATION

Diagnosis and treatment recommendations are based on the National Asthma Education and Prevention Program (NAEPP) 2007, Global Initiative for Asthma (GINA) 2022, Global Initiative for Chronic Obstructive Pulmonary Disease (GOLD) 2017 [ACOS] & 2022 [COPD], and International European Respiratory Society/American Thoracic Society (ERS/ATS) guidelines. 1-5,52

Asthma

Asthma is a dynamic condition requiring constant assessment in order to provide optimal control of symptoms. The Health Plan formulary was previously designed to make controller agents accessible, as these are the mainstay of therapy according to NAEPP and GINA guidelines. Controller medications for asthma include inhaled corticosteroids, long-acting beta-2 agonists, leukotriene antagonists, theophylline, cromolyn, and zileuton.

Concerns about the risks of using short-acting β 2-agonists (SABA) alone has led to the recent update in the Global Initiative for Asthma (GINA) recommendations. 2019 GINA updated guideline recommends either a symptom driven or daily inhaled corticosteroid treatment in all adults and adolescents with asthma. ⁴⁹ Short acting-inhalers should only be used on an as-needed basis, and no longer recommended as a monotherapy. Frequent use of short-acting inhalers can be an indicator of poorly controlled asthma.

Currently there are 6 monoclonal antibodies Tezspire, Dupixent, Xolair, Nucala, Cinqair, and Fasenra, with FDA approved indication for asthma. Since NAEPP and GINA guidelines list these agents as add-on therapies for patients with severe, uncontrolled disease, they are reserved for patients who have failed ICS, LABA, LAMA, and leukotriene antagonists. Xolair, Nucala, Cinqair, Fasenara, and Dupixent are specifically indicated in patients with allergic asthma, and therefore requires additional lab testing to establish medical necessity.

Chronic Obstructive Pulmonary Disease (COPD)

Spirometry remains vital for the diagnosis of COPD, therefore, Health Plan requires pulmonary function testing to ensure appropriate use. GOLD 2019 update recommends repeat of Spirometry on a separate occasion if post-bronchodilator FEV₁/FVC ratio is between 0.6 and 0.8. 41 Based on updated GOLD COPD 2019 guidelines, blood eosinophil levels are required for certain COPD medications.

REFERENCES

- 1. Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention, 2016. Available from: www.ginasthma.org.
- 2. National Heart, Lung, and Blood Institute. Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma. 2007. Available from: http://www.nhlbi.nih.gov/files/docs/guidelines/asthgdln.pdf.
- 3. Global Initiative for Chronic Obstructive Lung Disease. Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease. 2017. Available from: www.goldcopd.org.
- 4. Global Initiative for Chronic Obstructive Lung Disease. Diagnosis of Diseases of Chronic Airflow Limitation: Asthma COPD and Asthma-COPD Overlap Syndrome (ACOS). 2016. Available from: www.goldcopd.org.
- 5. Chung KF, Wenzel SE, Brozek JL, et al. International ERA/ATS guidelines on definition, evaluation and treatment of severe asthma. *Eur Respir J.* 2014;43 (2): 343-373.
- Food and Drug Administration. FDA News Release: FDA approves Nucala to treat severe asthma. http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm471031.htm. Updated November 6, 2015. Accessed September 18, 2016.
- 7. Nucala [Package Insert]. Philadelphia, PA: GlaxoSmithKline LLC; 2015.
- Food and Drug Administration. FDA News Release: FDA approves Cinqair to treat severe asthma. http://www.fda.gov/NewsEvents/Newsroom/ Press Announcements/ucm491980.htm. Updated March 23, 2016. Accessed September 23, 2016.
- 9. Cinqair [Package Insert]. Frazer, PA: Teva Respiratory, LLC; 2016.
- 10. Donohue JF. Systematic review comparing LABA, olodaterol, and indacaterol: limitations. *Int J Chron Obstruct Pulmon Dis.* 2014;9:1331-1335.
- 11. Cazzola M, Calzetta L, Matera MG. Beta2-adrenoreceptor agonists: current and future direction. Br J Pharmacol. 2011;163(1):4-17.
- 12. Roskell NS, Anzueto A, Hamilton A, Disse B, Becker K. Once-daily long-acting beta-agonists for chronic obstructive pulmonary disease: an indirect comparison of olodaterol and indacaterol. *Int J Chron Obstruct Pulmon Dis.* 2014;9:813-824.
- 13. Schurmann W, Schmidtmann S, Moroni P, Massey D, Qidan M. Respimat Soft Mist Inhaler versus Hydrofluoroalkane Metered Dose Inhaler: Patient Preference and Satisfaction. 2005;4(1):53-61.
- 14. Hodder R, Price D. Patient preferences for inhaler devices in chronic obstructive pulmonary disease: experience with Respimat Soft Mist Inhaler. *Int J Chorn Obstruct Pulmon Dis.* 2009;4:381-390.
- 15. Cazzola M, Beeh KM, Price D, Roche N. Assessing clinical value of fast onset and sustained duration of action of long-acting bronchodilators for COPD. *Pulmonary Pharmacology and Therapeutics*. 2015;31:68-78.
- 16. Hannaway PJ, Hooper GD. Comparison study of sustained-release theophylline products: Slo-bid capsules versus Theo-DUR tablets in 20 children and young adults with asthma. *J Allergy Clin Immunol.* 1986;77(3):456-464.
- 17. Food and Drug Administration. FDA Drug Shortages: Current and Resolved Drug Shortages and Discontinuations Reported to FDA. http://www.accessdata.fda.gov/scripts/drugshortages/dsp_ActiveIngredientDetails.cfm?AI=Theophylline%20Extended%20Release%20Tablets%20and%20Capsules&st=c&tab=tabs-1. Updated August 16, 2016. Accessed September 26, 2016.
- 18. American Society of Health-System Pharmacists. Theophylline Extended-Release Tablets. http://www.ashp.org/menu/DrugShortages/CurrentShortages/bulletin.aspx?id=1221. Updated August 15, 2016. Accessed September 26, 2016.
- 19. Fasenra [Package Insert]. Wilmington, DE: AstraZeneca Pharmaceuticals LP; 2017.
- 20. AirDuo Respiclick [Package Insert]. Jerusalem, Israel: Teva Respiratory LLC; 2017.
- 21. ArmonAir Respiclick [Package Insert]. Jerusalem, Israel: Teva Respiratory LLC; 2017.
- 22. Seebri Neohaler (glycopyrrolate) [prescribing information]. East Hanover, NJ: Novartis Pharmaceuticals; January 2017.
- 23. Agusti A, de Teresa L, De Backer W, et al. A comparison of the efficacy and safety of once-daily fluticasone furoate/vilanterol with twice-daily fluticasone propionate/salmeterol in moderate to very severe COPD. Eur Respir J. 2014;43:763–72.
- 24. Dransfield MT, Crim CC, Feldman G, et al. Once-daily (OD) fluticasone furoate/vilanterol (FF/VI: 100/25 lg) compared with twice-daily (BD) Fluticasone propionate/salmeterol (FSC: 250/50 lg) in patients with COPD abstract no. A2432]. Am J Respir Crit Care Med. 2013;187.
- 25. Svedsater H, Stynes G, Wex J, et al. Once-daily fluticasone furoate/vilanterol versus twice daily combination therapies in asthmamixed treatment comparisons of clinical efficacy. Asthma research and practice. 2016; 2:4. doi:10.1186/s40733-015-0016-0.
- 26. Stynes G, Svedsater H, Wex J, et al. Once-daily fluticasone furoate/vilanterol 100/25 mcg versus twice daily combination therapies in COPD mixed treatment comparisons of clinical efficacy. *Respiratory Research*. 2015;16(1):25. doi:10.1186/s12931-015-0184-8.
- 27. Partridge MR, Schuermann W, Beckman O, et al. Effect on lung function and morning activities of budesonide/formoterol vs salmeterol/fluticasone in patients with COPD. Ther Adv Respir Dis. 2009;3(4):147-57.
- 28. Dransfield MT, Bourbeau J, Jones PW, et al. Once-daily inhaled fluticasone furoate and vilanterol versus vilanterol only for prevention of exacerbations of COPD: two replicate double-blind, parallel-group, randomised controlled trials. Lancet Respir Med. 2013;1:210-23
- 29. Dransfield MT, Feldman G, Korenblat P, et al. Efficacy and safety of once-daily fluticasone furoate/vilanterol (100/25 mcg) versus twice-daily fluticasone propionate/salmeterol (250/50 mcg) in COPD patients. Respir Med. 2014;108:1171-79.
- 30. Agusti A, de Teresa L, De Backer W, et al. A comparison of the efficacy and safety of once-daily fluticasone furoate/vilanterol with twice-daily fluticasone propionate/salmeterol in moderate to very severe COPD. Eur Respir J. 2014;43(3):763-72.
- 31. Dahl R, Chuchalin A, Gor D, et al. EXCEL: a randomized trial comparing salmeterol/fluticasone propionate and formoterol/budesonide combinations in adults with persistent asthma. Resp Med. 2006; 100:1152-62.

- 32. FitzGerald MJ, Boulet LP, Follows RM. The CONCEPT trial: A 1-year, multicenter, randomized, double-blind, double-dummy comparison of a stable dosing regimen of salmeterol/fluticasone propionate with an adjustable maintenance dosing regimen of formoterol/budesonide in adults with persistent asthma. Clin Ther. 2005;27(4):393-406
- 33. Price DB, Williams AE, Yoxall S. Salmeterol/fluticasone stable-dose treatment compared to formoterol-budesonide adjustable maintenance dosing: impact on health-related quality of life. Respir Res. 2007;8:46.
- 34. Aalbers R, Backer V, Kava TT, et al. Adjustable maintenance dosing with budesonide/formoterol compared to fixed-dose salmeterol/fluticasone in moderate to severe asthma. Curr Med Res Opin. 2004;20(2):225-40.
- 35. Kuna P, Peters MJ, Manjra AI, et al. Effect of budesonide/formoterol maintenance and reliever therapy on asthma exacerbations. Int J Clin Pract. 2007;61(5):725-36
- 36. Palmqvist M, Arvidsson P, Beckman O, et al. Onset of bronchodilation with budesonide/formoterol and salmeterol/fluticasone in single inhalers. Pulm Pharmacol Ther. 2001;14(1):29-34.
- 37. Busse WW, Shah SR, Somerville L, et al. Comparison of adjustable- and fixed-dose budesonide/ formoterol pressurized metered-dose inhaler and fixed-dose fluticasone propionate/salmeterol dry powder inhaler in asthma patients. J Allergy Clin Immuno. 2008;121:1407-14.
- 38. Lasserson TJ, Ferrara G, Casali L. Combination fluticasone and salmeterol versus fixed dose combination budesonide and formoterol for chronic asthma in adults and children. Cochrane Database of Systematic Reviews 2011, Issue 12. Art. No.: CD004106. DOI: 10.1002/14651858.CD004106.pub4.
- 39. Bernstein DI, Hebert J, Cheema A, et al. Efficacy and Onset of Action of Mometasone Furoate/Formoterol and Fluticasone Propionate/Salmeterol Combination Treatment in Subjects With Persistent Asthma. Allergy Asthma Clin Immunol. 2011;7(1):21.
- 40. Woodcock A, Bleecker ER, Lötvall J, et al. Efficacy and safety of fluticasone furoate/vilanterol compared with fluticasone propionate/salmeterol combination in adult and adolescent patients with persistent asthma: a randomized trial. Chest. 2013;144(4):1222-9.
- 41. Global Initiative for Chronic Obstructive Lung Disease. Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease (2019 Report). Available from: https://goldcopd.org/wp-content/uploads/2018/11/GOLD-2019-v1.7-FINAL-14Nov2018-WMS.pdf
- 42. Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention, 2018. Available from: www.ginasthma.org.
- 43. Asthma and COPD ACCP https://www.accp.com/docs/bookstore/psap/p2017b2_sample.pdf
- 44. Dupixent package insert.
- 45. Evaluation of Dupilumab in Patients With Severe Steroid Dependent Asthma (VENTURE). Clinical Trials.gov. ClinicalTrials.gov Identifier: NCT02528214
- 46. CHEST Physician The Nespaper of the American College of Chest Physicians. Publish date: November 15, 2018. https://www.mdedge.com/chestphysician/article/188986/asthma/fda-approves-primatene-mist-return
- 47. American Lung Association Responds to FDA Approval of Primatene Mist Asthma Inhaler. https://www.lung.org/about-us/media/press-releases/fda-approval-primatene.html
- AAFA Statement on FDA Approval of Primatene Mist for Mild Asthma, https://www.aafa.org/media/2230/aafa-statement-of-fda-approval-of-primatene-mist-for-asthma.pdf.
- 49. Reddel HK, FitzGerald JM, Bateman ED, et al. GINA 2019: a fundamental change in asthma management. Eur Respir J 2019; 53: 1901046 [https://doi.org/10.1183/13993003.01046-2019].
- 50. Archive of New Indications and Dosage Forms 2019. https://www.drugs.com/new-indications-archive/april-2019.html.
- $51. \quad \text{CenterWatch 2019 FDA Approved Drugs.} \\ \underline{\text{http://live.centerwatch.com/drug-information/fda-approved-drugs/}} \\ \underline{\text{http://live.centerwatch.com/drug-information/fda-approved-drug-informa$
- 52. Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention, 2020. Available from: www.ginasthma.org.
- 53. Global Initiative for Chronic Obstructive Lung Disease (GOLD). 2021 global strategy for prevention, diagnosis and management of COPD. https://goldcopd.org/2021-gold-reports/. Updated 2021. Accessed May 3, 2022.
- 54. Tezspire (tezepelumab) [prescribing information]. Thousand Oaks, CA: Amgen, Inc; December 2021.
- 55. Global Initiative for Asthma (GINA). 2023 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 June 8, 2023.
- 56. Global Initiative for Chronic Obstructive Lung Disease (GOLD). 2023 global strategy for prevention, diagnosis and management of COPD. https://goldcopd.org/2023-gold-report-2/. Updated 2023. Accessed May 8, 2023.
- 57. Global Initiative for Chronic Obstructive Lung Disease (GOLD). 2023 global strategy for prevention, diagnosis and management of COPD. https://goldcopd.org/2024-gold-report/. Updated 2023. Accessed August 8, 2024.
- 58. Global Initiative for Asthma (GINA). 2024 global strategy for asthma management and prevention. https://ginasthma.org/2024-report/. Updated 2024. Accessed August 8, 2024.
- 59. FASENRA US prescribing information. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2024/761070Orig1s020correctedlbl.pdf. [Last accessed August 2024].

REVIEW & EDIT HISTORY

Document Changes	Reference	Date	P&T Chairman
Creation of Policy	Singulair Survey 7-06.doc	7/2006	Allen Shek PharmD BCPS
Update to Policy	ICS Review 9-06.doc	9/2006	Allen Shek PharmD BCPS
Update to Policy	Albuterol HFA 11-06.doc	11/2006	Allen Shek PharmD BCPS
Update to Policy	ICS-LABA combo status 9-07.doc	9/2007	Allen Shek PharmD BCPS
Update to Policy	Symbicort 9-11-07.doc	9/2007	Allen Shek PharmD BCPS
Update to Policy	Asthma_Xopenex 9-08.doc	9/2008	Allen Shek PharmD BCPS

Update to Policy	ICS Review 9-16-08.doc	9/2008	Allen Shek PharmD BCPS
Update to Policy	Policy Spacer utilization.doc		Allen Shek PharmD BCPS
Update to Policy	ICS post P&T Survey recap.doc	3/2009	Allen Shek PharmD BCPS
Update to Policy	Daliresp Monograph 11-20-12.doc	11/2012	Allen Shek PharmD BCPS
Update to Policy	Tudorza 5-21-2013.docx	5/2013	Allen Shek PharmD BCPS
Update to Policy	HPSJ Coverage Policy – Respiratory – Asthma & COPD 2015-05.docx	9/2015	Jonathan Szkotak, PharmD, BCACP
Update to Policy	HPSJ Coverage Policy – Respiratory – Asthma & COPD 2016-12.docx	12/2016	Johnathan Yeh, PharmD
Update to Policy	HPSJ Coverage Policy – Respiratory – Asthma & COPD 2017-12.docx	12/2017	Johnathan Yeh, PharmD
Update to Policy	HPSJ Coverage Policy – Respiratory – Asthma & COPD 2019-2.docx	2/2019	Matthew Garrett, PharmD
Update to Policy	HPSJ Coverage Policy – Respiratory – Asthma & COPD 2020-2.docx	2/2020	Matthew Garrett, PharmD
Update to Policy	HPSJ Coverage Policy – Respiratory – Asthma & COPD 2021-2.docx	2/2021	Matthew Garrett, PharmD
Update to Policy	Asthma & COPD	05/2022	Matthew Garrett, PharmD
Review of Policy	Asthma & COPD	06/2023	Matthew Garrett, PharmD
Update to Policy	Asthma & COPD	09/2024	Matthew Garrett, PharmD

Note: All changes are approved by the Health Plan P&T Committee before incorporation into the utilization policy.