

## INHALED DRUGS FOR COPD

<b>Inhaled Short Acting Beta(2)-Adrenergic Agonists (SABA)</b>					
<b>Name</b>	<b>Supplied</b>	<b>Covered by ODB</b>	<b>Cost</b>	<b>Suggested Dosing</b>	<b>Adverse Effects</b>
<b>Salbutamol</b>					
<b>Salbutamol HFA (generic)</b>	100 mcg/metered dose for inhalation	YES	\$5-5.75 for 200 doses	1–2 puffs inhaled TID–QID PRN; maximum 8 puffs (800 mcg)/day	Tremor, nervousness, hypokalemia, tachycardia, palpitations.
<b>Salbutamol Preservative Free Nebules (generic)</b>	1 mg/ml solution for inhalation	YES – LU REQUIRED	\$7.23-\$8.31 for 20 x 2.5 ml	2.5–5 mg inhaled QID PRN	
	2 mg/ml solution for inhalation	LU 265 (indefinite) LU 266 (indefinite) LU 267 (indefinite) LU 268 (indefinite)	\$13.50-\$15.53 for 20 x 2.5 ml		
<b>Airomir HFA</b>	100 mcg/metered dose for inhalation	YES with valid NO SUBSTITUTION	\$5.88-\$6.76 for 200 doses	1–2 puffs inhaled TID–QID PRN; maximum 8 puffs (800 mcg)/day	
<b>Ventolin Nebules</b>	5 mg/ml solution for inhalation	YES – LU REQUIRED LU 256 (indefinite) LU 257 (indefinite) LU 258 (indefinite) LU 259 (indefinite)	\$2.50 for 10 ml	2.5–5 mg inhaled QID PRN	
<b>Ventolin HFA</b>	100 mcg/metered dose for inhalation	YES with valid NO SUBSTITUTION	\$6.34-\$7.29 for 200 doses	1–2 puffs inhaled TID–QID PRN; maximum 8 puffs (800 mcg)/day	
<b>Ventolin Nebules P.F.</b>	1 mg/ml solution for inhalation	YES – LU REQUIRED LU 265 (indefinite) LU 266 (indefinite)	\$7.23-\$8.31 for 20 x 2.5 ml	2.5–5 mg inhaled QID PRN	

	2 mg/ml solution for inhalation	LU 267 (indefinite) LU 268 (indefinite)	\$13.50-\$15.53 for 20 x 2.5 ml		
<b>Ventolin Diskus</b>	200 mcg/dose	NO	\$10.16-\$11.68 for 60 doses	1 actuation inhaled TID-QID PRN; maximum 800 mcg/day	
<b>Terbutaline</b>					
<b>Bricanyl Turbuhaler</b>	0.5 mg/ dose for inhalation	YES	\$8.67-\$9.97 for 100 doses	1 actuation inhaled Q4-6H PRN; maximum 6 actuations/day	Tremor, nervousness, hypokalemia, tachycardia, palpitations.

### Inhaled Short Acting Muscarinic Antagonists (SAMA)

Name	Supplied	Covered by ODB	Cost	Suggested Dosing	Adverse Effects
<b>Ipratropium Bromide</b>					
<b>Atrovent HFA</b>	200 mcg/metered dose for inhalation	YES	\$21.38-24.59 for 200 doses	Individualize dose; may use PRN or regularly scheduled  2-4 puffs inhaled Q6-8H up to 6-8 puffs inhaled Q6-8H, if tolerated; maximum 12 puffs/day	Dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention. Possible increased risk of cardiovascular events.
<b>Preservative Free Nebules (generic)</b>	125 mcg/ml solution for inhalation	YES – LU REQUIRED LU 265 (indefinite) LU 266 (indefinite) LU 267 (indefinite) LU 268 (indefinite)	\$24.50-\$27.95 for 20 x 2 ml	250-500 mcg inhaled TID-QID	
	250 mcg/ml solution for inhalation		\$15.10-\$17.37 for 20 x 1 ml		
<b>Atrovent UDV</b>	125 mcg/ml solution for inhalation	NO	--	250-500 mcg inhaled TID-QID	
	250 mcg/ml solution for inhalation				

<b>Inhaled Short-Acting Muscarinic Antagonist/ Beta(2)-Adrenergic Agonists Combination (SAMA/SABA)</b>					
<b>Drug Name</b>	<b>Supplied</b>	<b>Covered by ODB</b>	<b>Cost</b>	<b>Suggested Dosing</b>	<b>Adverse Effects</b>
<b>Ipratropium/Salbutamol</b>					
<b>Combivent UDV</b>	500 mcg/2.5 mg per 2.5 ml solution for inhalation	YES – LU REQUIRED LU 256 (indefinite) LU 257 (indefinite) LU 258 (indefinite) LU 259 (indefinite)	\$34.07-39.18 for 20 x 2.5 ml	2.5 mL inhaled Q6H PRN	Dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention. Possible increased risk of cardiovascular events. Tremor, nervousness, hypokalemia, tachycardia, palpitations
<b>Teva-Combo sterinebs</b>	500 mcg/2.5 mg per 2.5 ml solution for inhalation	YES – LU REQUIRED LU 256 (indefinite) LU 257 (indefinite) LU 258 (indefinite) LU 259 (indefinite)	\$25.63-29.47 for 20 x 2.5 ml		
<b>Combivent Respimat</b>	20/100 mcg for inhalation	NO	\$31.69-36.44 for 120 doses	1 actuation inhaled QID; additional doses PRN; maximum 6 doses/day	

### Inhaled Long Acting Beta(2)-Adrenergic Agonists (LABA)

Drug Name	Supplied	Covered by ODB	Cost	Suggested Dosing	Adverse Effects
<b>Formoterol</b>					
<b>Oxeze Turbuhaler</b>	6 mcg/metered dose for inhalation	YES – LU REQUIRED LU 132 (indefinite)	\$35.53-40.86 for 60 doses	1 actuation inhaled Q12H; maximum 48 mcg/day	Tremor, nervousness, hypokalemia, tachycardia, palpitations
	12 mcg/metered dose for inhalation		\$47.31-54.41 for 60 doses		
<b>Foradil</b>	12 mcg capsule for inhalation	YES – LU REQUIRED LU 132 (indefinite)	\$53.44-60.31	1 capsule inhaled BID; maximum 48 mcg/day (as 2 capsules inhaled BID)	
<b>Indacaterol</b>					
<b>Onbrez Breezhaler</b>	75 mcg capsule for inhalation	YES – LU REQUIRED LU 443 (indefinite)	\$49.10-\$56.47 for 30 doses	1 capsule inhaled once daily	Tremor, nervousness, hypokalemia, tachycardia, palpitations
<b>Salmeterol</b>					
<b>SereVent Diskus</b>	50 mcg powder for inhalation	YES – LU REQUIRED LU 132 (indefinite) LU 391 (indefinite)	\$63.39-\$72.90 for 60 doses	1 actuation inhaled BID	Tremor, nervousness, hypokalemia, tachycardia, palpitations

<b>Inhaled Long Acting Muscarinic Antagonists (LAMA)</b>					
<b>Drug Name</b>	<b>Supplied</b>	<b>Covered by ODB</b>	<b>Cost</b>	<b>Suggested Dosing</b>	<b>Adverse Effects</b>
<b>Umdeclidinium</b>					
<b>Incruse Ellipta</b>	62.5 mcg blister powder for inhalation	YES	\$52.80-60.72 for 30 doses	1 actuation inhaled once daily	Dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention.
<b>Aclidinium Bromide</b>					
<b>Turdorza Genuair</b>	400 mcg/actuation powder for inhalation	YES	\$56.07-64.48 for 60 doses	1 actuation inhaled BID	Dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention.
<b>Glycopyrronium</b>					
<b>Seebri Breezhaler</b>	500 mcg capsule for inhalation	YES	\$56.07-64.48 for 30 doses	1 capsule inhaled once daily	Dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention.
<b>Tiotropium</b>					
<b>Spiriva</b>	18 mcg capsule for inhalation	YES	\$57.30-65.90 for 30 doses	1 capsule inhaled once daily	Dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention.
<b>Spiriva Respimat</b>	2.5 mcg/actuation powder for inhalation	YES	\$57.30-65.90 for 4ml, 60 doses	2 actuations inhaled once daily	

**Inhaled Long-Acting Muscarinic Antagonist/ Beta(2)-Adrenergic Agonists Combination (LAMA/LABA)**

<b>Drug Name</b>	<b>Supplied</b>	<b>Covered by ODB</b>	<b>Cost</b>	<b>Suggested Dosing</b>	<b>Adverse Effects</b>
<b>Acclidinium/Formoterol</b>					
<b>Duaklir Genuair</b>	400/12 mcg metered dose powder for inhalation	YES – LU REQUIRED LU 459 (indefinite)	\$63.36-72.86 for 60 doses	1 actuation inhaled BID	<b>LAMA:</b> dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention. <b>LABA:</b> tremor, nervousness, hypokalemia, tachycardia, palpitations.
<b>Tiotropium/Olodaterol</b>					
<b>Inspiroto Respimat</b>	2.5/2.5 mcg per actuation for inhalation solution	YES – LU REQUIRED LU 459 (indefinite)	\$67.24-77.33 for 60 doses	2 actuations inhaled once daily	<b>LAMA:</b> dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention. <b>LABA:</b> tremor, nervousness, hypokalemia, tachycardia, palpitations.
<b>Glycopyrronium/idacaterol</b>					
<b>Ultibro Breezhaler</b>	110/50 mcg for inhalation powder-capsule	YES – LU REQUIRED LU 459 (indefinite)	\$82.84-95.27 for 30 doses	1 capsule inhaled once daily	<b>LAMA:</b> dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention. <b>LABA:</b> tremor, nervousness, hypokalemia,

					tachycardia, palpitations.
<b>Umeclidinium/Vilanterol</b>					
<b>Anoro Ellipta</b>	62.5/25 mcg blister powder for inhalation	YES – LU REQUIRED LU 459 (indefinite)	\$89.12-102.49 for 30 doses	1 actuation inhaled once daily	<b>LAMA:</b> dry mouth, metallic taste, mydriasis and glaucoma if released into eye; urinary retention. <b>LABA:</b> tremor, nervousness, hypokalemia, tachycardia, palpitations.



<b>Inhaled Corticosteroid/Long-Acting Beta(2)-Adrenergic Agonists Combination (ICS/LABA)</b>						
<b>Drug Name</b>	<b>Supplied</b>	<b>Covered by ODB</b>	<b>Cost</b>	<b>Suggested Dosing</b>	<b>Adverse Effects</b>	
<b>Budesonide/formoterol fumarate</b>						
<b>Symbicort turbuhaler</b>	100/6 mcg metered dose for inhalation	YES—LU REQUIRED LU 330 (indefinite)	\$73.43-84.44 for 120 doses	2 actuations inhaled BID; maximum 8 actuations/day	<b>Corticosteroid:</b> oropharyngeal candidiasis and hoarseness (can be prevented by using a spacer with pMDI or by using DPI, and by rinsing mouth after use); skin bruising; posterior subcapsular and nuclear cataracts possible worsening of glaucoma. May decrease bone mineral density and increase fracture risk. Consider monitoring bone mineral density in individuals at high risk, e.g., osteoporosis. <b>LABA:</b> tremor, nervousness, hypokalemia, tachycardia, palpitations.	
	200/6 mcg metered dose for inhalation		\$95.42-109.73 for 120 doses			
<b>Fluticasone/salmeterol</b>						
<b>Advair</b>	25/125 mcg per metered dose	YES—LU REQUIRED LU 330 (indefinite)	\$107.21-123.29	2 puffs inhaled BID		
	25/250 mcg per metered dose		\$152.19-175.02			
<b>Advair Diskus</b>	50/100 mcg	YES—LU REQUIRED LU 330 (indefinite)	\$89.56-102.99	1 actuation inhaled BID		
	50/250 mcg		\$107.21-123.29			
	50/500 mcg		\$152.19-175.02			
<b>Wixela Inhub</b>	50/100 mcg	YES—LU REQUIRED LU 330 (indefinite)	\$42.41-48.77	1 actuation inhaled BID		
	50/250 mcg		\$50.76-58.37			
	50/500 mcg		\$72.06-82.87			
<b>Fluticasone/vilanterol</b>						
<b>Breo Ellipta</b>	100/25 mcg	YES—LU REQUIRED LU 456 (indefinite)	\$90.44-104.01	1 actuation inhaled once daily		
	200/25 mcg		\$140.03-161.03			

**Inhaled Corticosteroid/Long-Acting Muscarinic Antagonist/Long-Acting Beta(2)-Adrenergic Agonists Combination (ICS/LAMA/LABA)**

Drug Name	Supplied	Covered by ODB	Cost	Suggested Dosing	Adverse Effects
<b>Fluticasone/umeclidinium/vilanterol</b>					
<b>Trelegy Ellipta</b>	100/62.5/25 mcg	YES—LU REQUIRED LU 567 (indefinite)	\$143.80-165.37	1 actuation inhaled once daily	<p><b>Corticosteroid:</b> oropharyngeal candidiasis and hoarseness (can be prevented by using a spacer with pMDI or by using DPI, and by rinsing mouth after use); skin bruising; posterior subcapsular and nuclear cataracts, possible worsening of glaucoma. May decrease bone mineral density and increase fracture risk. Consider monitoring bone mineral density in individuals at high risk, e.g., osteoporosis.</p> <p><b>LABA:</b> tremor, nervousness, hypokalemia, tachycardia, palpitations.</p> <p><b>LAMA:</b> Dry mouth, metallic taste,</p>
	200/62.5/25 mcg	NO	\$159.29-183.18		

					mydriasis and glaucoma if released into eye; urinary retention.
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**REFERENCES:**

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