

A Guide to Asthma and COPD Maintenance Therapy by Alyssa Lagasca, PharmD

Asthma	Therapies and counseling points	COPD
<p>Track 1 (preferred - Symbicort):</p> <ol style="list-style-type: none"> 1) PRN only low dose ICS-formoterol 2) PRN only low dose ICS-formoterol 3) Low dose maintenance ICS-formoterol 4) Medium dose maintenance ICS-formoterol 5) Add-on LAMA and <u>consider</u> high dose ICS-formoterol (+/-) anti-IgE, anti-IL5/5R <p>Track 2:</p> <ol style="list-style-type: none"> 1) ICS whenever SABA is taken for exacerbation. 2) Low dose maintenance ICS 3) Low dose maintenance ICS-LABA 4) Medium/high dose maintenance ICS-LABA 5) Same as track 1 (Add-on LAMA with consideration for high dose ICS-LABA) <p>Management cycle:</p> <ol style="list-style-type: none"> 1) Review symptoms, exacerbations, side effects, lung function and patient satisfaction 2) Assess symptom control/modifiable risk factors, inhaler technique/adherence 3) Adjust based on observations from steps 1&2 	<p>ICS – thrush (rinse mouth), cough and throat irritation Flovent (Fluticasone Propionate) Pulmicort (Budesonide) QVAR (Beclomethasone)</p> <p>LABA – tremors and palpitations Performoist (formoterol) Serevent Diskus (salmeterol)</p> <p>LAMA – dry mouth, urinary retention and constipation Incruse (umeclidinium) Spiriva (tiotropium)</p> <p>ICS-LABA Symbicort (Budesonide/Formoterol) Advair (Fluticasone/Salmeterol) Breo Ellipta (Fluticasone/Vilanterol)</p> <p>LAMA-LABA Anoro Ellipta (Umeclidinium/Vilanterol) Stiolto Respimat (Olodaterol/Tiotropium)</p> <p>ICS-LABA-LAMA Trelegy Ellipta (Fluticasone/Vilanterol/Umeclidinium) Breztri Aerosphere (Budesonide/Glycopyrrolate/Formoterol)</p>	<p>0 or 1 moderate exacerbations mmRC 0-1, CAT < 10: LABA (prefer) or SABA mmRC ≥ 2, CAT ≥ 10: LABA + LAMA</p> <p>>2 moderate exacerbations OR > 1 leading to hospitalization: Regardless of mmRC/CAT: LABA + LAMA If blood eos ≥ 30: LABA + LAMA + ICS</p> <p>Management cycle:</p> <ol style="list-style-type: none"> 1) Review Symptoms such as dyspnea (mmRC*/CAT**) and exacerbations 2) Assess: <ul style="list-style-type: none"> • Inhaler technique and adherence • Non-pharmacological approaches (pulmonary rehabilitation and self-management education) 3) Escalate or de-escalate based on observations from steps 1&2

*mmRC: modified Medical Research Council dyspnea scale

**CAT: COPD assessment test

MDIs (Metered Dose Inhalers)	DPIs (Dry Powder Inhalers)
<p>Key is to inhale <u>SLOW AND DEEP.</u></p> <p><u>Administration:</u></p> <ol style="list-style-type: none"> 1. For first time use or if not used for 7+ days, <u>prime</u> inhaler by shaking it well for 5 seconds then release a test spray. 2. Shake inhaler and remove protective cap. 3. Hold inhaler upright and exhale away from device. 4. Place mouthpiece between lips and teeth. 5. Inhale <u>slowly and deeply</u> and press down on the canister to receive medication. 6. Hold breath for 5-10 seconds before re-capping and breathing out. 	<p>Key is to inhale <u>FORCEFULLY and DEEP.</u></p> <p><u>Handihaler Administration:</u></p> <ol style="list-style-type: none"> 1. Insert capsule into chamber. 2. Press green button once to puncture capsule and release medicine. 3. Do NOT shake device, breathe out fully. 4. Inhale fast and deep into mouthpiece. 5. Remove inhaler from mouth and hold breath for 10 seconds. 6. Breathe out slowly and repeat steps 4-8 to get full dose. <p><u>Ellipta Administration:</u></p> <ol style="list-style-type: none"> 1. Slide cover down to expose mouthpiece, do not block air vent. 2. Do NOT shake device, breathe out fully. 3. Take a forceful and quick breath into mouthpiece. 4. Remove inhaler from mouth and hold breath for 3-4 seconds before breathing out and sliding cover back on. <p><u>Diskus Administration:</u></p> <ol style="list-style-type: none"> 1. Push thumb grip away from you until it clicks, this will allow you to see mouthpiece. 2. Hold the lever and slide lever away from you until Diskus clicks – this will load medication. 3. Breathe out and seal lips around mouthpiece. 4. Inhale rapidly and deeply then continue to take a full, deep breath. 5. Hold breath for 10 seconds before breathing out, then pushing thumb grip back to you to close mouthpiece.

References:

1. Venkatesan P. 2023 GINA report for asthma. Lancet Respir Med. 2023 Jul;11(7):589. doi: 10.1016/S2213-2600(23)00230-8. Epub 2023 Jun 8. PMID: 37302397.
2. Venkatesan P. GOLD COPD report: 2023 update. Lancet Respir Med. 2023 Jan;11(1):18. doi: 10.1016/S2213-2600(22)00494-5. Epub 2022 Nov 30. PMID: 36462509.