



# UHA STEP-WISE APPROACH TO ASTHMA MANAGEMENT (AGES 12 AND OLDER)

ASTHMA MANAGEMENT KEY POINTS:						
<b>Assessment:</b>						
Asthma typically presents with a pattern of respiratory symptoms that occur following exposure to triggers (e.g. allergen, exercise, viral infection) and resolve with trigger avoidance or asthma medication. This history plus the finding on physical examination of characteristic musical wheezing (present in association with symptoms and absent when symptoms resolve) strongly point to a diagnosis of asthma. Confirmation of the asthma diagnosis is based on two key additional elements:						
<ul style="list-style-type: none"> <li>The demonstration of variable expiratory airflow limitation by <b>spirometry</b>; and</li> <li>Exclusion of alternative diagnoses.</li> </ul>						
<b>Treatment:</b>						
<ul style="list-style-type: none"> <li>Classification depends on impairment and risk.</li> <li>Each step should include education, review environmental control, and management of comorbidities.</li> <li>Consult with asthma specialist is recommended above step 3.</li> <li>Persistent asthma requires daily medication (step 2 or higher).</li> <li>Use of a LABA alone without other long-term asthma control (e.g. inhaled corticosteroid) is contraindicated.</li> </ul>						
STEP 1 prn SABA	STEP 2 daily or prn low-dose ICS + prn SABA	STEP 3 daily and prn combo low-dose ICS + formoterol	STEP 4 daily and prn combo med-dose ICS + formoterol	STEP 5 daily combo med- or high-dose ICS + LABA + LAMA + prn SABA	STEP 6 daily combo high-dose ICS + LABA + oral systemic corticosteroid + prn SABA	

DRUG CLASS	UMPQUA HEALTH ALLIANCE PREFERRED INHALERS* (mcg/puff)	ICS DAILY DOSE (mcg)
SABA	albuterol 90 (generic for Ventolin®, ProAir®) levalbuterol 45 (generic for Xopenex®)	
low-dose ICS	Qvar Redihaler® 40,80 (beclomethasone) Pulmicort Flexhaler® 90,180 (budesonide) Flovent HFA® 44,110 (fluticasone) Flovent Diskus® 50,100 (fluticasone) Arnuity Ellipta® 100 (fluticasone furoate) Asmanex HFA® 100 (mometasone) Asmanex Twisthaler® 110,220 (mometasone)	80-240 180-540 88-264 100-300 100 100-200 110-220
combo low-dose ICS + LABA	budesonide/formoterol 80/4.5 (generic for Symbicort®) fluticasone/salmeterol 100/50 (generic for Advair Diskus®) Wixela® 100/50 (fluticasone/salmeterol) fluticasone/salmeterol 55/14,113/14 (generic for AirDuo RespiClick®)	160-320 200 200 55-113
med-dose ICS	Qvar Redihaler® 80 (beclomethasone) Pulmicort Flexhaler® 90,180 (budesonide) Flovent HFA® 110 (fluticasone) Flovent Diskus® 100,250 (fluticasone) Asmanex HFA® 200 (mometasone) Asmanex Twisthaler® 220 (mometasone)	240-480 540-1,080 264-440 300-500 200-400 220-440
combo med-dose ICS + LABA	budesonide/formoterol 160/4.5 (generic for Symbicort®) fluticasone/salmeterol 250/50 (generic for Advair Diskus®) Wixela® 250/50 (fluticasone/salmeterol) fluticasone/salmeterol 113/14,232/14 (generic for AirDuo RespiClick®)	320-640 500 500 113-232
high-dose ICS	Qvar Redihaler® 80 (beclomethasone) Pulmicort Flexhaler® 180 (budesonide) Flovent HFA® 110 (fluticasone) Flovent Diskus® 250 (fluticasone) Arnuity Ellipta 200 (fluticasone) Asmanex HFA® 200 (mometasone) Asmanex Twisthaler® 220 (mometasone)	480-640 1,080-1,440 440-1,760 500-1,000 200 400-800 440-880
combo high-dose ICS + LABA	fluticasone/salmeterol 250/50 (generic for Advair Diskus®) Wixela® 250/50 (fluticasone/salmeterol) fluticasone/salmeterol 113/14,232/14 (generic for AirDuo RespiClick®)	1,000 1,000 232-464

\* Current formulary and PA guidelines available at <https://www.umpquahealth.com/pharmacy-services/>

Reference: National Heart Lung and Blood Institute (NIH). 2020 Focused Updates to the Asthma Management Guidelines: A Report from the National Asthma Education and Prevention Program Coordinating Committee Expert Panel Working Group. December 2020.

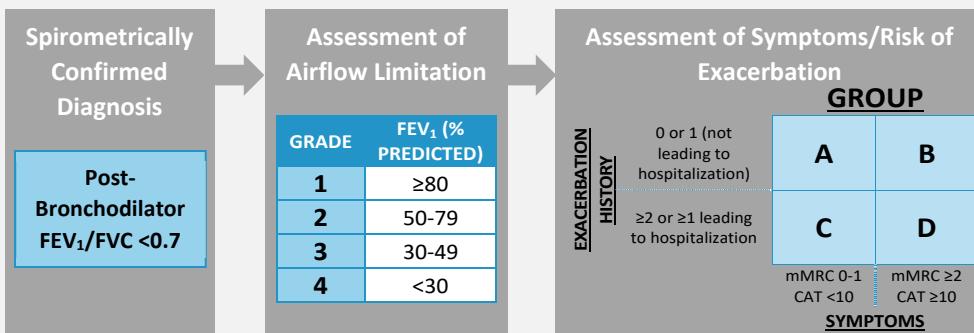


# UHA STEP-WISE APPROACH TO COPD MANAGEMENT

## COPD MANAGEMENT KEY POINTS:

### Assessment:

- COPD should be considered in patients with dyspnea, chronic cough or sputum production, history of recurrent lower respiratory tract infections and/or a history of exposure to risk factors for the disease.
- **Spirometry**, patient symptoms and history of exacerbations is required to make the diagnosis and determine the therapeutic approach.



### Treatment:

- Pharmacological treatment should be individualized to symptom severity, exacerbation risk, side effects, comorbidities, and response.
- ICS as monotherapy is not recommended.

### INITIAL TREATMENT:

\* For patients with history of asthma or eosinophils ≥300

### FOLLOW-UP TREATMENT:

#### RECOMMENDED NEXT STEPS: DYSPNEA

\* For patients with history of asthma, or eosinophils ≥300 + 1 moderate exacerbation per year, or eosinophils ≥100 + ≥2 moderate or 1 severe exacerbation per year

DRUG CLASS	UMPQUA HEALTH ALLIANCE PREFERRED INHALERS* (mcg per puff)	DOSE ** FREQUENCY
SABA	albuterol 90 (generic for Ventolin®, ProAir®) levalbuterol 45 (generic for Xopenex®)	4x daily or prn 4x daily or prn
SAMA	Atrovent® HFA 17 (ipratropium)	4x daily or prn
combo SABA + SAMA	Combivent Respimat® 20/50 (ipratropium/albuterol)	4x daily or prn
LABA	Arcepta Neohaler®75 (indacaterol) Striverdi® 2.5 (olodaterol)	1x daily 1x daily
LAMA	Incruse Ellipta® 62.5 (umeclidinium)	1x daily
combo LAMA + LABA	Bevespi Aerosphere® 9/4.6 HFA (glycopyrrate/formoterol) Utibron Neohaler® 27.5/15.6 (indacaterol/glycopyrrate) Stiolto Respimat® 2.5/2.5 (tiotropium/olodaterol) Anoro Ellipta® 65.5/25 (umeclidinium 62.5/vilanterol 25)	2x daily 2x daily 1x daily 1x daily
combo ICS + LABA	budesonide/formoterol 160/4.5 (generic for Symbicort®) fluticasone/salmeterol 250/50 (generic for Advair Diskus®) Wixela® 250/50 (fluticasone/salmeterol)	2x daily 2x daily 2x daily
combo ICS + LAMA + LABA	Trelegy Ellipta® 100/62.5/25 (PA*) (fluticasone/umeclidinium/vilanterol)	1x daily

\* Current formulary and PA guidelines available at <https://www.umpquahealth.com/pharmacy-services/>

\*\* Recommended daily dosing per FDA Guidelines for patients >12

Reference: Global Initiative for Chronic Obstructive Pulmonary Disease (GOLD). Pocket Guide to COPD Diagnosis, Management, and Prevention. Website [https://goldcopd.org/wp-content/uploads/2020/03/GOLD-2020-POCKET-GUIDE-ver1.0\\_FINAL-WMV.pdf](https://goldcopd.org/wp-content/uploads/2020/03/GOLD-2020-POCKET-GUIDE-ver1.0_FINAL-WMV.pdf). Published 2020. Accessed 1/22/21.

#### RECOMMENDED NEXT STEPS: EXACERBATIONS