## Table I: Short-Acting Beta Agonists (SABAs).

<b>Generic Brand</b> (inhaler type)	Indication	Dosing	Considerations
<ul> <li>Albuterol</li> <li>ProAir HFA (MDI)</li> <li>ProAir Digihaler, RespiClick (DPI)</li> <li>Proventil HFA (MDI)</li> <li>Ventolin HFA (MDI)</li> </ul>	<ul> <li>≥4 years old</li> <li>Bronchospasms</li> <li>Exercise-induced bronchospasm</li> </ul>	<ul> <li>2 inhalations every 4-6 hours as needed for shortness of breath</li> <li>Consider spacer with MDI</li> </ul>	<ul> <li>Increased usage could indicate worsened asthma control: assess need for scheduled inhaler.</li> <li>Also comes as a nebulizer solution.</li> <li>For DPI, do not use with spacer and does not require priming.</li> </ul>
<b>Levalbuterol</b> Xopenex (MDI)	<ul><li>≥4 years old</li><li>Bronchospasms</li></ul>	<ul> <li>2 inhalations every 4-6 hours as needed for shortness of breath</li> <li>Consider spacer with MDI</li> </ul>	<ul> <li>Lower incidences of tachycardia compared to albuterol</li> <li>Can use with spacer</li> </ul>

HFA = hydrofluoroalkane

## Table II: Long-Acting Beta Agonist (LABAs).

<b>Generic Brand</b> (inhaler type)	Indication	Dosing	Considerations
Olodaterol Striverdi Respimat (SMI)	<ul><li>Adults</li><li>COPD maintenance</li></ul>	2 inhalations once daily	<ul> <li>Great for patients with poor adherence and low inspiratory volume</li> <li>Consider spacer to ensure adequate dosing</li> </ul>
Salmeterol Xopenex (MDI)	<ul> <li>≥4 years old</li> <li>Asthma and bronchospasm (with concomitant ICS)</li> <li>COPD maintenance</li> <li>Exercise-induced bronchospasm (with concomitant ICS)</li> </ul>	1 inhalation twice daily	Do not use with spacer

ICS = inhaled corticosteroid



## **Table III: Short-Acting Muscarinic Agonist (SAMAs).**

<b>Generic Brand</b> (inhaler type)	Age	Indication	Dosing	Considerations
<b>Ipratropium bromide</b> Atrovent (MDI)	<ul> <li>≥12 years old</li> <li>Limited data for children under 12 for management of acute asthma exacerbation</li> </ul>	<ul> <li>COPD</li> <li>Off-label for acute asthma exacerbation</li> </ul>	2 inhalations every 4-6 hours as needed for shortness of breath	Also comes as nebulizer solution

## Table IV: Long-Acting Muscarinic Agonists (LAMAs).

<b>Generic Brand</b> (inhaler type)	Indication	Dosing	Considerations
<b>Aclidinium bromide</b> Tudorza Pressair (DPI)	<ul><li>Adults</li><li>COPD maintenance</li></ul>	1 inhalation twice daily	Make sure control window has changed from red to green before administering dose
<b>Tiotropium</b> Spiriva (DPI)	<ul><li>Adults</li><li>COPD maintenance</li></ul>	1 inhalation once daily	Capsules are part of dry powder mechanism: do not swallow capsule
<b>Tiotropium</b> Spiriva Respimat (SMI)	<ul> <li>≥6 years old</li> <li>COPD maintenance</li> <li>Moderate to severe asthma maintenance</li> </ul>	2 inhalations once daily	Great for patients with poor adherence and low inspiratory ability
<b>Umeclidinium</b> Incruse Ellipta (DPI)	<ul><li>Adults</li><li>COPD maintenance</li></ul>	1 inhalation once daily	Great for patients with poor medication adherence

## Table V: Inhaled Corticosteroid (ICS).

Generic Brand	Ana Tudiastian		-Т	Considerations		
(inhaler type)	Age	Age Indication	Low	Medium	High	Considerations
<b>Beclomethasone</b> Qvar RediHaler (MDI)	≥4 years	Asthma maintenance	80-240 mcg	241-480 mcg	>480 mcg	Do not use with spacer
<b>Budesonide</b> Pulmicort Flexhaler (MDI)	≥6 years		180-600 mcg	601-1200 mcg	>1200 mcg	<ul><li>Also comes as a nebulizer.</li><li>Do not use with spacer</li></ul>
Ciclesonide Alvesco (MDI)	≥12 years		80-240 mcg	320 mcg	>320 mcg	Better for patients with poor inspiratory ability who have difficulty with DPI inhalers
Fluticasone furoate Arnuity Ellipta (DPI)	≥5 years	<ul> <li>Asthma maintenance</li> <li>Off label use for bronchiolitis obliterans, COPD maintenance, and eosinophilic esophagitis</li> </ul>	100 mcg	100 mcg	>200 mcg	Required preparation for first dose (see package insert)
<ul> <li>Fluticasone propionate</li> <li>ArmonAir (DPI)</li> <li>Digihaler (DPI)</li> <li>RespiClick (DPI)</li> </ul>	≥12 years		100-250 mcg	251-500 mcg	>500 mcg	Do not use with spacer
Fluticasone propionate Flovent HFA (MDI)	≥4 years		88-264 mcg	265-440 mcg	>440 mcg	<ul> <li>Better for patients with poor inspiratory ability who have difficulty with DPI inhalers</li> <li>Can use with spacer</li> </ul>
Fluticasone propionate Flovent Diskus (DPI)	≥4 years		100-250 mcg	251-500 mcg	>500 mcg	<ul> <li>Do not use with spacer</li> <li>Use in the horizontal position (do not tilt)</li> </ul>
Mometasone Asmanex HFA (MDI)	≥5 years	Asthma maintenance	200-400 mcg		>400 mcg	Requires priming
<b>Mometasone</b> Asmanex Twisthaler (DPI)	≥4 years					



### Table VI: Combination - SAMA and SABA.

<b>Generic Brand</b> (inhaler type)	Indication	Dosing	Considerations
Ipratropium + Albuterol Combivent Respimat (SMI)	<ul> <li>Adults</li> <li>COPD for those with regular bronchodilator who continue to have bronchospasms</li> <li>Off label use for acute asthma exacerbation</li> </ul>	1 inhalation every 4-6 hours as needed for shortness of breath	Also comes as nebulizer solution

### Table VII: Combination - LAMA and LABA.

<b>Generic Brand</b> (inhaler type)	Indication	Dosing	Considerations
<b>Aclidinium + Formoterol</b> Duaklir Pressair (DPI)	<ul><li>Adults</li><li>COPD maintenance</li></ul>	1 inhalation twice daily	
<b>Glycopyrrolate + Formoterol</b> Bevespi Aerosphere (MD		2 inhalations twice daily	
<b>Tiotropium + Olodaterol</b> Stiolto Respimat (SMI)		2 inhalations once daily	
<b>Umeclidinium + Vilanterol</b> Anoro Ellipta (DPI)		1 inhalation once daily	Great for patients with poor adherence



### Table VIII: Combination – ICS-LABA.

Generic Brand	Tudiostica	– Total Daily Dose –			Considerations
(inhaler type)	Indication	Low	Medium	High	Considerations
Budesonide + Formoterol Symbicort (MDI)	<ul> <li>≥6 years</li> <li>Asthma maintenance</li> <li>COPD maintenance</li> <li>Off-label use for acute asthma exacerbation</li> </ul>	160-320 mcg	321-640	mcg	Do not use with spacer
Fluticasone furoate + Vilanterol Breo Ellipta (DPI)	<ul><li>≥5 years</li><li>Asthma maintenance</li><li>COPD maintenance</li></ul>	100	mcg	200 mcg	<ul><li>Also comes as a nebulizer.</li><li>Do not use with spacer</li></ul>
Fluticasone propionate + Salmeterol Advair HFA (MDI)	<ul><li>≥12 years</li><li>Asthma maintenance</li></ul>	90-230 mcg	231-460 mcg	>460 mcg	Better for patients with poor inspiratory ability who have difficulty with DPI inhalers
Fluticasone propionate + salmeterol Advair Diskus (DPI)	<ul><li>Asthma maintenance</li><li>COPD maintenance</li></ul>	100-200 mcg	201-500 mcg	>500 mcg	Required preparation for first dose (see package insert)
Fluticasone propionate + Salmeterol AirDuo Digihaler, RespiClick (DPI)	Asthma maintenance				Do not use with spacer
Fluticasone propionate + Salmeterol Wixela Inhub (DPI)	<ul><li>Asthma maintenance</li><li>COPD maintenance</li></ul>				<ul> <li>Better for patients with poor inspiratory ability who have difficulty with DPI inhalers</li> <li>Can use with spacer</li> </ul>
Mometasone + Formoterol Dulera (MDI)	<ul><li>Asthma maintenance</li><li>Off-label COPD maintenance</li></ul>	100-200 mcg	200-400	mcg	<ul><li>Do not use with spacer</li><li>Use in the horizontal position (do not tilt)</li></ul>

# Table IX: Combination – ICS, LAMA, and LABA.

Generic Brand Indication		– Tota	Considerations	
(inhaler type)	Indication	Low Mediu	n High	Considerations
Fluticasone furoate + Umeclidinium + Vilanterol Trelegy Ellipta (DPI)	<ul><li>≥18 years</li><li>Asthma maintenance</li><li>COPD maintenance</li></ul>	1 inhalation once daily (100 mcg, 62.5 mcg, 25 mcg)	1 inhalation once daily (200 mcg, 62.5 mcg, 25 mcg)	Not indicated for relief of acute bronchospasm
Budesonide + Glycopyrrolate + Formoterol Breztri Aerosphere (MDI)	<ul><li>≥18 years</li><li>COPD maintenance</li></ul>	2 inhalations twice daily (160 mcg, 9 mcg, 4.8 mcg per inhalation)		Not indicated for relief of bronchospasm or treatment of asthma