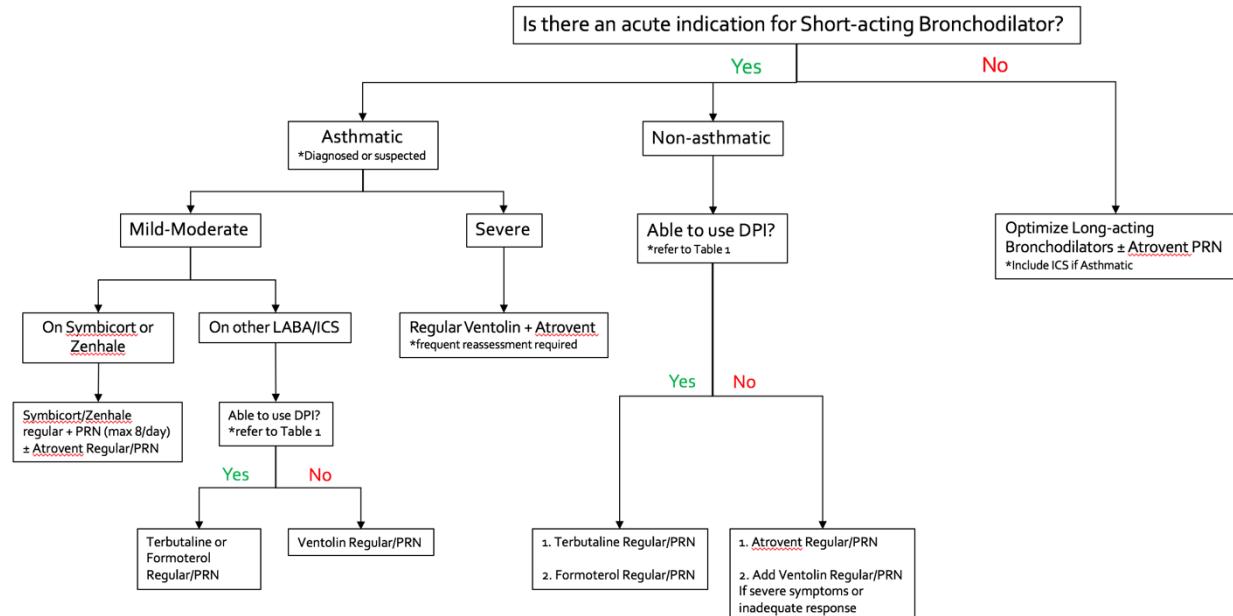


To all clinicians,

This document is meant as a tool to assist in decision making related to short and long acting bronchodilators in light of the shortage of Salbutamol (Ventolin®). Salbutamol inhalers are on backorder without a return date and in future, this supply issue will likely also affect all other MDI and inhalers, which are currently on allocation or backorder.

As you have likely seen memos have already been sent to nursing and pharmacy regarding processes to conserve Salbutamol supplies. We have included below suggestions to help conserve Salbutamol and provide options that can be used in place of Salbutamol in selected patients. This is meant as a suggestion only and should not supplant your own clinical judgment. If you are uncertain please discuss with pharmacy and/or respirology to assist in selecting the appropriate treatment regimen.



Terbutaline (Bricanyl®) and Formoterol (Oxeze®) are Dry Powder Inhalers (DPI) these inhalers are effective for most patients with airway disease but some patients may have difficulty using DPI inhalers effectively

Table 1: Factors to consider when initiating DPI for a patient not previously on one.

Good DPI Candidate	Poor DPI Candidate
High inspiratory flow	Low inspiratory flow
Preserved muscle strength	Weak inspiratory effort
No respiratory distress	Respiratory distress
Able to understand instructions for inhaler use	Language or cognitive barriers that impact inhaler use

Continuum of SABD Use



Additional consideration:

- Patients with known or suspected asthma should never be treated with a long acting beta agonist such as Formoterol without also being on an inhaled corticosteroid¹
- Patients requiring regular short acting bronchodilators should be reassessed regularly and stepped down to PRN short acting bronchodilators as soon as their condition has stabilized
- For patients admitted to hospital who have airway disease requiring short acting bronchodilators consideration should be given to initiating long acting bronchodilators as early as possible. Patients already on long acting bronchodilators can usually be continued on these medications on admission.
- Formoterol is a long acting beta agonist with a rapid onset of action which has been shown to be effective as a reliever medication in asthma (usually when combined with Budesonide (Symbicort®)²). Formoterol alone can be used as a reliever medication³ but this is an off-label use.

References:

- 1) 2019 GINA Report, Global Strategy for Asthma Management and Prevention. Available from: <https://ginasthma.org/pocket-guide-for-asthma-management-and-prevention/>
- 2) O'Byrne PM, Bisgaard H, Godard PP, Pistolesi M, Palmqvist M, Zhu Y, Ekstrom T, Bateman ED. Budesonide/formoterol combination therapy as both maintenance and reliever medication in asthma. *Am J Respir Crit Care Med* 2005;171:129–136.
- 3) Pauwels RA, Sears MR, Campbell M, Villasante C, Huang S, Lindh A, Petermann W, Aubier W, Schwabe G, Bengtsson T. Formoterol as relief medication in asthma: a worldwide safety and effectiveness trial. *Eur Respir J* 2003;22:787–794.