

How to use this guidance

- ! This guideline should be used to support new patients being commenced on therapy or those requiring treatment to be stepped up or down.
- ! Inhaler switches should only take place if clinically appropriate after a review.
- ! Inhalers should be prescribed by brand name, except for salbutamol.
- ! Combination inhalers should be used where appropriate.

Choosing the right device

- Inhaler technique and adherence should be checked at each review and prior to any treatment escalation.
- Choice of device should be based on individual patient inhaler technique including inspiratory flow rate.
- Can the patient inhale
 - **Hard and fast = DPI pathway**
 - **Slow and steady = MDI pathway (encourage spacer use)**
- In this guidance, inhalers are given a symbol indicating required inspiratory flow rate:

pMDI
 Med Low
 Medium
 Med High
 High

Green Inhaler Prescribing

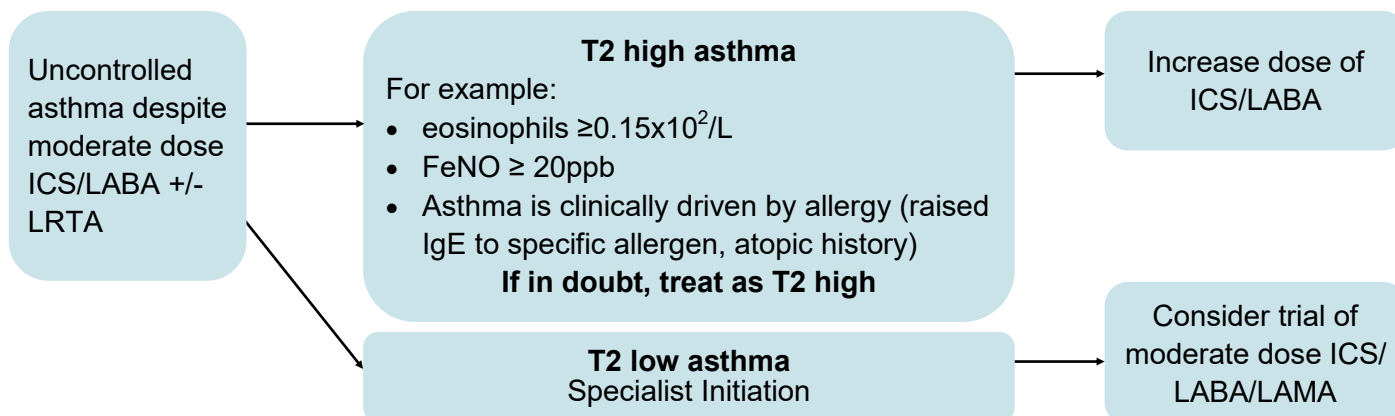
- As part of NHS Scotland's commitment to greener prescribing, the environmental impact of inhalers has been examined and should be incorporated into prescribing decisions.
- MDIs contain hydrofluorocarbon propellants that are greenhouse gases.
- Over-reliance of salbutamol increases the carbon footprint of a respiratory patient. Therefore, it is essential to identify and treat uncontrolled airways disease, encourage preventer adherence, and ensure inhaler devices are chosen based on individual inhaler technique to optimise control.
- DPIs have lower estimated carbon footprints than MDIs. Therefore, if a patient is able to use both MDI and DPI they should be given a DPI.
- Ventolin® evohalers have higher CO₂ emissions than other brands of salbutamol.
- In this guidance inhalers are given a symbol to indicate carbon footprint. This symbol indicates a 'greener' choice:



Abbreviations

DPI	Dry Powder Inhaler	LRTA	Leukotriene Receptor Antagonist
ICS	Inhaled Corticosteroid	MDI	Metered Dose Inhaler
LABA	Long-Acting Beta ₂ Agonist	SABA	Short-Acting Beta ₂ Agonist
LAMA	Long-Acting Muscarinic Antagonist	MART	Maintenance and Reliever Therapy

Understanding T2 low and T2 high abbreviations



References

Scottish Intercollegiate Guidelines Network (SIGN). SIGN 158: British guideline on management of asthma. Edinburgh: SIGN; 2019. (SIGN publication no. 158). Available from <https://www.sign.ac.uk/media/1773/sign158-updated.pdf>

Alliance Tech Medical: In-check dial: Inhaler resistance range. Issue number: 3 Available from: [In-Check DIAL | Alliance Tech Medical](#)

PrescQIPP Community Interest Company. Lowering the Inhaler Carbon Footprint. Bulletin 295; 2021. Available from: [Respiratory care | PrescQIPP C.I.C](#)

Guidance on Inhaled Therapies: Asthma (Adults)

**STOP.
THINK.
REVIEW.**

- Check inhaler technique/adherence
- Manage co-morbidities/review triggers
- Consider smoking status/smoking cessation
- Lifestyle and exercise
- Consider self-management advice

DPI Pathway - *hard and fast breath*

MDI Pathway - *slow and steady breath*

Regular Preventer Therapy ICS	1 st	Beclometasone Easyhaler® 200mcg 200-400mcg twice daily 		Soprobeq pMDI 100, 200mcg (Beclometasone) 100-400mcg twice daily 	
	2 nd	Budesonide Easyhaler® 100, 200mcg 100-400mcg twice daily 			
Initial Add on Therapy Low dose ICS/LABA	1 st	Relvar Ellipta® 92/22mcg (Fluticasone fuorate/ Vilanterol) 1 inhalation once daily 		Luforbec® pMDI 100/6mcg (Beclometasone/Formoterol) 1 inhalation twice daily or MART 	
	2 nd	Fobumix Easyhaler® 160/4.5mcg (Budesonide/Formoterol) 1 inhalation twice daily or MART 		Combisal® pMDI 50/25mcg (Fluticasone propionate/Salmeterol) 2 inhalations twice daily 	
	3 rd	Fostair NEXThaler® 100/6mcg (Beclometasone/Formoterol) 1 inhalation twice daily or MART 			
Additional Controller Therapy Medium dose ICS/LABA	1 st	Relvar Ellipta® 92/22mcg (Fluticasone fuorate/ Vilanterol) 1 inhalation once daily 		Luforbec® pMDI 100/6mcg (Beclometasone/Formoterol) 2 inhalations twice daily or MART 	
	2 nd	Fobumix Easyhaler® 160/4.5mcg (Budesonide/Formoterol) 2 inhalation twice daily or MART 		Combisal® pMDI 125/25mcg (Fluticasone propionate/Salmeterol) 2 inhalations twice daily 	
	3 rd	Fostair NEXThaler® 100/6mcg (Beclometasone/ Formoterol) 2 inhalation twice daily or MART 			
LRTA	Montelukast 10mg tablets — 10mg at night (stop if no benefit after 4-8 weeks)				
T2-low asthma Add LAMA	1 st			Trimbow pMDI® 87/5/9mcg (Beclometasone/Formoterol/ Glycopyrronium) 2 inhalations twice daily 	
T2-high asthma High Dose ICS/LABA	1 st	Relvar Ellipta® 184/22mcg (Fluticasone fuorate/Vilanterol) 1 inhalation once daily 		Luforbec® pMDI 200/6mcg (Beclometasone/Formoterol) 2 inhalations twice daily 	
	2 nd	Fobumix Easyhaler® 320/9mcg (Budesonide/Formoterol) 2 inhalations twice daily 		Combisal® pMDI 250/25mcg (Fluticasone propionate/Salmeterol) 2 inhalations twice daily 	
	3 rd	Fostair NEXThaler® 200/6mcg (Beclometasone/Formoterol) 2 inhalations twice daily 			
Add LAMA	1 st	Spiriva Respimat® 2.5mcg (Tiotropium) 2 inhalations once daily Inhale slow and steady. Must be prescribed in addition to ICS+LABA.		Trimbow pMDI® 172/5/9mcg (Beclometasone/Formoterol/ Glycopyrronium) 2 inhalations twice daily 	
Specialist Initiation	Theophylline M/R tablets 200mg every 12 hours. Adjusted up to 400mg every 12 hours based on levels.				
Intermittent Reliever Therapy SABA ALL PATIENTS	1 st	Salbutamol Easyhaler® 100mcg 1-2 inhalations as required 		Salbutamol pMDI 100mcg 1-2 inhalations as required 	
	2 nd	Bricanyl Turbohaler® 500mcg (Terbutaline) 1 inhalation as required 			