PHARMACOLOGICAL MANAGEMENT OF ADULT ASTHMA IN PRIMARY & SECONDARY CARE

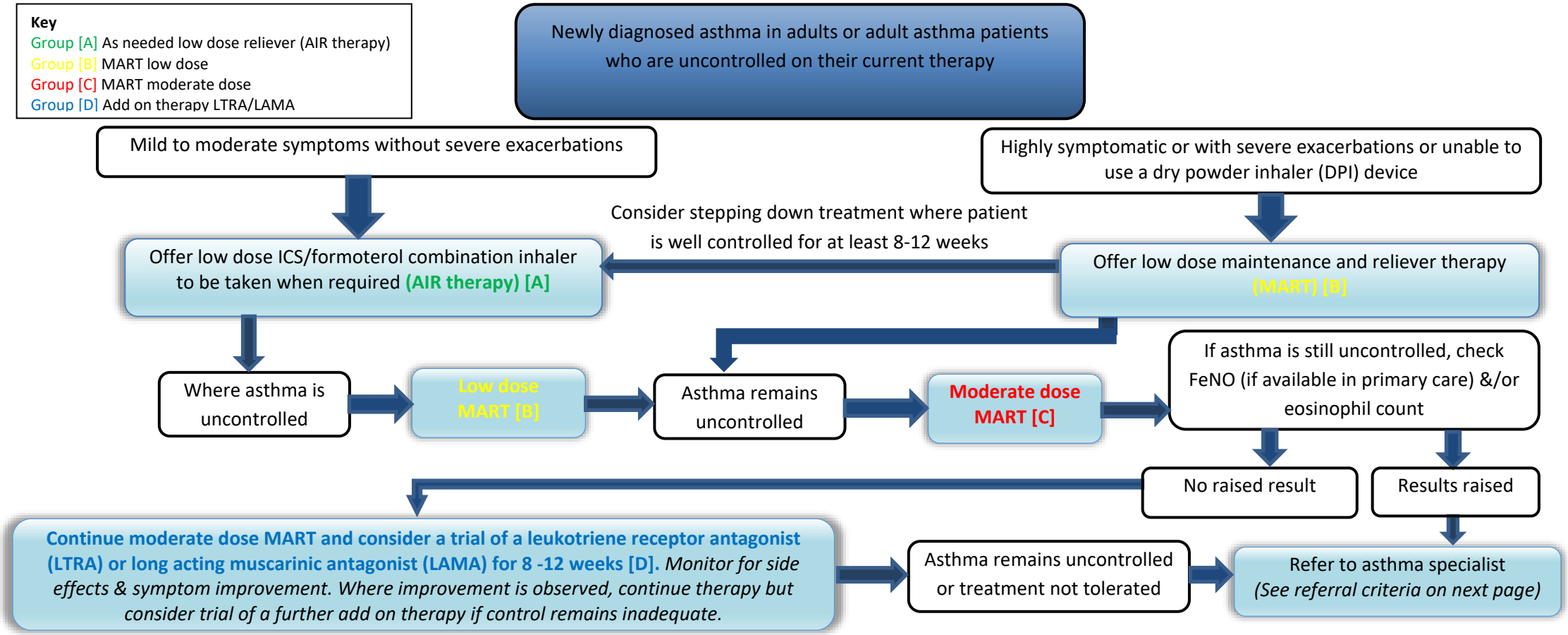
TARGET AUDIENCE	Primary & Secondary
PATIENT GROUP	Adults with a diagnosis of Asthma

Lead Author	**Prof Manish Patel & Prof Andrew Smith**	**Date approved**	**21/5/25**
Version	**8**	**Review Date**	**21/11/25**

Clinical Guidelines Summary

The new BTS/NICE/SIGN asthma guidance now recommends two pathways which do not include the use of short acting beta agonists (SABAs) as reliever inhalers for newly diagnosed asthma patients and for those that are symptomatic. These are the **anti-inflammatory reliever (AIR)** and **maintenance and reliever therapy (MART)** pathways which use inhalers that are a combination of inhaled corticosteroids (ICS) and formoterol. Implementing these new pathways will reduce SABA overuse, increase patient safety and lead to better patient outcomes.

Please note: Only specific brands of ICS/formoterol inhalers are licensed for reliever therapy. Please refer to the formulary for suitable options.



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Identifying patients at risk of Severe Asthma

Criteria to identify patients at risk of severe asthma

• ≥6 SABA prescriptions in previous 12 month OR if using MART regime; ordering pattern suggests regular use of maximum daily dose
OR
• ≥2 asthma exacerbations/ oral corticosteroid (OCS) prescriptions in previous 12 months
OR
• ACT <20 (Welcome to the Asthma Control Test) or ACQ5 >1.5 (ACQ5 Asthma control questionnaire | Right Decisions) despite maximum therapy: Inhaled corticosteroid (ICS) + Long acting beta agonist (LABA) +Long acting muscarinic antagonist (LAMA)

Criteria for DIRECT URGENT REFERRAL to severe asthma clinic

• Any patient receiving maintenance oral corticosteroid (OCS) for asthma (> 3 weeks course)
OR
• ≥3 exacerbations in previous 12 months
AND
• Check modifiable risk factors*

Consider direct referral for patients with
• Asthma with eosinophils > $0.8x10^9$/L or FeNO > 50 parts per billion (if available in primary care)

Optimise Current therapy and review in 8-12 weeks

• Check and address medication adherence, prescription numbers, digital monitoring
• Check and correct suboptimal inhaler technique
• Check and address modifiable risk factors for severe asthma*
• Provide Personal Asthma Action Plan- [AIR- air-asthma-action-plan/MART- mart-asthma-action-plan]
• Signpost to third sector resources, e.g. Asthma + Lung UK

If control achieved at 8-12 week review: continue on maintenance therapy and schedule annual review
If control not achieved at 8-12 week review: ensure good adherence and inhaler technique and consider referral if:

□ Previous emergency admission for asthma within 12 months
□ Abnormal obstructive spirometry or significant peak expiratory flow variability
□ Total Immunoglobulin E (IgE) elevated >500, and/or abnormal aspergillus serology
□ Blood eosinophils >$0.3x10^9$/L
□ SABA >12 per year

If <3 criteria present, make routine referral
If >3 criteria present, make urgent referral

*Modifiable risk factors for severe asthma

Cigarette smoking, inadequate medication, poor adherence, confirmed ≤ 80% dispensing or prescribing data, poor inhaler technique, occupational triggers, exposure to allergens or irritants, inactivity or sedentary lifestyle, obesity, psychosocial concerns, anxiety, depression.

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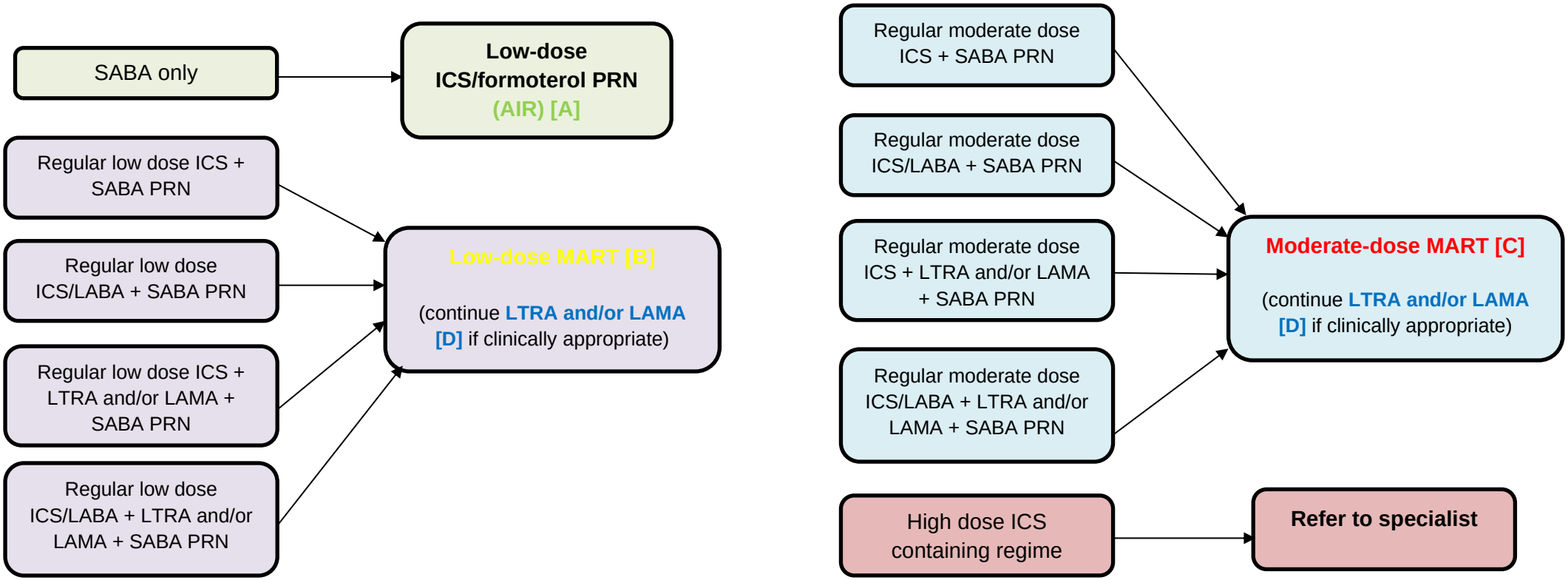
Guideline Body

- New patients should be assessed and initiated on either the AIR or MART pathway as per BTS/NICE/SIGN asthma guidance
- Clinicians may also identify adults who could be transferred to the AIR or MART pathway if they are not well controlled at their review or present as symptomatic
- If patients are **not symptomatic** and are happy on their current treatment pathway it is **not recommended that they are switched** at this time unless they are unhappy with their treatment for other reasons
- Where a patient cannot use a dry powder inhaler (DPI) they should be initiated on the MART pathway with a metered dose inhaler (MDI) and spacer. [B]



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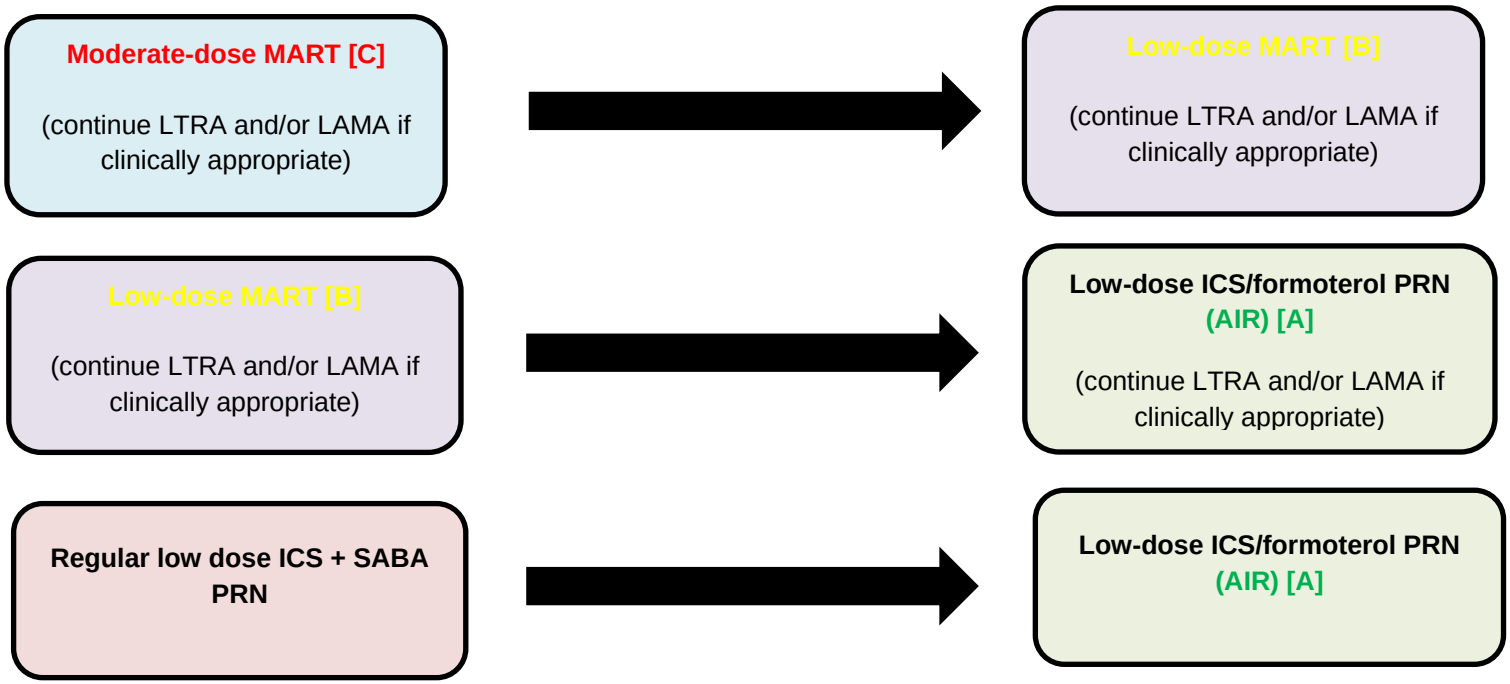
Stepping Down Treatment

- Consider stepping down treatment where a patient's asthma has been well controlled for at least a period of 8 to 12 weeks
- At the review the potential risks and benefits of decreasing therapy should be discussed with the patient
- The order in which treatment is stepped down should be based on the clinical effectiveness when introduced, side effects and the patient's preference. Allow at least 8 to 12 weeks before considering further treatment reduction
- If stepping down in those using low dose ICS alone or low dose MART, step down to low dose ICS/formoterol PRN (AIR) [A]
- A plan should be agreed with the patient on how the step down is monitored which should include self-monitoring, follow up review with the clinician and an updated asthma action plan
- Agree how the step down will be (self-)monitored, reviewed, and followed-up
- Review and update the person's asthma action plan



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NHS Lanarkshire

Adult Treatment Guide Summary

GHG: Greenhouse gas emissions (g CO2e) per puff (PresQUIPP Bulletin 295)

 Low <35 g CO2e per puff  High ≥35 g CO2e per puff

Group	Prescribe as	Inhaler type	Grams CO_2e per puff	Dose	Ingredients	Cost for 120 doses (SDT and dm+d January 2025)
[A]	Symbicort Turbohaler® 200/6	DPI		1 dose as required up to 8 doses per day Max doses 12/day- short term only	Budesonide/ Formoterol	£28.00
[B]	Symbicort Turbohaler® 200/6	DPI		1 dose twice daily. Reliever dose PRN Max doses 12/day- short term only	Budesonide/ Formoterol	£28.00
	Luforbec® 100/6mcg pMDI	pMDI		1 doses twice daily. Reliever dose PRN Max doses 8/day- short term only	Beclometasone/ Formoterol	£13.98
	Fobumix Easyhaler® 160/4.5mcg DPI	DPI		1 dose twice daily. Reliever dose PRN Max doses 12/day- short term only	Budesonide/ Formoterol	£21.50
[C]	Symbicort Turbohaler® 200/6	DPI		2 doses twice daily. Reliever dose PRN Max doses 12/day- short term only	Budesonide/ Formoterol	£28.00
	Luforbec® 100/6mcg pMDI	pMDI		**UNLICENSED**- 2 doses twice daily. Reliever dose PRN Max doses 8/day- short term only	Beclometasone/ Formoterol	£13.98
	Fobumix Easyhaler® 160/4.5mcg DPI	DPI		2 doses twice daily. Reliever dose PRN Max doses 12/day- short term only	Budesonide/ Formoterol	£21.50
[D]	Add on possible trial LRTA Montelukast 10mg at night (discontinue if no benefit after 3 months) OR				Montelukast	N/A
	Spiriva Respimat® 2.5mcg	DPI		2 doses once daily	Tiotropium	£23.00

Formulary status	Preferred	Total

***Patients receiving an MDI inhaler should be prescribed a spacer device. Use of a spacer can improve deposition of drug to the lower airways by up to 50%. The device should be cleaned regularly as per the manufacturer's advice and should be replaced every 12 months** (RESPe)

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NHS Lanarkshire Adult Asthma Quick Reference Treatment Guide

Newly diagnosed in adult asthma patients
If highly symptomatic or severe exacerbations, go straight to Group [B] and offer low dose MART

Group [A] As needed low dose reliever (AIR therapy)

Symbicort Turbohaler®
200/6

Preferred

1 doses as required up to 8 doses per day Max dose 12/day - short term only

DPI Route- Hard and fast breath	**pMDI Route- Slow and steady breath**

Group [B] MART low dose

Symbicort Turbohaler®
200/6

Preferred

1 dose twice daily
Reliever dose PRN

Max dose 12/day- short term only

Luforbec® 100/6mcg
pMDI

Preferred

1 dose twice daily
Reliever dose PRN

Max dose 8/day- short term only

Group [C] MART moderate dose

Symbicort Turbohaler®
200/6

Preferred

2 dose twice daily
Reliever dose PRN

Max dose 12/day - short term only

Luforbec® 100/6mcg
pMDI

Preferred

UNLICENSED*- 2 doses twice daily
Reliever dose PRN

Max dose 8/day - short term only

***Currently no licensed alternative for pMDI MART moderate dose**

Group [D] Add on therapy LTRA/LAMA

Check FeNO level, if available, and blood eosinophil count-

- **If either raised- refer patient to a specialist in asthma care**
- **If nethier raised -**

- Add on possible trial of either LTRA, Montelukast 10mg or LAMA (discontinue if no benefit after 8-12 weeks and trial alternative add on therapy LTRA/LAMA)
- If control improved but still inadequate, continue initial treatment and start trial of alternative add on therapy, LTRA/LAMA (discontinue if no benefit after 8-12 weeks)

Spiriva Respimat®
2.5mcg DPI

Preferred

2 doses once daily

Alternative Formulary Options

Group [B] MART low dose ICS/Formoterol

Fobumix Easyhaler® 160/4.5mcg
DPI

Total

1 dose twice daily
Reliever dose PRN

Max dose/day 12- short term only

Group [C] MART moderate dose ICS/Formoterol

Fobumix Easyhaler® 160/4.5mcg
DPI

Total

2 doses twice daily
Reliever dose PRN

Max dose/day 12- short term only

NHS Lanarkshire Traditional Pathway Adult Asthma Treatment Guide

This pathway should only be used for patients that are stable on their current treatment or are unsuitable for a switch to the recommended MART or AIR pathways

DPI Route- Hard and fast breath	pMDI Route- Slow and steady breath
Regular low dose ICS AND As needed SABA Reliever	
 Budesonide Easyhaler® 200mcg DPI £17.71/200 dose Preferred 1 dose twice daily	 Soprobec® (Beclometasone) 200mcg pMDI £10.51/200 dose Preferred 1 dose twice daily
Regular low dose ICS/LABA AND As needed SABA Reliever	
 Fobumix Easyhaler® (Budesonide/Formoterol) 160/4.5mcg DPI £21.50/120 dose Preferred 1 dose twice daily	 Luforbec® (Beclometasone/Formoterol) 100/6mcg pMDI £13.98/120 dose Preferred 1 dose twice daily
Regular moderate dose ICS/LABA AND As needed SABA Reliever	
 Fobumix Easyhaler® (Budesonide/Formoterol) 160/4.5mcg DPI £21.50/120 dose Preferred 2 doses twice daily	 Luforbec® (Beclometasone/Formoterol) 100/6mcg pMDI £13.98/120 dose Preferred 2 doses twice daily

* Luforbec® is twice as potent as Soprobec®, therefore 100mcg beclomethasone in Luforbec® is equivalent to 200mcg in Soprobec®

Add on therapy LTRA/LAMA

Check FeNO level, if available, and blood eosinophil count-

- **If either raised- refer patient to a specialist in asthma care**
- **If nethier raised -**

- Add on possible trial of either LTRA, Montelukast 10mg or LAMA (discontinue if no benefit after 8-12 weeks and trial alternative add on therapy LTRA/LAMA)
- If control improved but still inadequate, continue initial treatment and start trial of alternative add on therapy, LTRA/LAMA (discontinue if no benefit after 8-12 weeks)

Spiriva Respimat®
2.5mcg DPI

Preferred

2 doses once daily

SABA Reliever options

DPI Route- Hard and fast breath	pMDI Route- Slow and steady breath
	
Salbutamol Easyhaler® 200mcg DPI £6.63/200 dose	Salbutamol 100mcg pMDI £1.46/ 200 dose
Preferred	Preferred
1 dose as required	2 doses as required

Alternative Formulary Options

Regular low/moderate dose ICS/LABA AND As needed SABA Reliever	Regular high dose ICS/LABA AND As needed SABA Reliever
	
Relvar® (Fluticasone/Vilanterol) 92/22mcg DPI £22.00/ 30 dose	Relvar® (Fluticasone/Vilanterol) 184/22mcg DPI £29.50/ 30 dose
Total	S[1] option
1 dose daily	1 dose daily

High dose Trimbow® (Beclometasone/Formoterol/Glycopyrronium) 172/5/9mcg DPI [Two puffs twice daily]
S[1] formulary option. Can be initiated in secondary care and continued in primary care for the traditional route only.

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Key

ACT: Asthma Control Test
ACQ: Asthma Control Questionnaire
AIR: Anti-inflammatory Reliever
DPI: Dry powder inhaler
ICS: Inhaled corticosteroid
IgE: Immunoglobulin E
LABA : Long acting beta$_2$ agonist
LAMA: Long acting muscarinic antagonist
LTRA: Leukotriene receptor antagonist
MART: Maintenance and reliever therapy
MDI: Metered dose inhaler
OCS: Oral corticosteroid
SABA: Short acting beta$_2$ agonist

References/Evidence

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Appendices

1. Governance information for Guidance document

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Responsible Person (if different from lead author)	

CONSULTATION AND DISTRIBUTION RECORD	
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Consultation Process / Stakeholders:	NHSL Respiratory Service Improvement Group & the Lanarkshire Local Medical Committee

Distribution	

CHANGE RECORD

Date	Lead Author	Change	Version No.
	Professor Patel & Professor Smith	Reviewed in line with BTS, NICE, SIGN guidance 2024, Asthma: diagnosis, monitoring and chronic asthma management Move to AIR and MART therapy from traditional SABA use. High dose steroid plus LABA option removed	8
	Professor Patel & Professor Smith	Step down treatment moved to 8-12 weeks	8
	Professor Patel & Professor Smith	Adjunct data- removal theophylline	8

	Professor Patel & Professor Smith	Fostair changed to Luforbec in line with NHSL formulary Symbicort and Fobumix moved to preferred formulary Relvar changed to total formulary Duoresp removed from total formulary Clenil changed to Soprobec	8
	Professor Patel & Professor Smith	GHG emissions indicated for each inhaler and picture guide added	8
	Professor Patel & Professor Smith	Severe asthma section included to new guidance	8

2.You can include additional appendices with complimentary information that doesn't fit into the main text of your guideline, but is crucial and supports its understanding.

e.g. supporting documents for implementation of guideline, patient information, specific monitoring requirements for secondary and primary care clinicians, dosing regimen/considerations according to weight and/or creatinine clearance