

Key principles of treatment:

- Start treatment at level most appropriate to initial severity
- Achieve early control and maintain at lowest inhaled steroid dose
- Maintain control by increasing treatment as necessary and decreasing treatment when control is good.

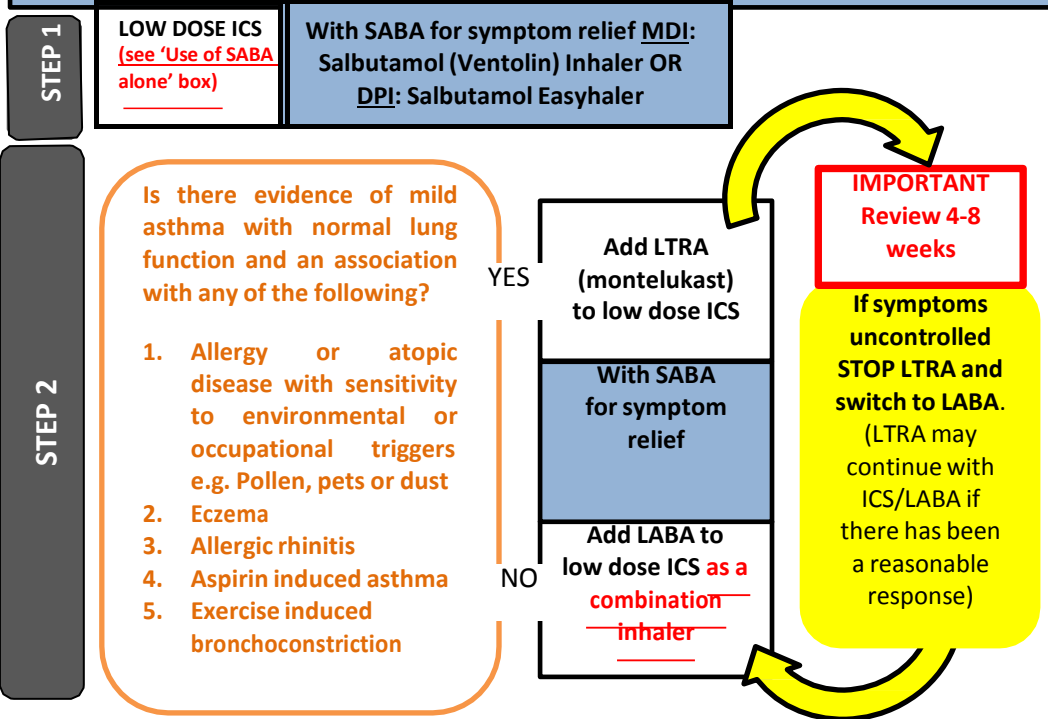
Royal College of Physicians (RCP) 3 questions (YES to any question = UNCONTROLLED ASTHMA)

In the last month:

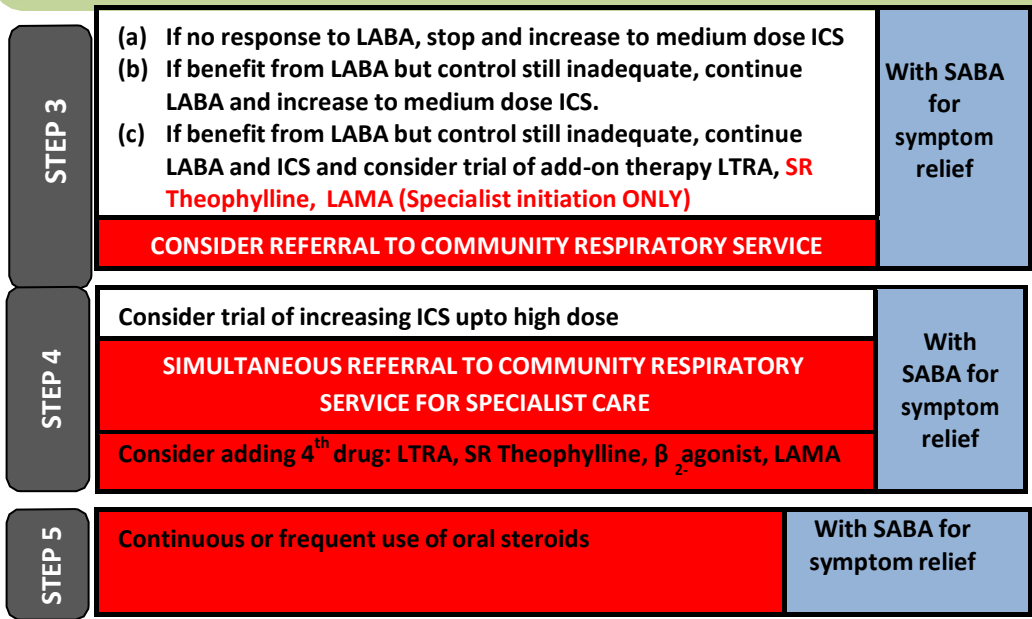
1. Have you had difficulty sleeping because of your asthma symptoms (including cough)?
(Good control = No nocturnal symptoms)
 2. Have you had your usual asthma symptoms during the day (cough, wheeze, chest tightness, or breathlessness)?
(Good control = No daytime symptoms, no asthma attacks, no need for rescue medication)
 3. Has your asthma interfered with your usual activities (e.g. housework, work/school, etc)?
(Good control = No limitation on activity including exercise)
- The above should be in combination with minimal side effects from treatment.

Ensure routine clinical review at least annually. Review after 4-8 weeks at each step up/down. If asthma uncontrolled, check diagnosis, inhaler technique (and correct if necessary), adherence, use of rescue medication, lung function, exposure to smoking & triggers, side effects and suitability of treatment.

Use of SABA alone: Many patients with asthma will require a low dose ICS at diagnosis. However, use of SABA alone may be appropriate for those with infrequent, short-lived wheeze and normal lung function



MART – Fostair®/Duoresp Spiromax®/Symbicort®) Appropriate for patients on Step 2 (Low dose ICS) or 3 (medium dose ICS) with a Personal Asthma Action Plan (PAAP), able to self-manage and are compliant with their own treatment and whose symptoms are uncontrolled on maintenance only treatment with ICS/LABA using SABA as reliever. [Click here for licensed regimes](#)



SABA as required at all steps - Consider stepping up treatment if using ≥THREE DOSES A WEEK (ONE DOSE = 2 puffs)

URGENT intervention required if ≥ 3 SABA inhalers are used over a 12 month period. Frequent use = POOR CONTROL

Step up to improve control as needed AND Step down to find and maintain lowest controlling therapy

Follow link to [Step Down guidance](#)

Abbreviations

SABA – Short-acting beta ₂ agonist	ICS – Inhaled corticosteroid
LTRA – Leukotriene receptor antagonist	LABA – Long acting beta agonist
LAMA – Long acting muscarinic antagonists	MART – Maintenance and reliever

[Click here for formulary product choices \(choices bolded\)](#)

Preventative measures



Ensure administration of annual influenza vaccination



Offer stop smoking support and reinforce benefits



Consider weight loss interventions for overweight adults

Patient Safety

Inhaled Corticosteroid Safety

- ICS safety is of crucial importance. Assess benefits versus risks for each individuals needs
- Consider **total daily steroid load**, including intranasal, topical and oral, and assess systemic risk.
- Ensure patient is aware of benefits and risks of ICS
- Patients should be maintained at the lowest possible dose of inhaled corticosteroid.
- Steroid cards should be issued to patients on high dose ICS ($\geq 1000\text{mcg}$ beclomethasone dipropionate (BDP) equivalent daily)
- Local side effects: dysphonia & oral candidiasis - Minimised by use of spacer with MDI followed by rinsing mouth after inhalation. Systemic side effects of high dose includes adrenal suppression, diabetes, skin thinning, bruising, osteoporosis and tuberculosis
- Smoking reduces the effects of ICS; higher doses may be required in smokers and ex-smokers
- Raise concerns if <12 ICS inhalers are collected per year.

Use of Combinations LABA/ICS Inhalers

- Use a **combination** ICS/LABA in clinical practice to improve adherence and guarantee that LABA is not taken without the ICS.
- Choice of preparation is based upon severity of asthma, device assessment and cost
- Prescribe by BRAND

Step UP and Step DOWN

Use the RCP or ACT questions <https://www.asthma.com/additional-resources/asthma-control-test.html> to assess asthma control.

If asthma is uncontrolled, consider STEPPING UP

Think TTT

Before initiating new treatment or stepping up, review:

- Asthma diagnosis
- Compliance /adherence with existing **Therapy**
- Inhaler **Technique**
- Eliminate **Trigger** factors (smoke, dust, mites, pets etc)

If asthma has been controlled for at least 3 months consider STEPPING DOWN

See [Guidelines on Stepping Down ICS in Asthma](#)

- Inhaled steroids can be reduced slowly by 25-50% every 3 months for stable patients. Patients deteriorate at different rates
- Review every 4-8 weeks. Step patient up again if symptomatic.
- High dose ICS may cause long-term harm. Review regularly.
- Stepping down should be explained to patient and be part of PAAP

Patient Education

Personalised Asthma Action Plans (PAAP)

All diagnosed asthma patients should be provided individual, self-management written guidance in the form of a PAAP. [Examples from Asthma UK](#)
Should contain:

- Current treatment regime and good inhaler technique
- Symptom triggers and what to avoid to maintain good control.
- Recognising poor control/exacerbations/asthma attacks
- How to increase reliever and maintenance therapy or MART with worsening symptoms and when to start steroids and seek (urgent) medical attention.
- Best PEFr, how to recognise decline and adjust treatment

PEF >80% best: good control

PEF 40-60% best: urgent action: commence oral steroids and seek medical advice

PEF <40%: call 999

Inhaler Technique

- Provide training on the use of the device and ensure good technique. Consider use of placebo inhaler for training.
- pMDI with spacer is as effective as any DPI but choice should be based upon patient preference and assessment of correct use.
- Be consistent with device choice (DPI or MDI); prescribing mixed inhaler can lead to confusion and increased errors
- Consider use of inhaler training tool (Incheck[®]) to correct inspiratory flow rate
- [Asthma UK OR RightBreathe.com](#) for training videos for inhaler technique.
- Use community pharmacy New Medicines Service (NMS) and Medicines Use Review (MUR) at each review
- Check adherence with therapy at every opportunity.
- Choose an alternative device if technique remains a problem

Drug delivery

Spacers

- Improves lung deposition, aids co-ordination, reduces oropharyngeal deposition and local side effects
- Should be compatible with the MDI being used:

	pMDI	Compatible with.....	
		Volumatic [®]	AeroChamber Plus [®]
AirFlusal [®]		✓	✓
Clenil [®]		✓	x
Flutiform [®]		x	✓
Fostair [®]		x	✓
QVAR [®]		x	✓
*Sereflo [®]		✓	✓
Sirdupla [®]		x	✓
Ventolin [®]		✓	✓

*The 125/25mcg device is not licensed but is exactly the same as the 250/25mcg strength and hence fits both spacers.

- Should be replaced at least every 12 months
- Should be washed monthly in detergent and allow to air dry.
- Patients should use the same make of spacer device as switching between spacer devices can result in changes in the dose delivered to the lungs

MART (Maintenance and reliever therapy) Regime (LINK)

Treatment in which a single inhaler, containing both ICS and a fast-acting LABA, is used for both daily maintenance therapy and the relief of symptoms as required.

- The total regular dose of ICS should not be decreased
- Patients taking regular (once a day or more), rescue doses of their combination inhaler should have their treatment reviewed
- The use of a separate reliever inhaler (SABA) is not required.
- Careful education of patients about the specific issues around this management strategy is required.**