South East London integrated guideline for the management of asthma in adults (18 years old and over)

NHS

Assessment

Always **consider alternative explanations** for uncontrolled asthma before adjusting therapy:

- poor inhaler technique/adherence
- alternative diagnoses
- smoking (active or passive)
- seasonal or environmental factors
- occupational exposures
- psychosocial factors

Assess asthma control objectively using:

A **validated questionnaire** (CKS) e.g. the RCP 3 questions "In the last month…:

- Have you had difficulty sleeping because of your asthma symptoms (including cough)?
- Have you had your usual asthma symptoms during the day (cough, wheeze, chest tightness, or breathlessness)?
- Has your asthma interfered with your usual activities (e.g. housework, work)?

Lung function: quality assured spirometry, PEFR (% best, variability), FeNO

Use of **rescue therapies**: salbutamol inhalers (>6 prescriptions/year or >1 inhaler /month) or >2 courses of prednisolone /year need an urgent review

Smoking cessation

Treating tobacco dependence is an essential clinical intervention.

- Very brief advice should be provided at every opportunity. Training and tools are available online https://london.stopsmokingportal.com/
- Expired carbon monoxide monitoring is a NICE recommended tool to use as part of a structured review to support people to stop smoking and initiate treatment
- Drug therapy together with psychological support increases likelihood of a successful quit. Quit smoking therapies (including varenicline) are safe and effective and should be equally offered to patients with mental illness, regardless of severity. Monitor in mental health. Nicotine Replacement Therapy with appropriate support via general practice or community pharmacy is an effective intervention, or **refer to your local smoking cessation service**
- Other resources: how and why to record tobacco dependence as a cause of death

A regular inhaled corticosteroid (ICS) must be used by ALL patients with confirmed asthma

Low dose ICS	Step up / down **Check adherence** before step up/down	Add LABA (option to trial montelukast first)	Step up / down **Check adherence** before step up/down	Moderate dose ICS/LABA	Seek advice and guidance from / refer to specialist	High dose ICS/LABA	Specialist only

Dry Powder inhalers

Beclometasone Easyhaler
Beclometasone 200mcg
ONE puff twice daily

Salbutamol Easyhaler
Salbutamol 100mcg
TWO puffs when required
Rescue therapy

Fostair Nexthaler 100/6mcg
Beclometasone/ Formoterol
100/6mcg (extra fine particles)
ONE puff twice daily

Local guidance allows clinical discretion to introduce LABA or LTRA after ICS depending on the status of the patient and intended benefit of treatment

Relvar Ellipta 92/22mcg
Fluticasone Furoate/ Vilanterol
92/22mcg
ONE puff once daily

Fostair Nexthaler 100/6mcg Ψ
Beclometasone/ Formoterol
100/6mcg (extra fine particles)
TWO puffs twice daily

Relvar Ellipta 184/22mcg Ψ
Fluticasone Furoate/ Vilanterol
184/22mcg
ONE puff once daily

Fostair Nexthaler 200/6mcg Ψ
Beclometasone/ Formoterol
200/6mcg (extra fine particles)
TWO puffs twice daily

Montelukast 10mg daily
Consider if ICS therapy is inadequate; review at 4-8 weeks. STOP if no improvement. Of particular benefit with history of atopy

Consider **MART** (maintenance and reliever therapy) with Fostair 100/6mcg ONE puff twice daily baseline (+/- Montelukast) Ψ

Consider **MART** with Fostair 100/6mcg TWO puffs twice daily baseline (+/- Montelukast) Ψ

Offer therapy

Consider therapy

Aerosol inhalers

Clenil Modulite pMDI 100mcg
Beclometasone 100mcg
TWO puffs twice daily
via spacer

QVAR Easi-breathe 50mcg
Beclometasone 50mcg
(extra fine particles)
TWO puffs twice daily

Salbutamol pMDI or Easi-breathe
TWO puffs when required
(**via spacer** with pMDI)
Rescue therapy

Fostair pMDI 100/6mcg
Beclometasone/ Formoterol
100/6mcg (extra fine particles)
ONE puff twice daily **via spacer**

Fostair pMDI 100/6mcg Ψ
Beclometasone/ Formoterol
100/6mcg (extra fine particles)
TWO puffs twice daily **via spacer**

Fostair pMDI 200/6mcg Ψ
Beclometasone/ Formoterol
200/6mcg (extra fine particles)
TWO puffs twice daily **via spacer**

Patients with uncontrolled asthma (e.g. >2 prednisolone courses/year, or *despite* adherence and good technique with high-dose ICS/LABA), should be referred to a specialist.

Treatments initiated by specialists only:

- Spiriva Respimat (tiotropium 2.5mcg, two puffs once daily)
- Alvesco pMDI (Ciclesonide 160mcg, up to two puffs twice daily via spacer)
- Biologic therapy – should be added to GP record as 'hospital prescribed'

- ✓**Prescribe by brand** with the device specified (e.g. Fostair Nexthaler instead of beclometasone/formoterol)
- ✓Choose inhaler type (aerosol / dry powder) based on **patient preference & ability**. Where possible give only one type
- ✓Extra fine particles deliver approximately twice the effective dose as standard inhalers
- ✓Use **spacers** with pressurised Metered Dose Inhalers (pMDI)
- ✓Only **change an inhaler with agreement of the patient**
- ✓Issue a written **personalised action plan.** Examples from Asthma UK
- ✓Ψ ICS cards are indicated for patients prescribed >1000mcg beclometasone dipropionate or equivalent (marked by Ψ)
- ✓Check technique and assess adherence at every opportunity
- ✓Refer to community pharmacists for Medicines Use Review + New Medicines Service

RightBreathe

Use RightBreathe for inhaler prescribing info, to demonstrate inhaler technique. Encourage patients to download app for videos & supporting information

This management guideline aims to support responsible respiratory prescribing

Good respiratory practice

- ✓ Patients should demonstrate how they use their inhaler at every opportunity, then be coached to improve or an alternative tried
- ✓ Refer patients to Community Pharmacist for Medicines Use Review + New Medicines Service to reinforce inhaler technique & to support adherence
- ✓ To avoid confusion inhalers should be **prescribed by brand** with the device specified
- ✓ Choose inhaler type (aerosol or dry powder) based on **patient preference & capability**. Where possible give only one type. Consider use of In-Check device
- ✓ Prescribe & encourage use of **spacer** with pressurised Metered Dose Inhalers
- ✓ Only **change an inhaler with agreement of the patient**. Blanket 'switching' may lead to a deterioration & anxiety for patient
- ✓ All patients should have a written **personalised action plan** that is reviewed regularly
- ✓ ICS cards are indicated for patients prescribed >1000mcg beclometasone dipropionate or equivalent (annotated above with the symbol Ψ). Order cards here
- ✓ Inhaled corticosteroids should be prescribed for all patients with confirmed asthma
- ✓ Avoid live vaccines for patients receiving biologic therapy

Asthma UK resources

- ✓ Patient support tool from Asthma UK: Asthma risk checker for patients
- ✓ Asthma UK perspective on National Review of Asthma Deaths

Assessing adherence

- ✓ High use of SABA inhalers (>12 inhalers/year) is associated with **increased risk of asthma death**, particularly when adherence to ICS is low (National Review of Asthma Deaths)
- ✓ Assess SABA:ICS ratio. If ratio 1:4 or more, reinforce regular use of ICS, and use of SABA as a reliever / rescue therapy only
- ✓ Where ICS is being 'overused' (>12/year), review management of patient. Does the patient need a higher dose / strength of ICS?

Stepping up and stepping down treatment

- ✓ Safe & effective management of asthma involves titrating therapy up & down according to individual need
- ✓ Update the patient's written asthma action plan
- ✓ After adjusting medicines, review the patient's response in 4-8 weeks
- ✓ Do not step down more frequently than 6-monthly
- ✓ Patients using high-dose ICS with no prednisolone 'rescue' prescribing history in past 12 months should be reviewed for step-down

Treatment options – montelukast and MART (▪▪▪▪▪▶)

- ✓ Montelukast is effective in about 20% of patients (those with a history of atopy). This can be considered when stepping up from initial inhaled corticosteroid (ICS)
- ✓ MART can be considered instead of regular moderate / high-dose ICS. Patient education and understanding is important. Specialist input may be helpful

Inhaler Technique

There are several common steps to all inhaler devices, but always ensure you are confident and competent to teach the devices you prescribe:

1. Prepare inhaler device – e.g. remove cap
2. Prepare ("load") dose – e.g. shake inhaler, insert and pierce capsule or "click" the dose lever
3. Breathe out (not into inhaler) as far as is comfortable
4. Put lips around mouthpiece
5. Breathe in correctly. This is the commonest error, but simply determined by the device *type*. All inhalers are either an **aerosol** or a **dry powder** (see pictures opposite)
6. Remove inhaler from mouth and hold breath for 5-10 seconds or as long as is comfortable, then breathe out
7. Repeat as directed and finish

Adapted with permission from: http://www.simplestepseducation.co.uk/

Dry Powder devices

'Quick and deep' inspiration

Easyhaler

Ellipta

Note: inhaler device colour will vary depending on strength and formulation

Nexthaler

Aerosol devices (including pMDI)

'Slow and steady' inspiration

pMDI

Respimat

Easi-breathe

Aerochamber plus

Approved: March 2019

Review date: March 2021 (or sooner if evidence or practice changes)