Primary Care Medicines Management of Asthma in Adults

Surrey Heartlands ICS Area Prescribing Committee

NHS

Diagnosis and Assessment
Code as "suspected asthma" (I J70) until diagnosis is confirmed

Monitored initiation of treatment with low-dose ICS

Easyhaler® Beclometasone 200 DPI 1 puff bd **or**
Clenil Modulite® 100 MDI + spacer 2 puffs bd **or**
Qvar® 50 MDI+spacer 2 puffs bd **or**
Qvar Easi-Breathe® 50 inhaler 2 puffs bd
Reliever inhaler:
Easyhaler® Salbutamol / Ventolin Accuhaler
Salamol 100 mcg (Salbutamol) MDI +spacer 2 puffs prn

- Assess symptoms, check steroid naive spirometry, reversibility
- Monitoring 6 week post trial of treatment with low dose ICS
- Use validated tools such as Asthma Control Test.
- Positive response to treatment (symptomatic, reversibility in spirometry, 20% variation in serial peak expiratory flow rate) may indicate an asthma diagnosis. Clearly record basis on which diagnosis is made.
- If no positive response consider differential diagnosis.
- If diagnosis is unclear refer for specialist opinion.

Key **BDP** Beclometasone Dipropionate
SABA short acting beta 2 agonist
ICS inhaled corticosteroid
LABA long acting beta-2 agonist
LAMA long acting muscarinic antagonist
LTRA leukotriene receptor antagonist
MDI metered dose inhaler
DPI dry powder inhaler
Green = Low carbon footprint inhaler choices

Prescribe inhalers by brand name only

Evaluation

Assess symptoms Measure lung function

Check inhaler technique and adherence

Adjust dose Update personal asthma action plan

Move up and down as appropriate

If not on MART therapy use SABA as required - consider moving up if using three doses a week or more.

Regular preventer low dose ICS (less than or equal to 400micrograms BDP equivalent)

Easyhaler® Beclometasone® 200 DPI 1 puff bd **or**
Clenil Modulite® 100 MDI +spacer 2 puffs bd **or**
Qvar® 50 MDI+spacer 2 puffs bd **or**
Qvar Easi-Breathe® 50 inhaler 2 puffs bd

If asthma is uncontrolled a **LTRA** can be trialed as first line add on therapy to ICS (particularly if atopy or allergic component) Review effectiveness / tolerability in 4-6 weeks. Withdraw if ineffective
NICE Asthma Guideline Nov 2017

Add-on therapy Add inhaled LABA to low dose ICS (with or without LTRA) use a combination inhaler

Fostair Nexthaler ® 100/6 DPI 1puff bd
or
Fostair ®100/6 MDI + spacer 1puff bd
See overleaf for alternative formulary Choices & MART low carbon choices*

Patients poorly controlled with low dose* ICS/ LABA, may benefit from single inhaler maintenance and reliever therapy (MART). Discussion with patient should inform which option to take. **Provide MART action plan** Review after 6-8 weeks or earlier if additional dose regularly used more than once daily. **MART licence***: Fostair 100/6 (up to 8 puffs/day), Duoresp 160/4.5, Symbicort 200/6, Fobumix 160 /4.5 (up to 12 puffs daily).

Additional add-on therapies

- No response to LABA-stop LABA and consider increased dose of ICS to medium dose
- If benefit from LABA but control still inadequate-continue LABA increase ICS to medium dose (medium dose is 400microgram to 800microgram BDP equivalent)

Fostair Nexthaler® 100/6 2 puffs bd **or**
Fostair ®100/6 MDI + spacer 2 puffs bd
Control still inadequate consider trial of other therapy – LTRA** Montelukast tabs10mg at night
– LAMA **Spiriva Respimat**® 2.5mcg 2 puffs od Surrey PAD
Review after 6-8 weeks withdraw if ineffective (consider exacerbation history)
**NB LTRA may have already been trialed as per NICE at earlier stage

High-dose therapies

- Consider trials of increasing ICS up to high dose (more than 800 micrograms BDP equivalent)
- Addition of a fourth drug, eg LAMA, LTRA, SR theophylline

Fostair Nexthaler 200/6 2 puffs bd **or**
Fostair® 200/6 MDI + spacer 2 puffs bd
Refer patient for specialist care

Before Stepping Up
Check:
- ❑ diagnosis,
- ❑ adherence to current medication and inhaler technique.
- ❑ trigger factors including rhinitis, reflux disease, smoking, occupation

Consider stepping treatment up if the patient:
- ❑ is using SABA 3 times per week or more
- ❑ is waking one night per week with asthma

Stepping Down
- ❑ Aim for minimum dose which provides good control
- ❑ Consider reduction every 3 months, decreasing the dose by approximately 25-50% each time
- ❑ Dose reduction should be slow, patients deteriorate at different rates
- ❑ Review patient 4 weeks after stepping down. Consider further reduction after 3 months
- ❑ Step back up during the 3 months if symptoms develop

Aims of Treatment
- ❑ No daytime symptoms
- ❑ No night time awakening due to asthma
- ❑ No need for rescue medication
- ❑ No asthma attacks
- ❑ No limitations on activity including exercise
- ❑ Normal lung function (in practical terms FEV1 and/or PEF >80% of best)
- ❑ Minimal side effects from medication

Reliever therapy- patients not using MART: SABA as required at each step – review patients using SABA three times per week or more
- patients using MART: Increase dose of MART inhaler according to action plan, which should be individualised to each patient

References: 1 https://www.brit-thoracic.org.uk/quality-improvement/guidelines/asthma/ **2.** https://www.nice.org.uk/guidance/ng80

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Patient Review: Monitoring, Recording and Personal Asthma Action Plan

Monitor the following by routine clinical review at least annually. Review at 4 weeks following change in medicine. Consider stepdown when stable for 3 months.

- ❑ symptomatic asthma control
- ❑ lung function assessed by spirometry or PEF
- ❑ asthma attacks, oral corticosteroid use, time off work
- ❑ inhaler technique and adherence
- ❑ bronchodilator reliance
- ❑ SABA use-review if using 3 doses per week or more
- ❑ Smoking Cessation : **One You Surrey 01737652168**
- ❑ Offer a personalised asthma action plan
- ❑ Use validated tools for monitoring
  Asthma Control Test

Personal Asthma Action Plan

Resources at **Asthma UK**

Patients to have an agreed personal asthma action plan; they should know how to increase medication and when to seek medical assistance.

Increasing ICS Treatment Within a Self-Management Programme

NICE Asthma Guideline Nov 17

Within a personal action plan, offer increased dose of ICS for 7 days to adults using an ICS in a single inhaler (including those on MART regime) when asthma control deteriorates. Clearly outline in the asthma action plan how and when to do this, and what to do if symptoms do not improve. When increasing ICS treatment:

•consider quadrupling the regular ICS dose

•do not exceed the maximum licensed daily dose.

Inhaler Choice

- ❑ Use NICE patient decision aid to help the patient decide which inhaler is easiest to use (includes information on carbon footprint).
- ❑ Prescribe inhalers only after the patient has received training in the use of the device and can demonstrate satisfactory technique. If the patient is unable to use a device an alternative should be found.
- ❑ Spacer device with MDI improves lung deposition; this can result in improved therapeutic effect and reduction in side effects. Spacer devices with anti-static (eg Aerochamber Flow Vu Plus®) properties further improve lung deposition.
- ❑ Written information on inhaler devices and spacers should be provided to patients. Patient leaflets are available on the PAD

Inhaled Corticosteroids

Prolonged high dose ICS >1000 mcg BDP per day can result in systemic side effects such as adrenal suppression, osteoporosis, increased risk of pneumonia and diabetes. For most patients escalation to high doses produces little additional benefit with higher risk of side effects. Using an MDI and spacer can optimise drug delivery and reduce side-effects.

High Dose ICS Safety cards

High dose ICS safety cards for patients and guidance for health care professionals can be obtained via your CCG medicines management team. Information on the PAD

ICS Dose Equivalents (Formulary Choices)

For further information re traffic light status see **Surrey PAD**

ICS	Dose (in micrograms)		
	Low	**Medium**	**High**
Beclometasone			
BDP Easyhaler®	100 2 puffs bd	200 2 puffs bd	200 4 puffs bd
Clenil Modulite®	100 2 puffs bd	200 2 puffs bd	250 2 puffs bd
Qvar® MDI EasiBreathe®	50 2 puffs bd	100 2 puffs bd	100 4 puffs bd
Beclometasone dipropionate (extrafine) with formoterol			
Fostair Nexthaler®	100/6 1 puff bd	100/6 2 puffs bd	200/6 2 puffs bd
Fostair® MDI	100/6 1 puff bd	100/6 2 puffs bd	200/6 2 puffs bd
Budesonide with formoterol			
Fobumix Easyhaler®	80/4.5 2 puffs bd	160/4.5 2 puffs bd	320/9 2 puffs bd
Symbicort Turbohaler®	100/6 2 puffs bd 200/6 1 puff bd	200/6 2 puffs bd 400/12 1 puff bd	400/12 2 puffs bd
Duoresp Spiromax ®	160/4.5 1 puff bd	160/4.5 2 puffs bd	400/12 2 puffs bd
Fluticasone propionate with salmeterol (formoterol not tolerated)			
Seretide Accuhaler®	100/50 1 puff bd	250/50 1 puff bd	500/50 1 puff bd
Combisal® MDI (no dose counter)	50/25 2 puffs bd	125/25 2 puffs bd	250/25 2 puffs bd
Fluticasone furoate with vilanterol **92 microgram od starting dose is equivalent to 500 micrograms fluticasone propionate.** Indicated in a small number of patients who are unable to comply with bd dosing.			
Relvar Ellipta®	-NA	92/22 1puff od	184/22 1puff od

Management of Acute Asthma outside hospital:

BTS Asthma Guidelines 2019

(P.95 and Annex 3 Management of acute asthma in adults in general practice)

- ❑ Give controlled supplementary oxygen to all hypoxemic patients with acute severe asthma titrated to maintain a SpO2 level of 94–98%. Do not delay administration of oxygen in the absence of pulse oximetry but commence monitoring of SaO2 as soon as it becomes available.
- ❑ Give SABA via spacer, 1 puff at a time, inhaled separately using tidal breathing; according to response, give another puff every 60 seconds up to max 10 puffs, assess often.
- ❑ In severe asthma poorly responsive to initial bolus dose of SABA, consider continuous nebulisation.
- ❑ Give steroids in adequate doses. Continue prednisolone 40-50mg daily for at least 5 days or until recovery.
- ❑ Monitor vital signs including sats and peak flow.
- ❑ Routine antibiotics are not recommended.
- ❑ Admit patient with any feature of a life threatening or near fatal attack or any feature of a severe attack persisting after initial treatment.
- ❑ Follow patient up on completion of steroid course within one week of asthma attack or hospital discharge.
- ❑ Keep patients who have had near fatal or difficult asthma under specialist supervision indefinitely, with follow up for at least a year after admission.

Community Pharmacy New Medicines Service (NMS)

Patients newly prescribed an inhaler can have two appointments with the pharmacist in a private consultation area. The first appointment is 7-14 days after starting the new medicine (or changing inhaler device); a follow-up consultation is between 14 and 21 days later.
GP/nurse can refer patient or pharmacist can identify patient as suitable for the service when they dispense the prescription. Patient leaflet and information available here.

Nebulisers

MDI + spacer is at least as good as nebuliser for treating mild/ moderate asthma exacerbations. Nebulisers are not standard care in asthma and should only be prescribed on specialist respiratory team recommendation.

Influenza vaccine is indicated in asthmatic patients requiring repeated use of systemic or inhaled steroids.
Pneumococcal vaccine is not indicated unless patient is having frequent oral corticosteroids **The Green Book**