NHS
Cambridgeshire and Peterborough
Clinical Commissioning Group

# Adult (≥18 years) Asthma Quick Reference Guide (Update Nov 2017)

**Key Points:**

- Advise patients with asthma to stop smoking – refer to local Stop Smoking Service for advice and support.
- Start treatment at the step most appropriate to initial severity of their asthma.
- Patients should receive training from a healthcare professional for each device prescribed, and be able to demonstrate satisfactory technique.[1]
- Check concordance and reconsider diagnosis if response to treatment is unexpectedly poor.[1]
- Explain to the patient the warning signs of poor asthma control and what to do during an attack. [2]
- Offer annual influenza vaccination to all patients with asthma that require continuous or repeated use of **inhaled or systemic** steroids or with previous exacerbations requiring hospital admission.
- Offer a one-off pneumococcal vaccination to patients who require continuous (> 1 month) use of **oral** corticosteroids (i.e. at a dose equivalent to ≥20 mg prednisolone daily). [3]
- Every patient must have a personal asthma action plan (PAAP). [2]
- Perform an asthma review **at least** annually (see indicators associated with increased risk of death overleaf). **Note** - those with seasonal asthma should be reviewed **at least one month before** their exacerbating season.
- Treat associated rhinitis with intranasal steroids.
- Consider a spacer device for patients prescribed a metered dose inhaler (MDI) who are:
  - Having difficulty co-ordinating actuation and inhalation.
  - Receiving high doses of inhaled corticosteroid (ICS) (>800 mcg of beclometasone or equivalent daily).[3]

**ONLY USE A LABA IN COMBINATION WITH AN ICS.**

***1st choice inhaler for each step is listed above - see Page 2 for alternative inhalers***

**Stepping Up?**

Think C.T.T.

- Compliance
- Technique
- Trigger factors

**Step 1 - Inhaled SABA prn**
**(Salbutamol MDI 100mcg 1-2 puffs PRN)**
Can decrease dose if controlled

**Step 2 - Add in regular ICS**
**(Clenil 100mcg (MDI) 2 puffs BD)**
Can decrease dose if controlled

**Step 3 - Initial**
Replace with LABA/ICS combination]
**(Fostair 100/6 (MDI) 1 puff BD)**

**Step 3 – Follow on**
Benefit from LABA/ICS but inadequate response, increase ICS dose in combination inhaler
**(Fostair 100/6 (MDI) 2 puffs BD)**

**If absolutely no response to LABA/ICS, review diagnosis.**
Consider stopping combination device and starting regular ICS
**(Qvar MDI 100mcg 2 puffs BD)**

If asthma still not controlled add either a leukotriene receptor antagonist (LTRA) or theophylline

**Step 4 - Consider trial of:**

- Increasing ICS dose up to BDP 2000mcg/day – *see table overleaf for ICS/LABA combination inhaler options*
- Or addition of either a Leukotriene Receptor Antagonists or theophylline (check levels where appropriate)

If trial of an add-on treatment is ineffective after 4 weeks, **seek specialist advice**.

**Step 5 - Refer to respiratory specialist**

Refer patient to specialist if they have required > 2 courses of oral/iv corticosteroids in past 12 months

**Regular TWICE daily dosing with additional WHEN REQUIRED dosing**

**Initiated** by an asthma nurse specialist or hospital specialist.

- Consider for patients on step 3 receiving frequent courses of oral steroids
- **Caution** – needs education and closer monitoring and of patient/prescriptions
- Use **Fostair 100/6 (MDI)** or **DuoResp Spiromax DPI 160/4.5**

**Stepping Down?**

-Reduce ICS dose slowly
-Aim to use the lowest effective ICS dose
-Consider every 12 weeks

Flow chart based on recommendations from the British Thoracic Society and Scottish Intercollegiate Guidelines Network[1]

| | Step 1 | Step 2 | Step 3 -initial | Step 3 – follow on | | Step 4 Tailor therapy to patient/preferred device | Step 5 |
|---|---|---|---|---|---|---|---|
| | | | | LABA/ICS benefit but inadequate response | LABA/ICS no benefit | | |
| 1st Choice | **Salbutamol MDI 100mcg (£2.85)**<br>1-2 puffs prn | **Clenil 100mcg (MDI) (£4.15)**<br>2 puffs BD | **Fostair 100/6mcg (MDI) (£13.00)**<br>1 puff BD | **Fostair 100/6mcg (MDI) (£27.36)**<br>2 puffs BD | **Qvar 100mcg (MDI) (£9.63)**<br>2 puffs BD | Listed in order of cost:<br>**Sereflo 250/25mcg (MDI) (£29.95)**<br>2 puffs BD<br>**Aerivio Spiromax 50/500mcg (DPI) (£29.97)**<br>1 puff BD<br>**Flutiform 250/10mcg (MDI) (£45.56)**<br>2 puffs BD<br>If treatment ineffective after 4 weeks, seek specialist advice. | **Refer to specialist** |
| Spacer | Volumatic or Aerochamber Plus | Aerochamber Plus | Aerochamber Plus | Aerochamber Plus | Aerochamber Plus | | |
| 2nd choice | **Easyhaler Salbutamol 100mcg (DPI) (£3.31)**<br>1-2 puffs prn | **Qvar 50mcg (MDI) (£4.40)**<br>2 puffs BD | **Flutiform 50/5mcg (MDI) (£13.44)**<br>2 puffs BD | **Flutiform 125/5mcg (MDI) (£26.13)**<br>2 puffs BD | **Qvar Autohaler 100mcg (BAA) (£9.63)**<br>2 puffs BD | | |
| Spacer | Not appropriate | Aerochamber Plus | Aerochamber Plus | Aerochamber Plus | Not appropriate | | |
| 3rd choice | Only if salbutamol not suitable:<br>**Terbutaline Turbohaler (Bricanyl) 500mcg (DPI) (£6.92)**<br>1 puff prn | Only if beclometasone not suitable:<br>**Easyhaler Budesonide 100mcg (DPI) (£4.96)**<br>2 puffs BD | Only If breathe actuated device required:<br>**DuoResp Spiromax 160/4.5 (DPI) (£13.98)**<br>1 puff BD | Only If breathe actuated device required:<br>**DuoResp Spiromax160/4.5 (DPI) (£27.97)**<br>2 puffs BD | Only if beclometasone not suitable:<br>**Easyhaler Budesonide 200mcg (DPI) (£9.91)**<br>2 puffs BD | | |
| Spacer | Not appropriate | Not appropriate | Not appropriate | Not appropriate | Not appropriate | | |

### Key

MDI: Metered dose inhaler
DPI: Dry powder inhaler
BAA: Breathe actuated aerosol
ICS: Inhaled corticosteroid
SABA: Short acting ß$_2$ agonist
LABA: Long acting ß$_2$ agonist

### Colour coded costs

Cost brackets for 28 days of regular treatment at specified dose. PRN doses are priced per device.

£0 - £4.99
£5 - £14.99.
£15 -£24.99
£25 - £34.99
£35-£45

### Complete control of asthma: the 6 measures[1]

1. No daytime symptoms
2. No night-time awaking due to asthma
3. No need for rescue medication
4. No exacerbations
5. No limitation on activity including exercise
6. Normal lung function (FEV1 and/or PEF>80% predicted or best

With minimal side-effects

### Criteria for specialist referral in adults[1]

- Prominent systemic features (myalgia, fever, weight loss)
- Unexplained restrictive spirometry
- Suspected occupational asthma
- Monophonic wheeze or stridor
- Chronic sputum production
- CXR shadowing
- Unexpected clinical findings (ie crackles, clubbing, cyanosis)
- Persistent non-variable breathlessness
- Poor response to asthma treatment/uncontrolled at step 4
- Marked blood eosinophilia (>1 x 109/l)
- Severe asthma exacerbation
- Diagnosis unclear

### Indicators associated with increased risk of death [2]

- Recent hospitalisation
- Previous severe attacks
- Non-attenders for planned review
- Co-morbidity
- LABA without ICS
- > 12 SABA/yr
- < 4 ICS/yr

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With acknowledgment to, Ipswich and East Suffolk CCG Prices based on eMIMs price at time of publication but may be subject to change.

References:
1. British Thoracic Society and Scottish Intercollegiate Guidelines Network (SIGN). British Guideline on the Management of Asthma. October 20141
2. **Royal College of Physicians.Why asthma still kills: the National Review of Asthma Deaths (NRAD) Confidential Enquiry report. London: RCP, 2014. Accessed via http://www.rcplondon.ac.uk**
3. Department of Health. The Green Book - Immunisation against infectious disease. Last updated March 2014.
4. National Institute for Health and Clinical Excellence (NICE). Clinical Knowledge Summaries (CKS) – Asthma. Last updated Dec 2013. Accessed via http://cks.nice.org.uk