

# Stepwise management of asthma for adults Wakefield version

## Notes

- **Select the least costly product that is suitable for an individual, within its marketing authorisation.**
- Before initiating a new drug therapy practitioners should check compliance with existing therapies, inhaler technique and eliminate trigger factors.
- Education is fundamental to asthma management
  - Each patient should have a clear understanding of how to recognise and deal appropriately with deterioration.
  - An individual self-management plan is essential.
  - Patients should have a basic understanding as to how their medication works.
- Rescue courses of steroids may be required at any stage to gain control and stabilise the condition. Prednisolone 40mg once daily for at least 5 days and until recovery of PEFr and symptoms.
- A rescue course of steroids may indicate the need to increase regular treatment to the next step.
- LABA should **not** be used without ICS

## Sub optimal control

- Using reliever more than 3 times weekly
- Symptomatic more than 3 times weekly
- Waking one night a week
- Recurrent rescue oral steroids

## Steroid safety cards

Issue for patients on steps 4 and 5

## Reducing treatment

- Consider stepping down treatment after 12 weeks if control is achieved. Continue to the lowest step that maintains control
- Reductions should be considered every 3 months, decreasing the dose by 25-50% each time
- When on combination of ICS and LABA, the preferred option is to reduce dose of ICS by 50% while continuing LABA. If control is maintained further reductions in ICS should be made until on a low dose, when the LABA may be stopped
- Regular review of patients as treatment is stepped down is important

### STEP 1:

#### Occasional relief of symptoms

As required Inhaled short-acting  $\beta_2$  agonist

#### Sub optimal control of symptoms – Proceed to step 2

(Or exacerbation of asthma requiring oral corticosteroids in the last 2 years)

### STEP 2:

#### Inhaled corticosteroid (ICS)

Beclometasone **or** Budesonide  
200mcg\* twice daily  
(Qvar 100mcg\*\* twice daily)

#### Sub optimal control of symptoms – Proceed to step 3

### STEP 3:

#### Long acting $\beta_2$ agonist (LABA)

Formoterol 12mcg twice daily **or**  
Salmeterol 50mcg twice daily - 4 week trial initially

#### Sub optimal control of symptoms

Beclometasone **or** Budesonide  
400mcg twice daily\* 3 month trial,

If already on this dose and sub optimal control of symptoms, proceed to next step

#### Sub optimal control of symptoms

**Oral Leukotriene Receptor Antagonist** – 3 month trial  
Consider checking blood eosinophil count whilst off oral steroid coincident with commencing Leukotriene Receptor Antagonist.  
Do NOT prescribe if eosinophil count above 1.0/nl  
Forewarn of risk of Churg-Strauss Syndrome.

#### Sub optimal control of symptoms

Sequential trial (3 months each) of:  
Oral MR Theophylline e.g. Uniphyllin, titrate dose to the therapeutic range  
Slow-release  $\beta_2$  agonist tablets

No clinical trials indicating which of these is the best option. BTS/SIGN asthma guidelines (2009) also support Symbicort SMART regimen in selected patients.

#### Sub optimal control of symptoms – Proceed to step 4

### STEP 4:

#### High dose inhaled corticosteroid

Beclometasone **or** Budesonide 1000mcg twice daily\* via spacer device **or**  
Fluticasone 500mcg twice daily via spacer device

#### Sub optimal control of symptoms – Proceed to step 5

### STEP 5:

Use daily steroid tablets in the lowest dose providing adequate control

Maintain high dose ICS at 2000mcg/day.\* Consider other treatments (as mentioned above) – 6 week trial period, stop if no improvement in symptoms.  
Refer patient for specialist care

\* For Budesonide and certain Beclometasone inhalers (see overleaf)

\*\* Qvar, Fostair, Fluticasone need this lower dose for equivalence (see overleaf)

Step down when controlled

Ensure that all patients have a short acting  $\beta_2$  agonist reliever inhaler

Offer Personalised Asthma Action Plans to all patients with asthma, particularly those admitted to hospital

## Doses of inhaled corticosteroids (ICS)

The table below adapted from BTS/SIGN asthma guidelines (updated July 2009) shows equivalent doses of ICS:

Steroid, name, inhaler device and trade name	Equivalent dose
<b>Beclometasone</b>	<b>200mcg</b>
*Clenil Modulite pressurised aerosol inhaler (PAI)	200mcg
Dry Powder Inhaler e.g. Easyhaler, Pulvinal, Asmabec Clickhaler, Becodisk, Cyclocaps	200mcg
*QVAR (PAI, Autohaler or Easi-Breathe)	100mcg
Fostair <sup>§</sup>	100mcg
<b>Budesonide</b>	<b>200mcg</b>
Pulmicort pressurised aerosol inhaler (PAI)	200mcg
Dry Powder Inhaler e.g. Easyhaler, Budelin Novoliser, Pulmicort Turbohaler & Symbicort	200mcg
<b>Fluticasone</b>	<b>100mcg</b>
Pressured aerosol inhaler e.g. Flixotide Evohaler & Seretide <sup>§</sup> Evohaler	100mcg
Dry Powder Inhaler e.g. Flixotide Accuhaler, Flixotide Diskhaler & Seretide <sup>§</sup> Accuhaler	100mcg
<b>Mometasone</b>	<b>100mcg</b>
<b>Ciclesonide</b>	<b>100-150mcg</b>

\* must be prescribed by brand name

<sup>§</sup> Combinations with long acting  $\beta_2$  agonists (LABA): Take care prescribing these as the relative amounts of steroids and LABA differ depending on the particular product chosen.

### Combination inhalers:

- The decision whether to use a combination inhaler depends on individual patient characteristics and clinician preference.
- There is no difference in efficacy in giving an inhaled corticosteroid and a long-acting  $\beta_2$  agonist in combination or separate inhalers.
- Once a patient is on **stable** therapy, combination inhalers have the advantage of guaranteeing that the long-acting  $\beta_2$  agonist is not taken without inhaled corticosteroid but the disadvantage of potentially making dose titration of the individual components more difficult (particularly with respect to stepping down of therapy).