

Asthma Prescribing Guidelines^{1,2}

AIM OF TREATMENT is **maximum control** of the disease *with minimal side effects*:

- No day time symptoms
- No night time awakening due to asthma
- No need for rescue medication
- No exacerbations
- No limitations on activity including exercise
- Normal lung function (in practical terms)
- FEV₁ and /or PEF > 80% predicted or best

Regular Patient Review and Follow-up

- Monitor through routine clinical review at least annually.
 - Use validated tools such as the Asthma control test <http://www.asthmacontroltest.com> or the **Royal College of Physicians (RCP) 3 questions**:
Ask the following questions in the last month:*
 1. Have you had difficulty sleeping because of your asthma symptoms? (including cough)
 2. Have you had your usual asthma symptoms during the day? (breathlessness, wheeze, cough, chest tightness)
 3. Has your asthma interfered with your usual activities? (housework, work/school etc)
- *A response of 'No' to all three questions is consistent with well-controlled asthma

- ✓ Check TRIGGER factors including drugs that may exacerbate asthma e.g. NSAIDs, aspirin, beta blockers
- ✓ Check Inhaler TECHNIQUE
- ✓ Check ADHERENCE with current THERAPY
- ✓ Offer stop smoking support at every opportunity
- ✓ Start treatment at **step most appropriate** to the initial severity
- ✓ Ensure annual influenza vaccination is given
- ✓ Always review diagnosis if response is unexpectedly poor (consider COPD or dysfunctional breathing)
- ✓ Treat **Rhinitis**

The Step Approach

At every opportunity offer STOP SMOKING support and reinforce benefits of smoking cessation

Start treatment at the step most appropriate to initial severity

Achieve early control

Maintain control by Stepping UP treatment as necessary and Stepping DOWN when control is good **for the past 3 months**.

Exercise induced asthma is a sign of poor control and requires stepping up.

Maintain at the lowest possible dose. Review every 3 months

If stable, decrease inhaled steroid dose slowly (by approx. 25-50% each time). Dose reduction should be slow. Patients deteriorate at different rates. Review patients 4 weeks after stepping down.

Always Assess:

Achieve early control

Diagnosis, Concordance

Inhaler technique, Smoking status

Reduce existing or new triggers prior to stepping up

Also consider treating rhinitis. Patients with asthma often have co-existing allergic rhinitis – refer to CG041

Personalised Action Plans

People with asthma should receive education and a written action plan.

Those admitted with severe asthma should receive a personalised action plan on discharge from a clinician with expertise in asthma management

Inhaled corticosteroid (ICS) safety issues

- The safety of ICS is of crucial importance and a balance between benefits and risks for each individual needs to be assessed. Take account of other topical steroid therapy when assessing systemic risk¹.
- Local side effects: dysphonia and oral candidiasis¹. Mouth should be rinsed after inhalation. Using a MDI + spacer improves lung deposition, aids co-ordination, reduces oropharyngeal deposition and local side effects
- Current and previous smoking reduces the effect of ICS. Higher doses may be needed in patients who are smokers or ex smokers¹
- Systemic side effects may include adrenal suppression at high doses of ICS¹. **Give steroid card at ≥ 1000 micrograms beclometasone dipropionate equivalent**
- Bone mineral density may be reduced with long term ICS, predisposing to osteoporosis. The ICS dose should be titrated to the lowest dose at which effective control of asthma is maintained. Adult patients on long-term steroid tablets (e.g. longer than three months) or requiring frequent courses of steroid tablets (e.g. three to four per year) should use a fracture risk assessment tool e.g. FRAX® to assess for fragility fractures. When a significant reduction in BMD occurs, treatment with a long-acting bisphosphonate should be offered (see British Osteoporosis Society guidelines, www.nos.org.uk)¹
- Patients treated with high dose ICS, equivalent to fluticasone propionate 1000 micrograms/day or more had a relative risk increase of 64% for new diabetes onset over 5.5 years (95% CI 1.52-1.76)⁴. Prescribers should be vigilant of risks and review regularly.

Consider STEROID CARD if on:

Beclometasone fine particle size (Fostair®/QVAR®) 400 – 500 micrograms daily
Budesonide 800 – 1000 micrograms daily
Fluticasone < 500 micrograms daily

Give STEROID CARD if on:

≥ 1000 micrograms Beclometasone dipropionate* (BDP) daily
≥ 1000 micrograms Budesonide daily
≥ 500 micrograms Fluticasone daily

References:

1. British Guideline on the Management of asthma. British Thoracic Society/Scottish Intercollegiate Guidelines network (SIGN 1531). September 2016 Available via <https://www.brit-thoracic.org.uk/>
2. Inhaled corticosteroids for the treatment of chronic asthma in adults and in children aged 12 years and over. NICE 2017 - <https://www.nice.org.uk/guidance/ng80>
3. Allergic Rhinitis and its Impact on Asthma (ARIA) guidelines: September 2010 The Journal of Allergy and Clinical Immunology Volume 126 (3): 466-46
4. Suissa S, Kezouh A, Ernst P. Inhaled corticosteroids and the risk of diabetes onset and progression. 123; 11:1001-1006. Available via [http://www.ajimed.com/article/S0002-9343\(10\)00648-0/fulltext](http://www.ajimed.com/article/S0002-9343(10)00648-0/fulltext)

ASTHMA PRESCRIBING GUIDELINES FOR ADULTS AND ADOLESCENTS AGED OVER 12 YEARS (chronic asthma)^{1,2}

Optimal inspiratory flow rates

MDI < 30l/min (Inhale slow and steady)

Dry Powders Inhalers (Inhale deep and fast)

Accuhaler® 30-90 l/min

Easi-breathe® 20-30 l/min

Easyhaler® 28 l/min

NEXTHaler® 35 l/min (usual 30-90 l/min)

Spiromax® 40-60 l/min

Turbohaler® 60-90 l/min

MDI + spacer more effective than MDI alone and as effective as any DPI (replace spacer every 12 months)

- Use Inhaler training tool (InCheck®) to correct Inspiratory flow rate
- Use asthma.org.uk training videos
- Use MDI+ spacer or dry powder Inhalers before stepping up

ICS costs for 30 days -SABA costs for 200 dose inhalers

Drug tariff/MIMS – October 2018

SABA: short acting β₂ agonist

ICS: Inhaled corticosteroid

LABA: long acting β₂ agonist

LTRA: leukotriene receptor antagonist

MART: Maintenance and Reliever Therapy

[Click here to view Asthma Drug Delivery Devices Pictorial Guide](#)

← BTS/SIGN Pathway →

Prescribe inhalers by BRAND and maintain on same brand

REVIEW TREATMENT EVERY 3 MONTHS: STEP UP TO IMPROVE CONTROL AS NEEDED AND STEP DOWN TO MAINTAIN THE LOWEST CONTROLLING STEP (Prescribe SABA prn in addition to regular therapies)

