Inhaled therapy in chronic obstructive pulmonary disease (COPD)

This briefing focuses on inhaled treatments for COPD and reviews medicines optimisation interventions ensuring that treatment is in line with national guidelines. The bulletin reviews the evidence for new treatments and further supporting materials are available on the step down of inhaled corticosteroids and inhaler technique assessments.

**Recommendations**

- Ensure that when a patient is first prescribed an inhaler they are shown how to use it, demonstrate that they are able to use it and ensure inhaler technique is assessed on a regular basis. (see PrescQIPP inhaler technique assessment tools [http://www.prescqipp.info/respiratory](http://www.prescqipp.info/respiratory))
- Optimise treatment of patients with COPD in line with national guidelines. Discontinue ineffective treatments before adding new ones.
- Review patients on triple therapy. Only prescribe inhaled corticosteroids (ICS) for certain patients with moderate or severe COPD or patients with mild COPD and persistent exacerbations. When considering ICS in COPD, clinicians should weigh the possible benefits such as reduced exacerbations and improved quality of life, with the potential adverse effects, particularly an increased risk of pneumonia. Issue steroid warning cards to patients on high dose ICS.
- Consider whether co-morbidities and interactions with other drugs may be affecting the patient’s willingness or ability to use their medicines correctly. Consider the following:
  - For patients with eGFR ≤50 ml/min use aclidinium or umeclidinium as preferred long acting antimuscarinic antagonists (LAMAs).
  - For patients with diabetes consider whether a high dose ICS is worsening their condition, i.e. an increase in HbA1c seen after long term use of high dose ICS.
  - All LAMAs should be used with caution in patients with certain cardiovascular disease.

**Supporting evidence**

The NICE\(^1\) and GOLD\(^2\) COPD pathways are summarised in attachments 1a and 1b. Triple therapy (ICS with LABA and LAMA) is only recommended as an option in patients with significant symptoms and high risk of exacerbations.\(^1,2\)

The cost/QALY for triple therapy in COPD (i.e. an ICS plus LAMA plus LABA) is between £7,000 and £187,000, which is well above the NICE threshold of £21,000 per QALY for a treatment to be regarded as cost effective.\(^3\) Non-drug interventions and lifestyle advise such as stopping smoking, flu vaccination and pulmonary rehabilitation are more cost effective than COPD drug treatments. Patient education and self care are also key components of COPD management and support medicines optimisation. Choice of therapy should be based on the patient’s ability to use the inhaler, side effects, interactions with other medicines and the cost-effectiveness of the total regimen they are on. Tables 1 and 2 in the bulletin provide a summary of the products available.
References


Additional resources available

- Bulletin
- Data pack
- Patient letter, audit and pathways

http://www.prescqipp.info/inhaled-therapy-in-copd/viewcategory/191