COPD PRESCRIBING GUIDELINES

There is no single diagnostic test for COPD. Diagnosis relies on a combination of history, physical examination and confirmation of airflow obstruction using spirometry.

- Requires the presence of irreversible airways obstruction; if unable to perform effective spirometry reconsider diagnosis and consider referral.
- Airflow obstruction is defined as reduced FEV1/FVC ratio (<0.7). This must persist after administration of bronchodilator drugs.
- It is no longer necessary to have an FEV1 <80% predicted for definition of airflow obstruction.
- If FEV1 is >80% predicted, a diagnosis of COPD should only be made in the presence of respiratory symptoms e.g. breathlessness or cough.

GOLD Combined Assessment of COPD table

When assessing risk, choose the highest risk according to GOLD grade or exacerbation history.

(One or more hospitalisations should be considered high risk.)

<table>
<thead>
<tr>
<th>Risk</th>
<th>GOLD Classification</th>
<th>Airflow Limitation</th>
<th>Symptom</th>
<th>Risk Exacerbation History</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>High Risk, Less Symptoms (C)</td>
<td>≥2 or &gt;1 leading to hospital admission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High Risk, More Symptoms (D)</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Low Risk, Less Symptoms (A)</td>
<td>≤1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Low Risk, More Symptoms (B)</td>
<td>≤1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CAT < 10 CAT ≥ 10
mMRC 0-1 mMRC ≥ 2
Breathlessness

The goals of COPD assessment are to determine the severity of the disease, it’s impact on patient’s health status, and the risk of future events (exacerbations, hospital admissions, death) in order to guide therapy. Validated questionnaires such as the COPD Assessment Test (CAT) are recommended for a comprehensive assessment of patients symptoms. The modified British Medical Research Council (mMRC) scale only provides assessment of breathlessness.

Therapeutic Options

- **Smoking Cessation should be offered to all patients** – this is the only treatment that slows disease progression. Offer at every opportunity / refer to stop smoking adviser.
- **Vaccination** - Infection can complicate COPD and some infections can be prevented by vaccination. All COPD patients should therefore be offered pneumococcal vaccination and an annual influenza vaccination
- **Pulmonary Rehabilitation** – refer patient when Medical Research Council (mMRC) dyspnoea score is >2. Also those who have had a recent hospitalisation for an acute exacerbation
- **Inhaler Technique** – should be assessed at every opportunity and before changing therapy
- **Screen for anxiety and depression** - give advice on how to identify and manage e.g. relaxation techniques
- **Exercise education** - most patients at all stages of disease benefit from exercise to improve exercise tolerance and symptoms of breathlessness and fatigue
- **Dietary advice** e.g. advice on nutrition and weight loss
- **Flare up packs** - promote use of self management plans and rescue packs.
- **Fan therapy** – consider use of hand held fans or bigger fans which should be moved from side to side on face to pass air over trigeminal nerves on either side of face which then slows respiratory rate down
- **Assess co-morbidities** – conditions may influence mortality and hospitalisations, and should be looked for routinely and treated appropriately.
- **Consider Chest X-Ray** to rule out other pathology if appropriate

NHS MKPAG on behalf of Respiratory LIT, is recommending prescribing of Inhaled Corticosteroids (where appropriate) off label as an option – using a licensed product for an unlicensed indication (COPD). We have made this decision based on concerns for patient safety and to improve patient compliance with treatment.
Pharmacological Management of Stable COPD (diagnosis confirmed)

Breathlessness and exercise limitation

- SABA (or SAMA) as required *
  - Still symptomatic
    - Add in LAMA
      - Caution with cardiac disease / renal impairment – see SPCs
      - Persistent breathlessness
        - 2 exacerbations or 1 hospitalisation/year

Single inhaler LAMA / LABA Combination

> 2 exacerbations per year or 1 hospitalisation

- Remains Breathless (needing treatment) (mMRC Score 3-4)
  - Consider LABA as alternative to LAMA if ineffective / patient does not tolerate
  - Reinforce non-pharmacological management:
    - Consider other causes / comorbidities. Review symptom control, activities of daily living (ADL), exercise capacity and number of exacerbations in last 12 months

Further exacerbations / hospital admissions

- Consider referral to Respiratory PCOC service

ICS Safety #
Be aware of the potential risk of developing side effects including non-fatal pneumonia and diabetes. Be prepared to discuss with patients

Licensed ICS/LABA Choice
LAMA (Switch to LAMA only inhaler) + ICS # / LABA Combination

Off-Label ICS Choice
LAMA / LABA Combination + ICS #

ICS/LABA is a recognised treatment for frequent exacerbations but we recommend optimising lung function first with LABA/LAMA before considering ICS #. [http://www.guidelines.co.uk/respiratory_wpg_copd](http://www.guidelines.co.uk/respiratory_wpg_copd)
Adapted from
1. NICE COPD Updated June 2015
2. Global Initiative for Chronic Obstructive Lung Disease (GOLD), Management and prevention of COPD Updated 2015

Chronic productive cough:
- consider trial of carbocisteine 750mg three times daily for 4 weeks then 750mg twice daily if improvement in sputum production or reduction in viscosity. Stop if no improvement. Do not routinely use mucolytic drugs to prevent exacerbations in people with stable COPD.

Check patient compliance and inhaler technique at every opportunity and before changing therapy. (Use In-check dial to correct inspiratory flow)

Ensure you stop SAMA before starting LAMA

LAMA/LABA combination may be started immediately in patients with FEV1 <50% + mMRC dyspnoea score ≥3 or 2 exacerbations (or 1 hospitalisation) in the preceding year.

Remains Breathless
- (>1) exacerbations/year or 1 hospitalisation/year
  - Reinforce non-pharmacological management:
    - Consider other causes / comorbidities. Review symptom control, activities of daily living (ADL), exercise capacity and number of exacerbations in last 12 months

Additional guidance:
- Give STEROID card if on > 1000mcg Beclometasone propionate (BDP) daily or equivalent

Guidance approved by MKPAG Nov 2015 Review date: Nov 2017 Author: Nikki Woodhall MKCCG on behalf of MK Respiratory LIT