Management of COPD in Primary Care

NHS
York and Scarborough Medicines Commissioning Committee

Step 1

Breathlessness and exercise limitation — See Drug Choices

Start SABA

Assess response in 4 weeks and **review assessment panel** before proceeding to the next option.

If no benefit or persistent symptoms consider adding SAMA.

Step 2

See Drug Choices

FEV_1 ≥50% of predicted

With persistent breathlessness

OPTION 1

LAMA plus PRN SABA (**stop SAMA**)

Assess response in 4 weeks and **review assessment panel** before proceeding to next option.

OPTION 2

LABA (continue SABA/ SAMA)

Assess response in 4 weeks and **review assessment panel** before proceeding to next option.

FEV_1 <50% of predicted

Persistent breathlessness with-out exacerbations

OPTION 1

LAMA plus PRN SABA (**stop SAMA**) Consider LABA plus PRN SABA/SAMA if LAMA not tolerated.

Assess response in 4 weeks and **review assessment panel** before proceeding to next option.

OPTION 2

LABA + LAMA

Assess response in 4 weeks and **review assessment panel** before proceeding to next option.

2 or more exacerbations in last 12 months

OPTION 1

LABA + ICS Consider LABA + LAMA if ICS declined or not tolerated.

Assess response in 4 weeks and **review assessment panel** before proceeding to next option.

Step 3

If still symptomatic and diagnosis confirmed — See Drug Choices

FEV_1 ≥50% of predicted with persistent breathlessness

Consider alternative diagnosis/ management

Consider LABA + LAMA

Assess response in 4 weeks and **review assessment panel** before proceeding to next option.

FEV_1 <50% of predicted with persistent breathlessness

Consider alternative diagnosis

Consider triple therapy (LABA/ICS plus LAMA plus PRN SABA (**stop SAMA**))

Assess response in 4 weeks and **review assessment panel** before proceeding to next option.

Triple therapy

LABA/ICS plus LAMA = **Specialist only if FEV_1 ≥50%**

N.B. In mild disease the evidence is poor for triple therapy and such therapy is generally not recommended but may be used in selected patients by specialists only.

Please refer to specialist. Clinicians must use the specified referral pathway: http://www.valeofyorkccg.nhs.uk/rss/

Assessment Panel

Before initiating treatment and at every review, refer to Assessment Panel.

Assess Response

Assess each new treatment step 4 weeks after initiation.

- Assess inhaler technique.
- **Consider alternative diagnosis.**
- Has the treatment made a difference to you?
- Is your breathing easier in any way?
- Has your sleep improved?
- Can you do some things that you could not do before or do the same things faster?
- Are you less breathless than before when doing these things?
- Record MRC scale.

If no benefit STOP treatment and consider alternative.

Try to prescribe the same type of device for each type of drug.

Pulmonary Rehabilitation

Consider referral to pulmonary rehabilitation if MRC score is 3+

Lifestyle Advice

Smoking cessation - promote at every opportunity.

Dietary advice - if BMI <18 or >30

Exercise - promote gentle exercise

Self-Management

Consider written self-management plan for all patients and rescue pack for appropriate patients.

Prescribe antibiotics in line with antimicrobial guidance.

Immunisation

Influenza annually

Pneumococcal as per green book

Anxiety and Depression

Screen for depression and anxiety using the PHQ-9 / HADS score.

Oxygen Therapy

If SPO2 <92% (at rest & stable) refer via Home Oxygen Assessment & Referral (HOS-AR) form.

Chronic Productive Cough

Consider a trial of carbocisteine 375mg (2caps tds, reducing to 2caps bd). This should be stopped if there is no benefit after a 4-week trial.

May 2017; For review May 2019

Drug choices for the management of COPD

Key: MDI = metered dose inhaler. DPI = dry powder inhaler

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Prescribe by brand

*See **BNF** for specific doses*

◊ To aid patient familiarity and identification of devices please prescribe by brand name.

◊ The choice of drug(s) should take into account the person's symptomatic response and preference, and the drug's potential to reduce exacerbations, its side effects and cost (NICE, 2010).

SABA (short acting beta agonist)

- Salbutamol 100mcg MDI, two inhalations four times a day, as and when required (£1.50) or
- Salbutamol 100mcg MDI and spacer device (Aerochamber® £4.86/Volumatic® £3.85) or
- Alternative SABA device to suit patient (e.g. salbutamol 100mcg Easyhaler® DPI £3.31/ terbutaline 500mcg Turbohaler DPI £6.92)

SAMA (short acting muscarinic antagonist)

- Ipratropium bromide 20mcg MDI 1-2 puffs QDS PRN (£5.56) +/- spacer.

LAMA (long acting muscarinic antagonist)

First line

- **Incruse Ellipta®,** DPI**,** umeclidinium 55mcg, one inhalation once a day (£27.50)

Alternative options

- **Eklira Genuair®,** DPI (blister and device), aclidinium 322mcg, one inhalation twice a day (£28.60)
- **Seebri Breezhaler®,** DPI (blister and device), glycopyrronium 44mcg, one inhalation once a day (£27.50)
- **Spiriva Respimat®**, MDI, tiotropium 2.5mcg, 2 puffs once daily (£23.00)

LABA + LAMA

First line

- **Anoro Ellipta®,** DPI, umeclidinium/ vilanterol 55/22mcg, one inhalation once a day (£32.50)

Alternative options

- **Duaklir Genuair®,** DPI, aclidinium/ formoterol 340/12mcg, one inhalation twice a day (£32.50)

- **Ultibro Breezhaler®,** DPI, (blister & device) indacaterol/glycopyrronium 85/43mcg, one inhalation once a day (£32.50)

- **Spiolto Respimat®**, MDI tiotropium/olodaterol 2.5/2.5mcg, 2 puffs once daily (£32.50)

LABA + ICS (long acting beta agonist and inhaled corticosteroid)

First line

- **Relvar Ellipta®,** DPI, fluticasone/ vilanterol 92/22mcg, one inhalation once a day (£22.00)

Alternative options

- **Fostair®,** MDI, beclometasone/formoterol 100/6mcg, two inhalations twice a day (£29.32)

- **Fostair NEXThaler®**, DPI, beclometasone/formoterol 100/6mcg, two inhalations twice a day (£29.32)

- **DuoResp Spiromax®** 320/9mcg (£29.97) OR **Symbicort Turbohaler®** 400/12 (£38.00), both DPIs, budesonide/formoterol. Both dose equivalent – one inhalation twice a day, patient will require appropriate device training.

Referral to a specialist

When there is:

- Diagnostic uncertainty
- Uncontrolled severe COPD
- Onset of cor pulmonale
- Assessment of surgery: bullous lung disease
- Rapid decline in FEV_1
- Aged <40 or FH of alpha 1 antitrypsin deficiency
- Frequent infection
- Haemoptysis

Supporting information :

- NICE (2010) Clinical Guidance CG101 (under review, update due Nov 2018)
- GOLD (2017) Global Strategy for the Diagnosis, Management and Prevention of COPD

May 2017; For review May 2019