

## **Important considerations:**

- Consider chest x-ray to exclude other pathologies & full blood count on diagnosis.
- Consider checking oxygen saturation annually.
- Optimise treatment of co-morbidities.
- Prescribe inhalers using the brand name (exceptions are salbutamol and terbutaline).
- > Ensure good inhaler technique.
- Trial medication for 3 months. If no benefit = STOP.
- LAMAs should be used with caution in patients with cardiovascular disease.

# Consider ICS withdrawal in the following circumstances (for patients without asthmatic features):

- ➤ Eosinophil level <100 cells/microL, and no history of exacerbations in the past year = consider withdrawal of ICS to LAMA/LABA in the first instance (if on triple therapy).
- > Patients with bacterial pneumonia.

# COPD confirmed by spirometry with FEV1/FVC < 0.7

Give advice on smoking cessation, ensure pneumococcal & influenza vaccinations are up to date, optimise BMI, promote exercise, enrol patient onto pulmonary rehabilitation programme if MRC score>3

Patients with a diagnosis of COPD and Asthma, or have asthmatic features (steroid responsiveness, eosinophils >300 cells/microL, variation of FEV1~ 400mls, variation of PEF~20%)

0-1 exacerbations, breathlessness and exercise limitation, or CAT score <10

≥2 exacerbations or 1 leading to hospital admission, or CAT score >10 eosinophils <300 cells/microL

Use SABA as required [A]

Where SABA required daily

Use SABA as required [A] PLUS

LABA/LAMA combination [B]

Use SABA as required [A] **PLUS** 

LABA/ICS combination [C] (If not tolerated try LAMA and ICS)

Continued exacerbations or

breathlessness

Stop [C] and start LABA/LAMA/ICS

combination [D] or consider

alternatives

Start
LABA/LAMA combination [B]

Continued exacerbations or breathlessness → measure eosinophil levels

< 100 cells/microL

≥ 100 cells/microL

Consider alternatives e.g.
Theophylline.

N.B. Caution in the elderly

Stop [B] and start

3-month trial of

LABA/LAMA/ICS

combination [D]

(If no benefit, revert back to [B])

#### KEY

[A] Short acting β agonist (SABA)

[B] Long acting  $\beta$  agonist (LABA) plus long acting muscarinic antagonist (LAMA) combination inhaler

[C] LABA and inhaled corticosteroid (ICS) combination inhaler

[D] LABA, LAMA and ICS combination inhaler

If still symptomatic or CAT score > 30 (at any stage of the pathway), consider referral for specialist advice

Excessive mucus production (at any stage of the pathway) = consider adding oral NACSYS®(Acetylcysteine) 600mg effervescent tablets 1 daily.

Review at 4-6 weeks and stop if no benefit.

Authors: Dr Andrew Smith and Dr Manish Patel (Consultants in Respiratory Medicine), University Hospital Wishaw. Victoria Mackinnon (Prescribing Adviser) and Rizwan Din (Advanced Clinical Services Pharmacist), NHSL Prescribing Team.

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| Formulary status | Preferred | Total |
|------------------|-----------|-------|
|------------------|-----------|-------|

| Group | Prescribe as                            | Inhaler<br>type | Dose                    | Ingredient                                 | SABA | LAMA | LABA | ICS | Cost of 30 days<br>treatment<br>(SDT and dm+d June 2021) |
|-------|---|-----------------|-------------------------|--|------|------|------|-----|--|
| [A]   | Salbutamol 100 micrograms               | pMDI            | 2 doses twice daily     | Salbutamol                                 | ٧    |      |      |     | £0.90  |
|       | Terbutaline 500 micrograms              | DPI             | 1 dose four times daily | Terbutaline                                | ٧    |      |      |     | £8.30  |
| [B]   | Spiolto Respimat® 2.5/2.5 micrograms    | pMDI            | 2 doses daily           | Tiotropium<br>Olodaterol                   |      | ٧    | ٧    |     | £32.50   |
|       | Anoro Ellipta® 55/22 micrograms         | DPI             | 1 dose daily            | Umeclidinium<br>Vilanterol                 |      | ٧    | ٧    |     | £32.50   |
|       | Ultibro Breezhaler® 50/110 micrograms   | DPI             | 1 dose daily            | Glycopyrronium<br>Indacaterol              |      | ٧    | ٧    |     | £32.50   |
|       | Duaklir Genuair® 340/12 micrograms      | DPI             | 1 dose twice daily      | Aclidinium<br>Formoterol                   |      | ٧    | ٧    |     | £32.50   |
| [C]   | Relvar Ellipta® 92/22 micrograms        | DPI             | 1 dose daily            | Fluticasone<br>Vilanterol                  |      |      | ٧    | ٧   | £22.00   |
|       | Fostair® 100/6 micrograms               | pMDI<br>or DPI  | 2 doses twice daily     | Beclometasone<br>Formoterol                |      |      | ٧    | ٧   | £29.32   |
|       | DuoResp Spiromax® 320/9 micrograms      | DPI             | 1 dose twice daily      | Budesonide<br>Formoterol                   |      |      | ٧    | ٧   | £27.97   |
|       | Symbicort® 400/12 micrograms            | DPI             | 1 dose twice daily      | Budesonide<br>Formoterol                   |      |      | ٧    | ٧   | £28.00   |
| [D]   | Trelegy Ellipta® 22/92/55 micrograms    | DPI             | 1 dose daily            | Vilanterol<br>Fluticasone<br>Umeclidinium  |      | ٧    | ٧    | ٧   | £44.50   |
|       | Trimbow® 5/87/9 micrograms              | pMDI            | 2 doses twice daily     | Formoterol Beclometasone Glycopyrronium    |      | ٧    | ٧    | ٧   | £44.50   |
|       | Trixeo Aerosphere® 5/7.2/160 micrograms | pMDI            | 2 doses twice daily     | Formoterol<br>Glycopyrronium<br>Budesonide |      | ٧    | ٧    | ٧   | £44.50   |

### Glossary

| FEV1: Forced expiratory volume in 1 second | FVC: Forced Vital Capacity | BMI: Body Mass Index                         | PEF: Peak Expiratory Flow                 |  |  |
|--|----------------------------|--|---|--|--|
| CAT: COPD Assessment Test                  |                            | MRC: Medical Research Council Dyspnoea scale |   |  |  |
| pMDI: pressurised Metered Dose Inhaler     | DPI: Dry Powder Inhaler    | SDT: Scottish Drug Tariff                    | dm+d: Dictionary of Medicines and Devices |  |  |

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