Adult asthma prescribing guidelines

NHS
Cornwall and Isles of Scilly

Fundamentals of asthma care

- Assess asthma control with a validated measure such as the asthma control test
- Assess adherence, SABA use and number of exacerbations
- Check inhaler technique and correct errors or change device as appropriate
- Identify and manage co-morbidities, for example rhinitis, GORD, anxiety or obesity
- Ensure every patient has an asthma action plan and knows how to implement it
- Ask about smoking - offer treatment and support to stop smoking
- Ensure every patient has a GP or nurse review within 48 hours of an exacerbation or hospital admission
- All people with an asthma diagnosis should be prescribed an inhaled steroid
- Review treatment and consider step-down using asthma decreasing treatment guide if good control (ACT Score ≥20 is good control)

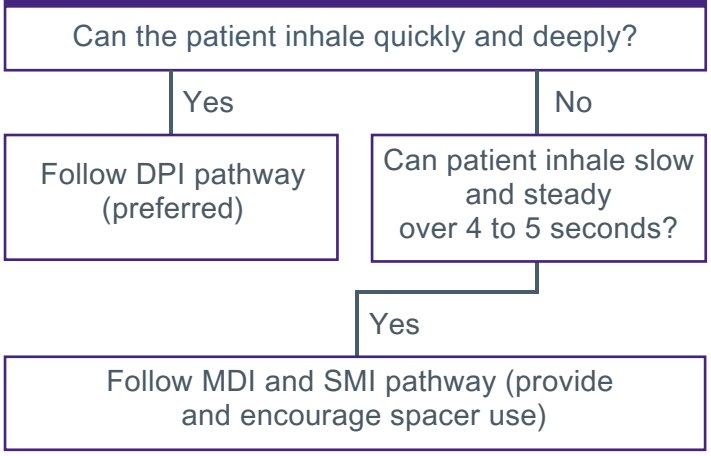
Treatment goal

- Complete asthma control
- No daytime symptom.
- No need for rescue medication
- No exercise or activity limitations
- No night waking
- No exacerbations
- Normal lung function
- Minimal medication side effects

Inhaler principles

- Match the device type to the patients inspiratory flow rate
- Observe patient inhaling and use placebos, whistle or In-check devices to assess
- Use DPI first line if suitable including SABA
- Use MDI in patients unsuitable for DPI - always prescribe with a spacer
- Check inhaler technique at every review and before treatment escalation
- Use combination inhalers where appropriate.
- Always prescribe by brand not generic

Inhaler selection



Regular preventer

Low dose ICS and as needed SABA (match device where possible).

ICS DPI options	SABA DPI options As needed dose	ICS MDI options Always with spacer	SABA MDI options Always with spacer
• Easyhaler Beclometasone 200mcg: 1 puff twice daily • Flixotide Accuhaler 100mcg: 1 puff twice daily (LF)	• Easyhaler Salbutamol 100mcg: 2 puffs • Bricanyl Turbohaler 500mcg: 1 puff • Ventolin Accuhaler 200mcg: 1 puff (LF)	• Soprobec 100 mcg: 2 puffs twice daily	• Salamol inhaler: 2 puffs as needed

Review after 4 to 8 weeks using ACT (≥20 is good control). If good control not achieved check and address inhaler technique, adherence and co-morbidities before moving to next treatment step.

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Initial add on therapy: Add LABA to low dose ICS with as needed SABA

DPI options	MDI options - always with spacer
• Fobumix Easyhaler 160/4.5: 1 puff twice daily • Fostair Nexthaler 100/6: 1 puff twice daily • Relvar Ellipta 92/22: 1 puff once daily (LF)	• Luforbec 100/6 : 1 puff twice daily • Combisal 50/25: 2 puffs twice daily

Or low dose ICS and LABA MART regime

- Consider for patients who have exacerbations
- Patients should not be prescribed a SABA
- Patients must be educated about the MART regime and clinician confident patient is suitable
- All patients to take a regular twice daily dose
- If reliever puffs needed > 3x per week consider step up
- MART options: Fobumix, Fostair DPI, Luforbec

Review after 4 to 8 weeks using ACT (>20 is good control). If good control not achieved check and address inhaler technique, adherence, co morbidities before moving to next treatment step.

No response to adding LABA

- Stop LABA and trial montelukast 10mg once daily for 8 weeks with low dose ICS. Evaluate response using asthma control test
- If no response, stop montelukast and increase inhaled steroid to medium dose
- Response to montelukast, but not controlled, increase inhaled steroid to a medium dose. Consider a trial of a LAMA for 8 weeks if control not achieved following dose increase

Response to LABA but control not achieved: Increase inhaled steroid to medium dose.

DPI options	MDI options - always with spacer
• Fobumix Easyhaler 320/9: 1 puff twice daily • Fostair Nexthaler 100/6: 2 puffs twice daily • Relvar Ellipta 92/22: 1 puff once daily (LF)	• Luforbec 100/6 : 2 puffs twice daily • Combisal 125/25: 2 puffs twice daily

If control not achieved with medium dose ICS and LABA trial montelukast 10mg OD for 8 weeks. If no response to montelukast, stop. Consider a trial of a LAMA for 8 weeks if control not achieved, for example Spiriva Respimat 2.5mcg 2 puffs once daily or a triple therapy (ICS, LABA and LAMA) inhaler where licensed for asthma.
Evaluate response of LAMA using asthma control test and stop if no response. If good control not achieved check or address inhaler technique, adherence and co morbidities before moving to next treatment step.

High dose ICS containing treatments or specialist therapies: Take advice from secondary care.

DPI options	MDI options - always with spacer
• Fobumix Easyhaler 320/9: 2 puffs twice daily • Fostair Nexthaler 200/6: 2 puffs twice daily • Relvar Ellipta (LF) 184/22: 1 puff once daily	• Luforbec 200/6 : 2 puffs twice daily • Combisal 250/25: 2 puffs twice daily

Secondary care may perform further diagnostic tests and consider alternative diagnoses and co-morbidities. Frequent exacerbators may be referred to tertiary care for assessment for biologic therapies.

MART regimens

MART regimes	Maintenance dose	As required dose	Maximum number of puffs in 24 hours
Low dose: • Fostair Nexthaler 100/6 • Luforbec MDI 100/6	1 puff twice a day	1 additional puff as needed	8 puffs
Low dose: • Fobumix Easyhaler 80/4.5 • Fobumix Easyhaler 160/4.5	2 inhalations per day, given either as 1 inhalation in the morning and evening or as 2 inhalations in either the morning or evening	1 additional puff as needed. No more than 6 puffs on a single occasion.	8 puffs in 24 hours. 12 puffs in 24 hours for a limited period
Medium dose: • Fobumix Easyhaler 160/4.5	2 puffs twice a day	1 additional puff as needed. No more than 6 puffs on a single occasion.	8 puffs in 24 hours. 12 puffs in 24 hours for a limited period

Asthma control test

The asthma control test (ACT) is a validated symptom measure which can be used with or without peak flow monitoring to aid diagnosis and assess the impact of asthma symptoms on patients' lives. An ACT score of 20 to 25 defines asthma as well controlled, 15 to 19 poorly controlled and below 15 very poorly controlled.

An increase in ACT score of 3 or more units is clinically meaningful and can help you evaluate if an intervention has made a difference to the patient. The ACT test is on templates used in GP systems.

Inhaler strategy

The NHS has a target to reduce carbon emissions; 1 metered dose inhaler has the same carbon footprint as up to 24 dry powder inhalers. pMDIs contain propellant. This means they have a higher carbon footprint than DPIs see NICE patient decision aid. If a patient can use both a DPI and MDI they should be given a DPI.

Use the same device type (DPI or MDI) for all inhalers where appropriate. Some DPI's require more inspiratory flow than others, the lowest flow option is highlighted in each section (LF).

Patients for whom MDI is the most appropriate device should always be prescribed a spacer.

Ensure patients are taught how to use a new device and technique and adherence are checked at each review and before escalating therapy.

Involving the patient in inhaler choice can aid concordance for example deciding between a once or twice daily regime (where available) and ensuring patients find their device acceptable.

Inhaler devices vary in how complex or easy to use they are, the first line recommended inhalers are those which are simple for patients to use and for healthcare professionals to teach. Second line inhalers can be used if first line devices are not suitable.

Inhaler information and how to use videos are available on the Right Breathe website.

NHS steroid emergency cards

NHS steroid emergency cards should be given to be patients on:

- inhaled beclomethasone >1,000mcg/day or equivalent (>500mcg/day if extra-fine)
- inhaled fluticasone propionate >500mcg/day or equivalent
- consider for lower doses if additional steroids used via other routes, for example nasal
- more than 40mg prednisolone per day or equivalent for longer than 1 week
- on a maintenance dose of prednisolone 5mg/day or equivalent or more for 4 weeks or longer
- repeated short courses of oral doses
- a course of oral glucocorticoid within a year of stopping long term therapy
- steroids alongside drugs that affect CYP3A4 (CP450) metabolism, for example ritonavir, itraconazole and ketoconazole

Steroid treatment cards should be issued as before. Steroid emergency cards and treatment cards may be ordered from Primary Care Support England. Further guidance on eligible groups is available on the SPS website.

Abbreviations

- DPI: Dry powder inhaler
- ICS: Inhaled corticosteroid
- LABA: Long acting beta agonist
- LAMA: Long acting muscarinic antagonist
- LF: Lowest inspiratory flow rate
- MART: Maintenance and reliever therapy
- MDI: Metered dose inhaler
- SABA: Short acting beta agonist

Based on the BTS/SIGN 2019 asthma guidelines and the NICE asthma (NG80) guidelines. There are differences between the guidelines and this guideline is an integrated pragmatic approach to develop guidelines for Cornwall and the Isles of Scilly.

These guidelines have been updated with input from Chris Burgin, pharmaceutical advisor, Cornwall and Isles of Scilly ICB; Jill Leyshon, respiratory specialist nurse; Matthew Berry, consultant in respiratory medicine; Bethany Doherty, asthma & COPD specialist nurse and Susheela Banerji, speciality doctor, respiratory medicine, Royal Cornwall Hospitals NHS Trust (RCHT). Based on a previous version developed by Fiona Lee.

Version 2 (May 2024) replacing Fostair pMDI with Luforbec pMDI