Healthier Together

Improving health and care in Bristol, North Somerset and South Gloucestershire

BNSSG Adult Asthma Guidelines 2022

Carbon Footprint Key Low Medium High	Regular low dose ICS	Regular low dose ICS + LABA	Medium dose ICS + LABA Give steroid treatment card	High dose ICS + LABA Give steroid treatment + emergency card ▲ Consider secondary care referral
			Add **Spiriva Respimat®** 2 puffs OD if still exacerbating +/- Montelukast 10mg ON	
Dry Powder Inhalers First choice if clinically appropriate	**Easyhaler® Beclometasone** 200mcg 1 puff bd **Flixotide® Accuhaler** 100mcg 1 puff bd	**Fobumix® Easyhaler 80/4.5** 1-2 puffs bd **Fostair® 100/6 NEXThaler** 1 puff bd **Relvar® Ellipta▼ 92/22#** 1 puff od **Symbicort® 100/6 Turbohaler** 1-2 puffs bd	**Fobumix® Easyhaler 160/4.5** 1-2 puffs bd **Fostair® 100/6 NEXThaler** 2 puffs bd **Relvar® Ellipta▼ 92/22#** 1 puff od **Symbicort® 200/6 Turbohaler** 1-2 puffs bd	**Fobumix® Easyhaler 320/9 ▲** 1-2 puffs bd **Fostair® 200/6 NEXThaler ▲** 2 puffs bd **Relvar® Ellipta▼ 184/22** 1 puff od **Symbicort® 400/12 Turbohaler ▲** 1-2 puffs bd
		#Note: Relvar 92/22 has been designated as both a low and medium dose		
Meter Dose Inhalers Second choice if DPI not appropriate	**Clenil® Inhaler 100mcg** 2 puffs bd	**Luforbec® 100/6 Inhaler** 1 puff bd **Combisal® 25/50** 2 puffs bd	**Luforbec® 100/6 inhaler** 2 puffs bd **Combisal® 25/125** 2 puffs bd	**Luforbec® 200/6 inhaler ▲** 2 puffs bd **Combisal® 25/250 ▲** 2 puffs bd
Breath Actuated MDI Second choice if DPI not appropriate	**Qvar® Easi-Breathe 50mcg** 2 puffs bd			
MART	**Consider if MART regimen might be more appropriate (see below)**			
Salbutamol	Patients who are on a MART regimen should NOT be prescribed salbutamol PRN			
	DPI	**Easyhaler® Salbutamol** 100mcg 1-2 puffs PRN	**Ventolin Accuhaler®** 200mcg 1 puff PRN	
	MDI	Do not prescribe Ventolin pMDI or generic Salbutamol MDI due to their very large carbon footprint		
		Salamol® Inhaler 100mcg 1-2 puffs PRN	**Airomir® Inhaler** 100mcg 1-2 puffs PRN	

Key: SABA = Short-acting β2-agonist ICS = Inhaled corticosteroid OCS = Oral corticosteroid LABA = Long-acting β2-agonist LTRA = Leukotriene receptor antagonist

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Why the update?

BNSSG have made the decision to delay publication of new clinical guidance until the release of the British Thoracic Society/National Institute for Health and Care Excellence (BTS/NICE) joint guideline. BTS and NICE will be releasing a new joint asthma guideline which is due to be published in November 2023 that takes into consideration recent scientific literature and will recommend cost effective management of asthma. With an increasing focus on the environmental impact of respiratory medicine, this guideline has been updated in the interim to create an emphasis on greener inhaler prescribing.

Inhaler selection & Environmental Considerations

Inhalers have a significant carbon footprint and make up ~3% of all NHS carbon emissions and 13% of direct patient care. In the UK a large proportion of our inhalers are pressurised metered dose inhalers (pMDIs) which contain hydrofluoroalkanes (HFA) propellants which are potent greenhouse gases. In January 2019, the NHS long-term plan proposed a 50% reduction in the greenhouse gas emissions from inhalers in 10 years. Using these simple steps when prescribing inhalers will help:

1. **DPIs** or **SMIs** should be offered **first line** where clinically appropriate. Find out how to check whether a patient is suitable for a DPI below.
2. Focus on finding the right medication and device for each individual using shared decision making and ensure good inhaler technique. **Optimal asthma management** is the key goal.
3. Avoid **Flutiform MDI**, **Symbicort MDI**, **Ventolin Evohaler MDI** and **generic Salbutamol MDI** which all have large carbon footprints.
4. Ask patients to **return all used or unwanted inhalers to community pharmacies or dispensaries** for disposal by incineration or re-cycling.
5. Click here for more guidance on how to reduce the environmental impact of inhalers. The Greener Practice guide is also helpful.

DPI suitability

Most patients will be able to use DPI inhalers but some patients with poor inspiratory ability may struggle to use them. If you are not sure, assess the patient's inspiratory ability by observing them inhaling. As always, inhaler technique is key and so should always be assessed and discussed whichever device is chosen.

- Can the patient take a deep quick breath in within 2-3 seconds? **DPI likely to be fine**
- Can the patient take a slow steady breath in over 4-5 seconds but not a deep quick breath? **MDI may be needed instead of DPI**

Maintenance and Reliver Therapy (MART)

Consider this if patient has inadequate control and frequent use of reliever medication and/or previous exacerbations requiring medical intervention. Patients must have education on the use of the inhaler as MART, and clinicians must be confident patients understand how to use it appropriately. Patients should be advised to always have their inhaler available for PRN use. Salbutamol PRN is **not** required in addition to MART. Practices should monitor compliance and any dose-related adverse effects. Guidance on how to complete a MART asthma action plan can be found here

Product for MART	Inhaler device	MART dosing	Max daily dose	Age restrictions
Symbicort 200/6 and 100/6▲	DPI Turbohaler	2 puffs per day + PRN	12 puffs*	12 years +
Fobumix 80/4.5 and 160/4.5▲	DPI Easyhaler	2 puffs per day + PRN	12 puffs*	18 years +
Luforbec 100/6▲	MDI	1 puff BD + PRN	8 puffs	18 years +
Fostair 100/6▲	NEXThaler	1 puff BD + PRN	8 puffs	18 years +

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Key considerations

If a patient has had **≥2 courses of oral corticosteroids (OCS) in 12 months** or **≥6 SABA inhalers in 12 months**, review the appropriateness of therapy immediately as their asthma is likely poorly controlled, putting them at greater risk of death from an asthma attack

Patients who are on a **high dose ICS** and have had **≥3 OCS in the last 12 months** or are on **maintenance OCS** should be referred to a Severe Asthma Centre for consideration of biologic therapy.

- **Acute Asthma**
  - Please refer to: BTS/SIGN Asthma Guidelines Quick Reference Guide 2019, P.15-16
  - Patients using a medium or high dose ICS + LABA should **NOT** be advised to double-up their inhaler dose after an exacerbation
  - All asthmatics discharged from hospital post exacerbation should be seen face-to-face by a GP/practice asthma nurse **within 1-2 weeks**

- **Steroid Emergency Cards:**
  - The NPSA issued national guidance promoting a new patient-held Steroid Emergency Card to help healthcare staff identify patients with adrenal insufficiency and provide information on emergency treatment
  - Please refer to Table 3 in the SPS guidance for advice on what inhaled glucocorticoid doses should receive a steroid emergency card
  - These inhalers are indicated with a ▲ on the page above
  - Always remember to check if patient is using MART regime

- **Smoking cessation services:**
  - Bristol - Stop Smoking Service
  - North Somerset - Smoke Free North Somerset
  - South Gloucestershire - One You South Gloucestershire Smoke Free
  - Please see Remedy for up-to-date referral pathways

- **Spacers**
  - Spacers must be considered for all patients on a **pMDI** as they have been shown to improve lung drug deposition and reduce side effects.
  - Spacers should be **cleaned monthly** and **replaced annually**
  - Community pharmacists can provide spacers to patients using MDIs
  - BNSSG recommend using the Aerochamber Flow-Vu which is compatible (but not licensed for use with) with all pMDIs.

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Diagnosis

Ensure correct diagnosis

Refer to: BTS/SIGN Asthma Guidelines Quick Reference Guide 2019, P.2-6

Non-pharmacological Asthma Care

Vaccinations

Smoking cessation

Weight loss

Breathing exercises

Medications

See inhaler table on next page

- ☑ Check compliance and inhaler technique **before** stepping up
- ☑ Right breathe website has good inhaler technique videos
- ☑ All inhalers **must** be prescribed by brand
- ☑ Ensure device consistency across therapy to enhance patient compliance
- ☑ Consider if **MART** regimen is suitable
- ☑ Spacers should be used with MDI inhalers. They should be **cleaned monthly** and **replaced annually**

Reviews

- At **every** review and **before** stepping up therapy check; peak inspiratory flow, asthma control, number of exacerbations, time off work/school, OCS use, inhaler technique, adherence, SABA reliance, trigger factors, smoking status
- Consider Asthma Control Test when reviewing patients
- Recheck diagnosis if asthma control remains poor despite using at least a low dose ICS/LABA
- Every patient **must** have a Personalised Asthma Action Plan
- **Rhinitis** is a risk factor for the development and increasing severity of asthma. Refer to BNSSG Formulary for medication
- Consider stepping therapy **down** after ≥ 3 months complete asthma control

Refer to secondary care if:

- If there is diagnostic uncertainty
- Admission to hospital for poorly controlled asthma
- Asthma remains uncontrolled after 3 months following treatment optimisation
- There is complicating multi-morbidity
- Consideration of monoclonal antibody therapy
- If complicating lung conditions (e.g. vasculitis, allergic bronchopulmonary aspergillosis or bronchiectasis)
- If ≥2 courses of oral corticosteroids in 12 months, despite optimising medication

BNSSG Medicines Optimisation team with NBT, UHBW and BNSSG Respiratory Working Group
Approved by BNSSG Area Prescribing and Medicines Committee December 2022.
Review December 2023

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