





# Inhaled corticosteroid doses for the BTS, NICE, SIGN asthma guideline

# What is this guide for?

The tables in this guide support the recommendations on inhaled corticosteroid (ICS) dosages in the <u>BTS, NICE and SIGN guideline on asthma</u>. Information is correct at the time of publication (November 2025). The tables do not make any recommendations about a particular product's place in therapy, nor should these be inferred.

# Using the tables

#### People aged 12 and over

For treatment recommendations, see guideline algorithm C: Pharmacological management of asthma in people aged 12 years and over.

- Inhalers and dosages for <u>anti-inflammatory reliever (AIR) and maintenance and reliever</u>
   therapy (MART) in people aged 12 and over are given in <u>Table 1 on pages 3 to 4</u>.
- ICS dosages for use as regular maintenance therapy with a short-acting beta<sub>2</sub> agonist (SABA) in people aged 12 and over with well-controlled asthma on the treatment pathway recommended by previous NICE and BTS/SIGN guidelines are given in <u>Table 3</u> on page 6.

#### Children aged 5 to 11

For treatment recommendations, see guideline algorithm D: Pharmacological management of asthma in children aged 5 to 11 years.

- Inhalers and dosages for MART in children aged 5 to 11 are given in <u>Table 2 on page 5</u>.
- Paediatric ICS dosages for use with SABA in children aged 5 to 11 are given in <u>Table 4 on</u> page 8.

# Using the tables

#### **General points**

When using the tables, prescribers should consult manufacturers' SPCs, the BNF and BNFC for full prescribing information, and take into account the following:

- **Doses relate to the metered ICS dose.** For some inhalers this may be different from the delivered dose (the dose that leaves the mouthpiece) and the labelled strength.
- Dosages in the tables are not strict dose equivalences but are a guide to similar clinical
  effectiveness. Prescribers should also take into account the possibility of adverse
  effects from ICS, which may differ between ICS and according to dosage. Some people
  receiving high dose ICS should receive a steroid emergency card (see the <a href="Specialist">Specialist</a>
  Pharmacy Service guidance available with the National Patient Safety Alert 2020).
- Before stepping up an ICS dose: take into account and try to address the possible reasons for uncontrolled asthma. These could include suboptimal adherence or poor inhaler technique. At annual review, discuss the potential risks and benefits of decreasing the person's maintenance therapy when their asthma has been well controlled on their current maintenance therapy.
- Clinical judgement should be used for dosages for children and young people. The BTS, NICE, SIGN guideline gives recommendations on treatment for people aged 12 years and over, children aged 5 to 11 years, and children under 5 years. The tables reflect these age categories. However, UK marketing authorisations differ in using 12 years and older and 18 years and older categories. In practice, the prescriber will choose dosages for children under 5 years and young people aged 12 to 17 years, taking into account factors such as the severity of the condition being treated and the person's size in relation to the average size of people of the same age.
- Not all products have UK marketing authorisation for use at all dosages or for all ages.
  If considering prescribing a product outside the terms of its marketing authorisation,
  follow relevant professional guidance and take full responsibility for the decision. See
   NICE's information on prescribing medicines or SIGN's information on prescribing
  licensed medicines outwith their marketing authorisation.

## Source of dosage information

The dosages given are based on the following sources:

- manufacturers' summaries of product characteristics (SPCs)
- the Global Initiative for Asthma (GINA; 2025)
- the British National Formulary (BNF)
- the British National Formulary for children (BNFC)
- specialist advice.

## ICS/formoterol inhalers: dosages for AIR and MART

The tables below show the information for dry powder inhalers (DPIs) and metered dose inhalers (MDIs) listed on the electronic Medicines Compendium (eMC) as licensed for MART in November 2025. 'Low dose' and 'moderate dose' classifications refer to the ICS dosage of the maintenance component of MART. <u>Definitions of AIR and MART</u> can be found in the terms used in this guideline section of the <u>BTS, NICE and SIGN guideline on asthma</u>.

Table 1. ICS/formoterol inhalers for AIR and MART in adults and children aged 12 and over

Product name	Inhaler type	Dose for AIR (if licensed)	Low-dose MART: maintenance component	Moderate-dose MART: maintenance component	Maximum total daily dose (including reliever doses)	
-	Budesonide/formoterol products licensed for AIR and MART All products are licensed for use in people aged 12 and over					
<ul> <li><u>DuoResp Spiromax 160/4.5</u></li> <li><u>Fobumix Easyhaler 160/4.5</u></li> <li><u>Symbicort Turbohaler 200/6</u></li> <li><u>WockAIR 160/4.5</u></li> </ul>	DPI	1 inhalation as needed; dose may be repeated if necessary	1 inhalation twice a day or 2 inhalations once a day (400 micrograms budesonide total daily dose)	2 inhalations twice a day (800 micrograms budesonide total daily dose)	Not more than 6 inhalations on a single occasion.  A total daily dose of more than 8 inhalations (1,600 micrograms budesonide) is not normally needed but a total daily dose of up to 12 inhalations (2,400 micrograms budesonide) could be used for a limited period.  People using high doses should have their treatment reassessed.	
Budesonide/formoterol products licensed only for MART All products are licensed for use in people aged 12 and over						
<ul> <li>Fobumix Easyhaler 80/4.5</li> <li>Symbicort Turbohaler 100/6</li> </ul>	DPI	Not licensed for AIR	1 inhalation twice a day or 2 inhalations once a day  (200 micrograms budesonide total daily dose: note this is at the lower end of the low-dose range)	No licensed dosage for moderate-dose MART  Consider using the higher-strength equivalent inhaler	Not more than 6 inhalations on a single occasion.  A total daily dose of more than 8 inhalations (800 micrograms budesonide) is not normally needed but a total daily dose of up to 12 inhalations (1,200 micrograms budesonide) could be used for a limited period.  People using high doses should have their treatment reassessed.	
• Symbicort 100/3	MDI (usually with a spacer)	Not licensed for AIR	2 inhalations twice a day or 4 inhalations once a day (400 micrograms budesonide total daily dose)	4 inhalations twice a day (800 micrograms budesonide total daily dose)	Not more than 12 inhalations on a single occasion.  A total daily dose of more than 16 inhalations (1,600 micrograms budesonide) is not normally needed but a total daily dose of up to 24 inhalations (2,400 micrograms budesonide) could be used for a limited period.  People using high doses should have their treatment reassessed.	

Table continues over page

Table 1. ICS/formoterol inhalers for AIR and MART in adults and children aged 12 and over (continued)

Product name	Inhaler type	Dose for AIR (if licensed)	Low-dose MART: maintenance component	Moderate-dose MART: maintenance component	Maximum total daily dose (including reliever doses)	
Beclometasone/formoterol products licensed only for MART All products are extra-fine particle inhalers. All are licensed for use in people aged 18 and over.						
• Fostair NEXThaler 100/6	DPI	Not licensed for AIR	1 inhalation twice a day (200 micrograms extra-fine particle beclometasone total daily dose)	2 Inhalations twice a day (400 micrograms extra-fine particle beclometasone total daily dose)  Off-label	8 inhalations (800 micrograms extra-fine particle beclometasone)	
<ul> <li>Fostair 100/6</li> <li>Bibecfo 100/6</li> <li>Luforbec 100/6</li> <li>Proxor 100/6</li> <li>Vivaire 100/6</li> </ul>	MDI (usually with a spacer)	Not licensed for AIR	1 inhalation twice a day (200 micrograms extra-fine particle beclometasone total daily dose)	2 Inhalations twice a day (400 micrograms extra-fine particle beclometasone total daily dose)  Off-label	8 inhalations (800 micrograms extra-fine particle beclometasone)	

In November 2025, the DPIs listed in table 1 had a significantly lower carbon footprint than equivalent MDIs.

Note: other combination inhalers, including other strengths of beclometasone or budesonide, are not licensed for AIR or MART.

## Table 2. ICS/formoterol inhalers for MART in children aged 5 to 11

The evidence for MART in children aged 5 to 11 is from a single study using a budesonide 100 (80)/formoterol 6 (4.5) dry powder inhaler (DPI). See the BTS, NICE, SIGN asthma guideline for full details.

In November 2025, only one budesonide/formoterol inhaler was licensed for MART in children in this age group, and it is licensed for children aged 6 to 11, not 5 to 11: Symbicort Turbohaler 100/6. This is a DPI. Symbicort 100/3 MDI is licensed for use in people aged 12 and over for MART and as maintenance with a SABA. Note that Symbicort 100/3 MDI contains less formoterol per dose than Symbicort Turbohaler 100/6 but the same amount of budesonide. Using more inhalations of Symbicort 100/3 MDI than Symbicort Turbohaler 100/6 would lead to higher doses of budesonide being taken. See <a href="NICE's information on prescribing medicines">NICE's information on prescribing medicines</a> or <a href="SIGN's information on prescribing licensed medicines outwith their marketing authorisation">NICE's information on prescribing medicines</a> or <a href="SIGN's information on prescribing licensed medicines outwith their marketing authorisation">NICE's information on prescribing medicines</a> or <a href="SIGN's information on prescribing licensed medicines outwith their marketing authorisation">NICE's information on prescribing medicines</a> or <a href="SIGN's information on prescribing licensed medicines outwith their marketing authorisation">NICE's information on prescribing licensed medicines</a> or <a href="SIGN's information on prescribing licensed medicines outwith their marketing authorisation">NICE's information on prescribing licensed medicines</a> or <a href="SIGN's information on prescribing licensed medicines outwith their marketing authorisation">NICE's information on prescribing licensed medicines</a> or <a href="SIGN's information on prescribing licensed medicines outwith their marketing authorisation">NICE's information on prescribing licensed medicines</a> or <a href="SIGN's information on prescribing licensed medicines">NICE's information on prescribing licensed medicines</a> or <a href="SIGN's information on prescribing licensed medicines">NICE's information on prescribing licensed medicines</a> or <a href=

All beclometasone/formoterol inhalers licensed for MART are licensed only in adults aged 18 and over therefore they are not listed here.

Product name	Inhaler type	Paediatric low-dose MART: maintenance component	Paediatric moderate-dose MART: maintenance component	Maximum total daily dose (including reliever doses)		
Budesonide/formoterol						
Symbicort Turbohaler 100/6 (licensed from age 6)	DPI	1 inhalation once or twice a day (100 to 200 micrograms budesonide total daily dose)	2 inhalations twice a day (400 micrograms budesonide total daily dose)  Off-label	Not more than 4 inhalations on a single occasion.  A total daily dose of more than 4 inhalations (400 micrograms budesonide) is not normally needed but a total daily dose of up to 8 inhalations (800 micrograms) could be used for a limited period.  Children using high doses should have their treatment reassessed.		
Symbicort 100/3     Off-label	MDI (usually with a spacer)	1 inhalation once or twice a day (100 to 200 micrograms budesonide total daily dose)  Off-label	2 inhalations twice a day (400 micrograms budesonide total daily dose)  Off-label	Not more than 8 inhalations on a single occasion. Off-label.  A total daily dose of more than 12 inhalations (1,200 micrograms budesonide) is not normally needed but a total daily dose of up to 16 inhalations (1,600 micrograms) could be used for a limited period. Off-label.  Children using high doses should have their treatment reassessed.		

In November 2025, the DPIs listed in table 2 had a significantly lower carbon footprint than equivalent MDIs.

## ICS: dosages for regular maintenance therapy with a SABA

Table 3. ICS dosages for people aged 12 years and over

	Low dose	Moderate dose	High dose			
Beclometasone dipropionate						
Standard particle MDIs and DPIs	200 to 500 micrograms per day in 2 divided doses	600 to 800 micrograms per day in 2 divided doses	1,000 to 2,000 micrograms per day in 2 divided doses			
Extra-fine particle MDIs and DPIs	100 to 200 micrograms per day in 2 divided doses	300 to 400 micrograms per day in 2 divided doses	500 to 800 micrograms per day in 2 divided doses			
Budesonide						
MDIs and DPIs	200 to 400 micrograms per day as a singe dose or in 2 divided doses	600 to 800 micrograms per day as a single dose or in 2 divided doses	1,000 to 1,600 micrograms per day in 2 divided doses			
Ciclesonide						
MDIs	80 to 160 micrograms per day as a single dose	240 to 320 micrograms per day as a single dose or in 2 divided doses	400 to 640 micrograms per day in 2 divided doses			
Fluticasone propionate						
MDIs and DPIs	100 to 250 micrograms per day in 2 divided doses	300 to 500 micrograms per day in 2 divided doses	600 to 1,000 micrograms per day in 2 divided doses			
Fluticasone furoate						
DPIs 3	Not available	100 micrograms per day as a single dose	200 micrograms per day as a single dose			
Mometasone furoate						
DPIs 4	200 micrograms per day as a single dose	400 micrograms per day as a single dose or in 2 divided doses	600 to 800 micrograms per day in 2 divided doses			

- Extra-fine particle inhalers include brands such as Bibefco, Fostair, Kelhale, Luforbec, Proxor, Vivaire and Qvar, which are more potent than standard particle inhalers. GINA 2025 states that the dose range for moderate dose extra-fine particle beclometasone is from greater than 200 micrograms per day to 400 micrograms per day. Some SPCs for extra-fine particle beclometasone state a 1:2.5 equivalence ratio with standard particle beclometasone. Others state that 400 micrograms per day of extra-fine particle beclometasone is equivalent to 800 to 1000 micrograms per day of standard particle beclometasone. An assessment of the individual person's circumstances is essential.
- Flixotide Evohaler and Flixotide Accuhaler are licensed up to 2,000 micrograms per day (in 2 divided doses). The manufacturer's SPC advises that, because of the risk of systemic effects, doses of fluticasone propionate above 1,000 micrograms per day should be prescribed only for adults aged 17 years and over with severe asthma where additional clinical benefit is expected, demonstrated by either an improvement in pulmonary function and/or symptom control, or by a reduction in oral corticosteroid therapy.
- At the time of publication (November 2025), fluticasone furoate was available for asthma only in a combination product, Relvar Ellipta (fluticasone furoate with vilanterol). The manufacturer's SPC states that in people with asthma, fluticasone furoate 100 micrograms once daily is approximately equivalent to fluticasone propionate 500 micrograms a day (in 2 divided doses), and fluticasone furoate 200 micrograms once daily is approximately equivalent to fluticasone propionate 1000 micrograms a day (in 2 divided doses).
- Mometasone is also available as a combination product containing indacaterol, glycopyrronium bromide and mometasone furoate in a hard capsule delivered via the Breezhaler device (Enerzair Breezhaler). The only licensed dosage is 1 capsule daily, equivalent to 160 micrograms of mometasone furoate. However, the dosage equivalence of mometasone delivered via the Breezhaler device to that delivered via other DPIs is not certain, so it is not possible to classify this dosage.

Table 4. ICS dosages for children aged 5 to 11 years

	Paediatric low dose	Paediatric moderate dose	Paediatric high dose			
Beclometasone dipropionate						
Standard particle MDIs and DPIs	100 to 200 micrograms per day in 2 divided doses	300 to 400 micrograms per day in 2 to 4 divided doses	500 to 800 micrograms per day in 2 to 4 divided doses			
Extra-fine particle MDIs and DPIs	50 to 100 micrograms per day in 2 divided doses  150 to 200 micrograms per day in 2 divided doses		300 to 400 micrograms per day in 2 divided doses			
Budesonide						
MDIs and DPIs	100 to 200 micrograms per day as a singe dose or in 2 divided doses	300 to 400 micrograms per day as a single dose or in 2 divided doses	500 to 800 micrograms per day in 2 divided doses			
Ciclesonide						
MDIs 2	80 micrograms per day as a single dose	160 micrograms per day as a single dose or in 2 divided doses	240 to 320 micrograms per day in 2 divided doses			
Fluticasone propionate						
MDIs and DPIs	50 to 100 micrograms per day as a single dose or in 2 divided doses	150 to 200 micrograms per day in 2 divided doses	250 to 400 micrograms per day in 2 divided doses			

- Extra-fine particle inhalers licensed in children include brands such as Qvar, which are more potent than standard particle CFC-free inhalers. GINA 2025 states that the dose range for paediatric moderate dose extra-fine particle beclometasone is from greater than 100 micrograms per day to 200 micrograms per day. Some SPCs for extra-fine particle beclometasone state a 1:2.5 equivalence ratio with standard particle beclometasone. Others state that 200 micrograms per day of extra-fine particle beclometasone is equivalent to 400 to 500 micrograms per day of standard particle beclometasone. An assessment of the individual person's circumstances is essential.
- At the time of publication (November 2025), ciclesonide (Alvesco) did not have UK marketing authorisation for use in children aged under 12 years (see notes on page 2).
- At the time of publication (November 2025), not all dosages were included within UK marketing authorisations for use in children aged under 12 years (see notes on page 2).