

**ASTHMA Inhaler Types and Devices Oct 2024** [See local Asthma Guideline](#) (Licensed\* / commonly used for ASTHMA)

See [Norfolk & Waveney net.formulary](#) for full details Device choice should be based on **product licence, patient ability to use the device, Global Warming Potential (GWP) and cost**. Inhalers with a lower GWP should be offered 1<sup>st</sup> line if appropriate **Local formulary 1<sup>st</sup> choice options based on drug content, lowest GWP (DPI/ SMI) and cost**  
Alternative formulary options: see links above for more info on when to use . Non-formulary for new patients with Asthma unless significant supply issues with formulary options.

DEVICE TYPE	Breath-Actuated (BA) Dry Powder Inhaler (DPI) – low GWP		Soft mist MDI low GWP	Pressurised Metered Dose Inhaler p MDI high GWP	
	Pre-loaded dose	Dose loading	BA dose loading	Standard	Breath-actuated
<b>Short-Acting Beta Agonist SABA</b>	<b>Salbutamol:</b> Easyhaler®, Ventolin Accuhaler® <b>Terbutaline:</b> Bricanyl Turbohaler®	<b>Salbutamol:</b> Salbulin Novolizer®		<b>Salbutamol:</b> Airomir®, Generic various, Salamol®, Ventolin Evohaler® (≠ a,c) high GWP	<b>Salbutamol:</b> Airomir Autohaler®, Salamol Easi-Breathe®
<b>Long-Acting Beta-Agonist LABA</b>	<b>Formoterol:</b> Easyhaler®, Oxis Turbohaler® <b>Salmeterol:</b> Serevent Accuhaler® BTS/SIGN: state use ICS+LABA combo			<b>Formoterol:</b> Atimos Modulite® <b>Salmeterol:</b> Generic (incl. branded) various, Serevent Evohaler® BTS/SIGN: state use ICS+LABA combo	
<b>Anti-Muscarinic LAMA specialist</b>	<b>LAMAs for ASTHMA should only be on the advice of a respiratory specialist</b>		<b>Tiotropium:</b> Spiriva Respimat®	For patients who still need pMDIs (e.g. younger children, reduced inspiratory flow/ ability to use a DPI/SMI) Green font = 1 <sup>st</sup> choice pMDI based on drug content, GWP, device and cost.	
<b>Inhaled corticosteroids ICS</b> prescribe by brand	<b>Beclometasone:</b> Easyhaler® <b>Budesonide:</b> Easyhaler®, Pulmicort Turbohaler®, <b>Fluticasone:</b> Flixotide Accuhaler® <b>Mometasone:</b> Asmanex Twisthaler®	<b>Budesonide:</b> Budelin Novolizer®		<b>Beclometasone:</b> Beclu®, Cienil Modulite®, Soprobecc®, <b>Extra fine:</b> Kelhale®, Qvar®, <b>Fluticasone:</b> Flixotide Evohaler® <b>Ciclesonide:</b> Alvesco®	<b>Extra fine Beclometasone:</b> Qvar® Easi-Breathe Qvar® Autohaler
<b>Combination ICS + LABA</b> prescribe by brand	<b>Extra fine Beclometasone /Formoterol:</b> Fostair NEXThaler® <b>Budesonide/Formoterol:</b> DuoResp Spiromax®, Fobumix Easyhaler®, Symbicort Turbohaler®, WockAIR®, <b>Fluticasone/Salmeterol:</b> Fixkoh Airmaster®, AirFluSal Forspiro® 50/500, FUSACOMB Easyhaler®, Seffalair Spiromax®, Seretide Accuhaler® (formulary for < 12 years), Stalplex Inhaler 50/500®, <b>Fluticasone furoate/Vilanterol:</b> Relvar Ellipta®	<b>Mometasone /Indacaterol</b> Aectura Breezhaler® On specialist advice only		<b>Extra fine Beclometasone/Formoterol all ≥18yrs:</b> Bibecfo®, Fostair®, Luforbec® <b>Budesonide/Formoterol:</b> Symbicort p MDI 100mcg/3mcg®, highest GWP <b>Fluticasone/Formoterol:</b> Flutiform® highest GWP <b>Fluticasone /Salmeterol:</b> AirFluSal MDI®, Aloflute®, Avenor®, Combisal®, Sereflo®, Seretide Evohaler®, Sirdupla®	
<b>Triple therapy ICS+LABA+LAMA specialist</b>	<b>Triple Therapy for ASTHMA should only be on the advice of a respiratory specialist</b>	<b>Mometasone/Indacaterol/Glycopyrronium</b> Energair Breezhaler®		<b>Extra fine Beclometasone/Formoterol/Glycopyrronium:</b> Trimbow® p MDI	
<b>Maintenance &amp; Reliever Therapy (MART)</b>	The following are licensed for MART: DPIs: Fobumix Easyhaler 80/4.5 & 160/4.5 (age ≥ 12 yrs) Fostair NEXThaler 100/6 (age ≥ 18 yrs), WockAIR 160/4.5 (age ≥ 12 yrs), Symbicort Turbohaler 100/6 & 200/6, (age ≥ 12 yrs) DuoResp Spiromax 160/4.5 (age ≥ 12 yrs), 160/4.5 (age ≥ 18 yrs) pMDIs: Bibecfo 100/6 (age ≥ 18 yrs), Luforbec 100/6 (age ≥ 18 yrs), Fostair pMDI 100/6 (age ≥ 18 yrs), Symbicort 100/3 pMDI highest GWP (age ≥ 12 yrs). <b>MART: a type of asthma treatment plan - just one inhaler to use as both a preventer and a reliever. Click <a href="#">here</a> to access local MART document.</b>				

**Table to show images and features of the more *common* devices in use, *licensed\** for ASTHMA**

DEVICE TYPE	Pressurised MDI	Breath-actuated MDI			Breath-actuated Dry Powder									
		Pressurised		Dose loading	Pre-loaded dose									Dose loading
DRUG	p MDI	Auto-haler® Teva	Easi-breathe® Teva	Respimat® Boehringer	Accuhaler® GSK	Easyhaler® Orion	Ellipta® GSK	Forspiro® Sandoz / Wockhardt	NEXT-haler® Chiesi	Spiromax® Teva	Turbo-haler® Astra-Zeneca	Twist-haler® MSD	Breez-haler® Novartis	
<b>Dexterity</b>	Required to press/ attach to spacer#	Minimal	Minimal	Required to set up and prime	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Required to load capsule
<b>Dose counter/ indicator</b>	AirFluSal, Aloflute, Beclu, Bibecfo, Clenil, Fostair, Flutiform, Luforbec, Sereflo, Seretide, Sirdupla, Symbicort, Trimbow	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X
<b>Shelf life May depend on drug content</b>	Depends on product/ temperature if 'in use' (e.g. 3 months -2 years)			3 years (In use 3 months)	2 years	2-3 years (in use depends on drug 1 - 6 months)	2 years (in use 6 weeks)	2 years	3 years (in use 6 months)	2-3 years (in use 3-6 months)	2 years	2 years (In use 3 months)	2 years (In use 3 months)	Caps 24- 30months.
<b>Airflow resistance</b>	Minimal	Low	Low	Low	Med-low	High	Med-low	Medium	Med-high	Medium	Medium / Med-high	Med- high	Low	
<b>Dosing Frequency</b>	Depends on drug content & product			Once daily	Depends on content	Depends on content	Once daily	Depends on content/ indication	Twice daily	Depends on content / regimen	Depends on content / regimen	Usually once daily	Once daily	
<b>Actuation check</b>	Audible puff/taste	Audible click	Propellant taste	Audible click	Visual/ lactose taste	Lactose taste	Visual/ audible	Visual	Audible/ Visual/lac- tose taste	Audible/ visual/lacto- se taste	none	Visual/ lactose taste	Audible whirring/ lactose taste	
<b>Other information</b>	Shake before use	Shake before use	Shake before use	Tricky to set up for 1 <sup>st</sup> use	Push lever to prime	Shake, then press to prime QR code to access video	Open to prime.	Push lever to prime	Open to prime	Open to prime	Twist to prime	Twist to prime. (need good eyesight)	Press to pierce. In- hale twice	

\*See individual Summary of Product Characteristics (SPC) for full information and **age restrictions**. Summary of Product Characteristics (SPC) 2. MIMs online accessed 07.10.24 3. In-Check Dial © G16

‡ SPACERS see [KM Bulletin 18 inhaler spacer devices](#): C = Certified carbon neutral devices

<b>Title</b>	ASTHMA inhaler Types and Devices
<b>Description of policy</b>	<i>To inform healthcare professionals</i>
<b>Scope</b>	<i>Information to show available choices of inhalers</i>
<b>Prepared by</b>	Prescribing & Medicines Management Team
<b>Evidence base / Legislation</b>	Level of Evidence: A. based on national research-based evidence and is considered best evidence <b>B. mix of national and local consensus</b> C. based on local good practice and consensus in the absence of national research based information.
<b>Dissemination</b>	Is there any reason why any part of this document should not be available on the public web site? <input type="checkbox"/> Yes / No <input checked="" type="checkbox"/>
<b>Approved by</b>	Prescribing & Medicines Management Senior Team 22.5.13, 26.2.15 v2.0, 11.9.15 V3.0 , 21.4.16 v3.1, 17.1.17 v3.3, 26.6.17 v4.0, 13.3.18 v.4.2, 19.11.18 v5.0, 18.7.19 v5.1, 17.6.21 v5.2,
<b>Authorised by</b>	Prescribing & Medicines Management Senior Team 22.5.13, 26.2.15 v2.0, 11.9.15 V3.0, 21.4.16 v3.1, 17.1.17 v3.3, 26.6.17 v4.0, 13.3.18 v.4.2, 19.11.18 v5.0, 18.7.19 v5.1 21.10.21 V6.0, 19.8.22 v6.1
<b>Review date and by whom</b>	MO Team October 2026
<b>Date of issue</b>	October 2024

### Version Control (To be completed by policy owner)

Version	Date	Author	Status	Comment
1.0	22.5.13	Prescribing & Medicines Management Team (MC)	Final	Approved by Senior Team
1.1	19.2.15	Prescribing & Medicines Management Team (MC)	draft	Logo updated. New inhalers available to date added. Approved by Prescribing & Meds Man Senior Team, minor syntax changes
2.0	26.2.15	Prescribing & Medicines Management Team (MC)	Final	
2.1	11.9.15	Prescribing & Medicines Management Team (MC)	draft	New product additions- Spiolto Respimat and Sirdupla. Addition of link to formularies. New table with device images.
2.2	11.9.15	Prescribing & Medicines Management Team (MC)	draft	Indication of formulary options added.
2.3	12.10.15	Prescribing & Medicines Management Team (MC)	draft	Approved at Prescribing Reference Group 6.10.15. Prescribe by brand info & clearer indication of cost effective options.
3.0	22.10.15	Prescribing & Medicines Management Team (MC)	FINAL	Further amendments finalised by Snr Presc Team
3.1	19.4.16	Prescribing & Medicines Management Team (MC)	update	Removed: Pulvinal salbutamol & beclometasone Asmasal clickhaler salbutamol-discontinued. Added new product – AirFluSal Forspiro
3.2	21.11.16	Prescribing & Medicines Management Team (MC)	update	Separate into two documents Asthma & additional COPD document produced. Remove COPD drugs and colour coded license info from this version. Remove SAMA row as ipratropium not standard use for asthma. Removed discontinued products. Red for non-formulary drugs. Green for the more cost effective products. Addition of spacer information.

3.3	28.12.16	Prescribing & Medicines Management Team (MC)	FINAL	Emailed to New local Respiratory group for comment. Info added for 'black type' products in the table. New licence info for symbicort and MART ≥ 12 years. Final approval Snr Presc Team 17.1.17
3.4	21.02.17	Prescribing & Medicines Management Team (MC)	update	AirFluSal 500/50 added as licensed for severe asthma.
3.5	20.6.17	Prescribing & Medicines Management Team (MC)	draft	Converted to new format as per COPD document- page 2 changed to include 'features'. Updated available products- airflusal MDI, sereflo added. Costs checked and 'green' entries amended in line with most cost effective option(s) per group / in line with local recommendations. Spacer list amended to formulary choices only
4.0	26.6.17	Prescribing & Medicines Management Team (MC)	FINAL	Email authorisation by Senior Prescribing Team 26.6.17
4.1	5.2.18	Prescribing & Medicines Management Team (MC)	Draft update	Aloflute & Fobumix easyhaler added
4.2	21.2.18	Prescribing & Medicines Management Team (MC)	update	Slight formatting change, KA links updated. Ratified by Senior Prescribing Management Team 13.2.18
4.3	08.10.18	Medicines Optimisation Team (MC)	update	Logo update. Delete – dose loading BA dry powder inhalers (novolizer & aerolizer) as not commonly used, to create more space for new inhalers. Added new inhalers- Combisal, Flutiform K haler & Kelhale. (2 <sup>nd</sup> page info also added), Amended colour code to include green 1 <sup>st</sup> line / alternative 1 <sup>st</sup> line options and amber second line options. Amended green/amber inhalers in line with formulary. Removed red from Relvar Ellipta as now 2 <sup>nd</sup> line formulary option. Amended spacer information. All LABA alone inhalers – made 'black type' to be just listed as licensed options as no longer listed in formulary as per BTS guideline statement for combo use only. Fusacomb easyhaler added
5.0	15.11.18	Medicines Optimisation Team (MC)	FINAL	
5.1	10.07.19	Medicines Optimisation Team (MC)	update	Aerivio spiromax removed as discontinued. New inhalers added -Soprobec (non-formulary) & Stalpex. Clenil now has dose indicator -amended. Removed red non formulary coding for ciclesonide / mometasone and made black as per other non-formulary listed, as no listed as double red and sometimes used in exceptional cases. Fostair NEXThaler added as licensed option for MART. Ratified at Senior Team meeting 18.7.19
5.2	09.06.21	Medicines Optimisation Team (MC)	FINAL	Changed NHS logo to new CCG version. Ventolin MDI ,Flutiform, Autohalers, Symbicort MDI non-formulary due to higher GWP than other MDIs. Flutiform K-Haler discontinued. Removed statement that p MDI plus spacer is preferred option re: GWP preferred option DPI. Ventolin accuhaler – formulary. New inhalers added- Fixkoh, Breezhalers. Ratified at Senior Team Meeting 17.6.21
5.3	13.10.21	Medicines Optimisation Team (MC)	DRAFT	Easyhaler information – added shake before prime Header colour changes and info added to highlight the lower GWP for DPIs. Wording amended to clarify what 'green' 1st line options refer to. High GWP added to relevant inhalers Link to asthma uk and explanation added to MART. New inhalers Luforbec added.

5.4	19.11.21	Medicines Optimisation Team (MC)	DRAFT	New format and additions/amendments approved at MOST meeting 21.10.21 - MART licence for DuoResp updated, Avenor & WockAIR new inhalers added. Updates to mdi inhalers dose counter info.
6.0	07.12.21	Medicines Optimisation Team (MC)	FINAL	
6.1	22.08.22	Medicines Optimisation Team (MC)	update	<p>AGEM logo removed – new ICS/ICB logos added  New box info to remind that use Of LAMAs/ Triple Therapy for Asthma should be on specialist advice  Update in line with PQS 22/23 Greener/cost effective inhalers.</p> <p>Colour coding changed so that highlighted green are all 1<sup>st</sup> choice only (drug content, GWP &amp; cost)  SABA: Generic salbutamol pMDI – made non formulary, Airomir p MDI alternative. Salbutin novolizer alternative DPI Ventolin Accuhaler made green 1<sup>st</sup> choice option ( price reduction to same price as easyhaler from 1<sup>st</sup> Aug 22)  ICS+LABA – new inhaler WockAIR added – more cost effective than others so added as 1<sup>st</sup> choice option &amp; licensed for MART for age 12 and over  Luforbec amended to 1<sup>st</sup> choice option as less expensive than equivalent Fostair pMDI and also carbon neutral (offset).  Fixkoh Airmaster – amended as alternative cost effective DPI equivalent fluticasone/sameterol content</p> <p>Amendments made following PRG discussion  Combisal , Avenor and Sereflo to be formulary options based on cost, licence and to keep in line with PQS 22/23 lower cost mdi's. Others to be non-formulary (unless existing patients/ supply issues).  Additional information box added to highlight when p MDIs can still be used 1<sup>st</sup> line ad clarify 1<sup>st</sup> line choice  Spacer compatibilities checked/ updated via MIMs table.</p>
6.2	14.11.23	Medicines Optimisation Team (MC)	update	<p>Beclu, GoResp® Digihaler added in blue as still under discussion.  Bibecfo added -cost effective Luforbec equivalent.  C as superscript and ref C= Certified carbon neutral devices added to relevant devices as more become carbon neutral- all Easyhalers, Chiesi inhalers and Luforbec</p>
6.3	07.10.24	Medicines Optimisation Team (MC)	update	<p>Beclu – changed to green, formulary, GoResp Digihaler removed – recalled. Fobumix – age licence info updated ( now licensed for children). MART link changed to new local document. Spacer detail removed as MIMs reference no longer includes a,b,c descriptor.</p>