

## Guide for alternative inhalers during stock shortages related to Coronavirus (COVID-19)

NHSE advice is not to make any changes to normal medicines usage during the Covid19 outbreak which could destabilise the supply chain. For long term supply issues see [MIMS Shortages Tracker](#) (requires log in, free registration).

- Do **not** increase numbers of inhalers prescribed on regular repeat or acute prescriptions and ensure prescriptions are not issued significantly earlier than they should be.
- **Issue duration** for inhalers prescriptions should be calculated according to number of doses in each inhaler and the dose patient uses. This should be entered on to the clinical system as appropriate (see appendix 1). If implemented this will help to support the supply chain and reduce shortages.
- If an inhaler is out of stock, consider the following options and ensure the person can use their inhaler correctly.  
**Prescribe inhalers by BRAND.**

**First line:** An equivalent inhaler (same drug & dose), ideally with same inhaler device - see table below  
**Secondly line:** If same inhaled corticosteroid (ICS) is not available, consider a similar strength ICS (low/moderate/high ICS doses – these are not strict dose equivalences but are a guide to similar clinical effectiveness. see asthma [guideline](#)).  
 Alternatively, for COPD patients consider LABA+LAMA combination inhaler in stable patients with no asthmatic feature (Ultibro, Duaklir, Anoro, Spiolto- see [JAPC COPD guideline](#).)

- Use **RightBreathe website** <https://www.rightbreathe.com/> or application (available for iOS and Android) for information on inhalers, videos for inhaler technique and use of spacers. 'How to use your inhaler' videos are available on asthma UK website <https://www.asthma.org.uk/advice/inhaler-videos/>

ICS Inhalers containing beclometasone dipropionate (JAPC Traffic light Classification)	
See also formulary respiratory chapter, asthma guideline <a href="#">link</a>	
Originator	Clenil Modulite ( <b>GREEN</b> ) 50, 100, 200 and 250 strengths (pMDI) (Standard particle)
<b>Option 1</b>	Soprobeq 50, 100, 200 and 250 strengths (pMDI) ( <b>GREEN</b> ) (Standard particle) <ul style="list-style-type: none"> <li>• Same strength and dose as Clenil, very similar device, compatible with Volumatic spacer.</li> <li>• Licensed for asthma (50, 100 microg licensed in children)</li> </ul>
<b>Option 2</b>	Qvar ( <b>GREEN</b> ) or Kelhale ( <b>Non-Formulary</b> ) 50, 100 microg (pMDI) (extra-fine particle) <ul style="list-style-type: none"> <li>• <b>Twice as potent</b> as Clenil. 50microg dose of Qvar or Kelhale is equivalent to 100microg dose of Clenil</li> <li>• Similar device but not compatible with Volumatic spacer.</li> <li>• Licensed for asthma. Qvar for ≥5 years old; Kelhale only for adults ≥18 years old</li> <li>• Qvar also available as Easi-breath &amp; autohaler devices (<b>Non-Formulary</b>).</li> </ul>
<b>Option 3</b>	Consider changing strength of Clenil inhaler. e.g. for patients on Clenil 100 microg Two puffs BD consider prescribing Clenil 200microg One puff BD. <ul style="list-style-type: none"> <li>• Risk of patient taking double dose- only do this if good patient understanding</li> <li>• 200microg strength not licensed for use in children.</li> </ul>
<b>Alternative options</b>	Consider Budesonide Easyhaler 100, 200, 400 microg (Breath-actuated DPI) ( <b>GREEN</b> ) <ul style="list-style-type: none"> <li>• Require patient counselling to use DPI device.</li> <li>• Dose approximately equivalent to Clenil, switch dose at 1:1</li> <li>• Licensed in asthma adult and children &gt;6 years old</li> </ul> <p>In children, consider Flixotide- Fluticasone 50 microg (pMDI) or 100microg (DPI) (<b>GREEN for children</b>)</p> <ul style="list-style-type: none"> <li>• Require dose change. Flixotide is <b>Twice as potent</b> as Clenil</li> <li>• Licensed in children &gt;4 years</li> </ul> <p>Consider beclometasone Easyhaler (<b>Non-Formulary</b>) 200microg (DPI)(standard particle)</p> <ul style="list-style-type: none"> <li>• Dry powder inhaler for asthma only licensed in adult</li> </ul>

<b>ICS/ LAMA Inhalers</b> (JAPC Traffic light Classification)- see formulary <a href="#">respiratory chapter</a>	
<b>Originator brand</b>	<b>Equivalent (active ingredient only)</b>
<b>Beclometasone(extra fine) &amp; formoterol</b> Fostair 100/6 & 200/6 pMDI <b>(GREEN – 1<sup>st</sup> line MDI)</b> Fostair 100/6 & 200/6 Nexthaler DPI <b>(GREEN)</b>	N/A
<b>Budesonide &amp; formoterol</b> Symbicort 100/6 Turbohaler DPI <b>(GREEN)</b>	Fobumix Easyhaler 80microg/dose / 4.5microg/dose DPI <b>(GREEN – 1<sup>st</sup> line DPI)</b>
Symbicort 200/6 Turbohaler DPI <b>(GREEN)</b>	<ul style="list-style-type: none"> <li>Fobumix Easyhaler 160microg/dose / 4.5microg/dose DPI <b>(GREEN – 1<sup>st</sup> line DPI)</b></li> <li>DuoResp Spiromax 160microg/dose / 4.5microg/dose DPI <b>(GREEN)</b></li> </ul> <b>Same drug &amp; dose BUT come in a different device</b>
Symbicort 400/12 Turbohaler DPI <b>(GREEN)</b>	<ul style="list-style-type: none"> <li>Fobumix Easyhaler 320microg/dose / 9microg/dose DPI <b>(GREEN – 1<sup>st</sup> line DPI)</b></li> <li>DuoResp Spiromax 320microg/dose / 9microg/dose DPI <b>(GREEN)</b></li> </ul> <b>Same drug &amp; dose BUT come in a different device</b>
<b>Fluticasone propionate and salmeterol</b> Seretide 50 Evohaler (pMDI) <b>(GREEN children; BROWN adults)</b>	Combisal 25microg/dose / 50microg/dose inhaler (pMDI) <b>(GREEN children; BROWN adults)</b>
Seretide 100 Accuhaler (DPI) <b>(GREEN children; BROWN adults)</b>	N/A
Seretide 125 or 250 Evohaler (pMDI) <b>(Non-Formulary).</b>	AirFluSal 25microg/dose/125microg/dose inhaler or 25microg/dose/250microg/dose inhaler (pMDI) <b>(GREEN)</b>  Alternative <u>Non-Formulary</u> brands: Sereflo, Combisal, Sirdupla <b>These equivalents are the same drug, dose AND device (all pMDI)</b>
Seretide 250 Accuhaler (DPI) <b>(Non-Formulary).</b>	Fusacomb Easyhaler 50microg/dose/250microg/dose DPI <b>(GREEN)</b> <b>Same drug &amp; dose BUT it is a different device</b>
Seretide 500 Accuhaler (DPI) <b>(Non-Formulary).</b>	Fusacomb Easyhaler 50microg/dose/500microg/dose DPI <b>(GREEN)</b> Alternative <u>Non-Formulary</u> brands: AirFluSal Forspiro, Stalpex DPI <b>Same drug &amp; dose BUT come in a different device to Accuhaler - Stalpex device is very similar to Accuhaler</b>
Relvar Ellipta 92/22 & 184/22 <b>(BROWN)</b>	N/A

## Appendix 1- setting up issue duration on clinical systems

Ensure the duration of each prescription is set up correctly. This helps achieving appropriate ordering intervals.

### Setting up issue durations on EMIS Web

Name: Clenil Modulite 100micrograms/dose inhaler (Chiesi Ltd)

Dosage: 1 PUFF TWICE A DAY

Quantity: 1 inhaler x 200 dose

Rx Types: Repeat

Duration: [Empty] Day(s)

Authorised Issues: [Empty]

Pack Details

Optional Prescription Information

Pharmacy Info: [Empty]

Patient Info: [Empty]

Missing Duration

Name: Clenil Modulite 100micrograms/dose inhaler (Chiesi Ltd)

Dosage: 1 PUFF TWICE A DAY

Quantity: 1 inhaler x 200 dose

Rx Types: Repeat

Duration: 28 Day(s)

Authorised Issues: [Empty]

Pack Details

Optional Prescription Information

Pharmacy Info: [Empty]

Patient Info: [Empty]

Wrong Duration

Name: Clenil Modulite 100micrograms/dose inhaler (Chiesi Ltd)

Dosage: 1 PUFF TWICE A DAY

Quantity: 1 inhaler x 200 dose

Rx Types: Repeat

Duration: 100 Day(s)

Authorised Issues: [Empty]

Pack Details

Optional Prescription Information

Pharmacy Info: [Empty]

Patient Info: [Empty]

Correct Duration

### Setting up issue durations on SystmONE

Drug prescribed: Soprobec 100micrograms/dose inhaler (Glenmark Pharmaceuticals Europe Ltd)

Script type:  NHS Issue  Private Issue  Instalment Dispensed Issue

Dose: inhale 2 doses twice daily

Total quantity:  Number 1 inhaler = 200 dose

Script notes: [Empty]

Administrative notes: [Empty]

Issue duration: [Empty] Days

Missing Duration

Drug prescribed: Soprobec 100micrograms/dose inhaler (Glenmark Pharmaceuticals Europe Ltd)

Script type:  NHS Issue  Private Issue  Instalment Dispensed Issue

Dose: inhale 2 doses twice daily

Total quantity:  Number 1 inhaler = 200 dose

Script notes: [Empty]

Administrative notes: [Empty]

Issue duration: 28 Days

Wrong Duration

Drug prescribed: Soprobec 100micrograms/dose inhaler (Glenmark Pharmaceuticals Europe Ltd)

Script type:  NHS Issue  Private Issue  Instalment Dispensed Issue

Dose: inhale 2 doses twice daily

Total quantity:  Number 1 inhaler = 200 dose

Script notes: [Empty]

Administrative notes: [Empty]

Issue duration: 50 Days

Correct Duration

## Appendix 2 ICS dose comparison

### ICS doses

The doses in this table should be used as a guide and should not be interpreted as a definitive statement of the relative potencies of the different inhaled steroids.

	Low dose	Moderate dose	High dose
<b>Beclometasone dipropionate</b> <sup>1</sup>			
Standard particle CFC-free inhalers	200-500microg per day in 2 divided doses	600-1000 microg per day in 2 divided doses	1,200-2,000 microg per day in 2 divided doses.
Extra-fine particle CFC-free inhalers <sup>2</sup>	100-200 microg per day in 2 divided doses	300-400microg per day in 2 divided doses	500-800 microg per day in 2 divided doses
<b>Budesonide</b>			
Dry powder inhalers	200-400 microg per day as a single dose or in 2 divided doses	600-800 microg per day as a single dose or in 2 divided doses	1,000-1,600 microg per day in 2 divided doses
<b>Fluticasone propionate</b>			
Metered dose and dry powder inhalers <sup>3</sup>	100–250 microg per day in 2 divided doses	300 - 500 microg per day in 2 divided doses <sup>a</sup>	600–1,000 microg per day in 2 divided doses <sup>a</sup>
<b>Fluticasone furoate</b> <sup>4</sup>			
Dry powder inhaler	--	100 microg as a single daily dose	200 microg as a single daily dose
<b>Ciclesonide</b>			
Metered dose inhaler	80-160 microg per day as a single dose	240-320 microg per day as a single dose or in 2 divided doses	400-640 microg per day in 2 divided doses
<b>Mometasone furoate</b>			
Dry powder inhaler	200 microg per day as a single dose a day	400 microg per day in 2 divided doses	Up to 800 microg per day in 2 divided doses

<sup>1</sup> CFC-containing beclometasone dipropionate MDIs are no longer available, so are not included. The MHRA advises that beclometasone dipropionate CFC-free inhalers should be prescribed by brand name (Drug safety update, July 2008).

<sup>2</sup> Extra-fine particle CFC-free inhalers include brands such as Qvar and Fostair, which are more potent than standard particle CFC-free inhalers. Fostair and Fostair NEXThaler are combination products containing beclometasone dipropionate with formoterol. 100 microg of beclometasone dipropionate via Qvar products are approximately equivalent to 200 microg of beclometasone dipropionate in standard particle CFC-free inhalers. 100 microg of beclomethasone dipropionate via Fostair products are approximately equivalent to 250 microg of beclometasone dipropionate in standard particle CFC-free inhalers.

<sup>3</sup> Flixotide Evohaler and Flixotide Accuhaler are licensed up to 2,000 microg per day (in 2 divided doses), which is approximately equivalent to 4,000 microg per day of budesonide. The manufacturer's SPC advises that, because of the risk of systemic effects, doses of fluticasone propionate above 1,000 microg 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.

<sup>a</sup>Fluticasone doses changed to be in line with GINA.

<sup>4</sup> At the time of publication (February 2018), fluticasone furoate was only available in a combination product, Relvar Ellipta (fluticasone furoate with vilanterol). The manufacturer's SPC states that in people with asthma, fluticasone furoate 100 microg once daily is approximately equivalent to fluticasone propionate 250 microg twice daily, and fluticasone furoate 200 microg once daily is approximately equivalent to fluticasone propionate 500 microg twice daily. See also the NICE evidence summary Asthma: fluticasone furoate/vilanterol (Relvar Ellipta) combination inhaler (2014).