# Regular Preventer

## GMMMG Asthma Formulary Inhaler Options – August 2017

<table>
<thead>
<tr>
<th>Brand name</th>
<th>Beclometasone</th>
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<th>Beclometasone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device</td>
<td>MDI</td>
<td>MDI</td>
<td>DPI</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
<th>50 microgram</th>
<th>100 microgram</th>
<th>200 microgram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult asthma dose</td>
<td>2 inhalations twice a day</td>
<td>2 inhalations twice a day</td>
<td>1 inhalation twice a day</td>
</tr>
</tbody>
</table>

### Steps to use the inhaler – ease of use

#### 5 step process
- **Hold the inhaler upright and open it by folding down the cap which fits over the mouthpiece.**
- **Breathe out normally as far as comfortably can.**
  - Then hold the mouthpiece firmly between. Hold the inhaler upright and make sure that hand is not blocking the air holes. Breathe in slowly and deeply through the mouthpiece. Don’t stop breathing when the inhaler puffs the dose into mouth. Carry on until have taken a deep breath.
- **Take the inhaler out of mouth and hold breath for 10 seconds.**
  - Then breathe out slowly. After using inhaler, hold it upright and close the cap immediately.
  - If need to take more than one puff, close the cap, wait about one minute and then start again from step 1.

#### 5 step process
- **Remove the mouthpiece cover.**
- **Breathe out before placing the inhaler into their mouth.**
  - Then close their lips around the mouthpiece and breathe in steadily and deeply.
  - After starting to breathe in through the mouth, the top of the inhaler should be pressed down.
  - Whilst still breathing in, remove the inhaler from their mouth and hold breath for about 5 to 10 seconds, or as long as is comfortable, and then breathe out slowly. The patient must not breathe out into the inhaler.
  - If another dose is required wait 30 seconds before repeating the process.
  - Finally, breathe out slowly and replace the mouthpiece cover.

#### 5 step process
- **Remove the dust cap.**
- **Shake the Easyhaler vigorously up and down 3–5 times, to allow proper powder flow and a correct dose.**
  - After shaking, hold the Easyhaler in the upright position.
  - Press the Easyhaler once between finger and thumb until hear a click and let it click back again, to deliver powder into the inhalation channel inside the mouthpiece. Keep holding the Easyhaler in the upright position.
  - Inhale the dose whilst in the upright position either sitting or standing.
  - If prescribed more than one dose, repeat process.
  - Put the dust cap back on the mouthpiece.

### Miscellaneous information

#### BDP in Qvar is TWICE as potent as Clenil Modulite (and other standard BDP containing inhalers).

#### The Volumatic™ spacer device may be used by patients who have difficulty synchronising aerosol actuation with inspiration of breath.

#### If the inhaler is new or has not been used for three days or more, one puff should be released into the air. It is not necessary to shake the inhaler before use because this is a solution aerosol.

#### Shelf life of 3 years in aluminium foil and 6 months after opening of the foil. An optional protective cover which is not routinely supplied with the product is available.

### NHS List Price

| NHS List Price | £7.87 for 200 inhalations (50 day supply) | £7.42 for 200 inhalations (50 day supply) | £14.93 for 200 inhalations (100 day supply) |

Produced by Regional Drug and Therapeutics Centre (RDTC®) for use by GMMMG. August 2017
# Initial add-on therapy

## GMMMG Asthma Formulary Inhaler Options – August 2017

<table>
<thead>
<tr>
<th></th>
<th>Beclometasone / Formoterol</th>
<th>Beclometasone / Formoterol</th>
<th>Budesonide / Formoterol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand name</strong></td>
<td>Fostair NEXThaler®</td>
<td>Fostair®</td>
<td>Duoresp Spiromax®</td>
</tr>
<tr>
<td><strong>Device</strong></td>
<td>Dry powder</td>
<td>MDI</td>
<td>DPI</td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td>100/6 microgram</td>
<td>100/6 microgram</td>
<td>160/4.5 microgram</td>
</tr>
<tr>
<td><strong>Adult Asthma dose</strong></td>
<td>1 inhalation twice a day</td>
<td>1 inhalation twice a day</td>
<td>1 inhalation twice a day</td>
</tr>
<tr>
<td><strong>Steps to use the inhaler – ease of use</strong></td>
<td>4 step process</td>
<td>2 step process</td>
<td>5 step process</td>
</tr>
<tr>
<td></td>
<td>• Open cover fully to load dose</td>
<td>• Press top of inhaler canister whilst breathing in to inhale dose (co-ordination required)</td>
<td>• Open the mouthpiece until a click is heard</td>
</tr>
<tr>
<td></td>
<td>• Inhale dose</td>
<td>• Repeat</td>
<td>• Breath in forcefully and deep through the mouthpiece to inhale dose</td>
</tr>
<tr>
<td></td>
<td>• Close and check counter has gone down by one</td>
<td>• Hold breath for 10 seconds or as long as comfortably possible</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Repeat</td>
<td>• Repeat if necessary</td>
<td>• Close mouthpiece</td>
</tr>
<tr>
<td><strong>Miscellaneous information</strong></td>
<td>NEXThaler is a breath-operated inhaler</td>
<td>Fostair is the only combination inhaler which needs to be stored in the fridge (before dispensing only)</td>
<td>160/4.5 mcg is equivalent to a metered dose of 200 mcg budesonide / 6 mcg of formoterol fumarate dihydrate.</td>
</tr>
<tr>
<td></td>
<td>After first opening the pouch, the medicinal product should be used within 6 months.</td>
<td>Fostair has shelf life of 5 months after dispensing (out of fridge).</td>
<td>320/9 mcg is equivalent to a metered dose of 400 mcg budesonide/12 mcg of formoterol fumarate dihydrate</td>
</tr>
<tr>
<td></td>
<td>Fostair NEXThaler does not require any special temperature storage conditions.</td>
<td>Fostair is the only pressurised metered dose inhaler (pMDI) licensed for treatment of COPD and is suitable for use with the AeroChamber Plus spacer device.</td>
<td>Doesn’t require priming.</td>
</tr>
<tr>
<td></td>
<td>Has a Dose counter</td>
<td>Small particle size – 100mcg dose is not bioequivalent to 100mcg BDP in other inhalers.</td>
<td></td>
</tr>
<tr>
<td><strong>NHS List Price</strong></td>
<td>£29.32 for 120 puffs (60 day supply)</td>
<td>£29.32 for 120 puffs (60 day supply)</td>
<td>£29.97 for 120 puffs (60 day supply)</td>
</tr>
</tbody>
</table>

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### Additional add-on therapies

<table>
<thead>
<tr>
<th></th>
<th>Beclometasone / Formoterol</th>
<th>Beclometasone / Formoterol</th>
<th>Budesonide / Formoterol</th>
<th>Fluticasone furoate / Vilanterol</th>
<th>Tiotropium</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand name</strong></td>
<td>Fostair® NEXThaler®</td>
<td>Fostair®</td>
<td>Duoresp Spiromax®</td>
<td>Relvar Ellipta®</td>
<td>Spiriva Respimat®</td>
</tr>
<tr>
<td><strong>Device</strong></td>
<td>Dry powder</td>
<td>MDI</td>
<td>DPI</td>
<td>Dry powder</td>
<td>MDI</td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td>100/6 microgram</td>
<td>100/6 microgram</td>
<td>160/4.5 microgram</td>
<td>92/22 microgram</td>
<td>2.5 microgram</td>
</tr>
<tr>
<td><strong>Adult Asthma dose</strong></td>
<td>2 inhalations twice a day</td>
<td>2 inhalations twice a day</td>
<td>2 inhalations twice a day</td>
<td>One inhalation of 92/22 mcg once daily.</td>
<td>Two puffs (5 microgram) given from the Respimat inhaler once daily, at the same time of the day.</td>
</tr>
</tbody>
</table>
| **Steps to use the inhaler – ease of use** | 4 step process  
- Open cover fully to load dose  
- Inhale dose  
- Close and check counter has gone down by one  
- Repeat  | 2 step process  
- Press top of inhaler canister whilst breathing in to inhale dose (coordination required)  
- Repeat  | 5 step process  
- Open the mouthpiece until a click is heard  
- Inhale forcefully and deep through the mouthpiece to inhale dose  
- Hold breath for 10 seconds or as long as comfortably possible  
- Repeat if necessary  
- Close mouthpiece  | 2 step process  
- Slide down cover to load dose  
- Inhale dose  | 3 step process  
- Inhaler preparation required: Load cartridge and prepare cartridge in inhaler – 6 steps  |
| **Miscellaneous information** | NEXThaler is a breath-operated inhaler  
After first opening the pouch, the medicinal product should be used within 6 months.  
Fostair NEXThaler does not require any special temperature storage conditions.  | Fostair is the only combination inhaler which needs to be stored in the fridge (before dispensing only)  
Fostair has shelf life of 5 months after dispensing (out of fridge).  
Fostair is the only pressurised metered dose inhaler (pMDI)  | 160/4.5 mcg is equivalent to a metered dose of 200 mcg budesonide / 6 mcg of formoterol fumarate dihydrate.  
320/9 mcg is equivalent to a metered dose of 400 mcg budesonide / 12 mcg of formoterol fumarate dihydrate  
Doesn’t require priming.  | The inhaler is in the ‘closed’ position when it is first taken out of its sealed tray and has a "Discard by" date 6 weeks from the date of opening the tray.  
If the inhaler cover is opened and closed without inhaling the medicinal product, the dose will be lost. The lost dose will be securely held inside the  | Dose indicator  
Locks when empty  
Clean mouthpiece once a week  |
## GMMMG Asthma Formulary Inhaler Options – August 2017

<table>
<thead>
<tr>
<th>Has a Dose counter</th>
<th>licensed for treatment of COPD and is suitable for use with the AeroChamber Plus spacer device. Small particle size – 100mcg dose is not bioequivalent to 100mcg BDP in other inhalers.</th>
<th>inhaler, but it will no longer be available to be inhaled.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NHS List Price</strong></td>
<td>£29.32 for 120 puffs (30 day supply)</td>
<td>£29.97 for 120 puffs (30 day supply)</td>
</tr>
<tr>
<td></td>
<td>£22.00 for 30 inhalations (30 day supply)</td>
<td>£33.50 for 60 inhalations (30 day supply)</td>
</tr>
</tbody>
</table>

### High dose therapies

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<thead>
<tr>
<th>Brand name</th>
<th>Beclometasone / Formoterol</th>
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<tr>
<td><strong>Device</strong></td>
<td>Dry powder</td>
<td>MDI</td>
<td>DPI</td>
<td>Dry powder</td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td>200/6 microgram</td>
<td>200/6 microgram</td>
<td>320/9 microgram</td>
<td>184/22 microgram</td>
</tr>
<tr>
<td><strong>Adult Asthma dose</strong></td>
<td>2 inhalations twice a day</td>
<td>2 inhalations twice a day</td>
<td>2 inhalations twice a day</td>
<td>One inhalation of 184/22 mcg once daily.</td>
</tr>
</tbody>
</table>
| **Steps to use the inhaler – ease of use** | 4 step process  
  - Open cover fully to load dose  
  - Inhalate dose  
  - Close and check counter has gone down by one  
  - Repeat | 2 step process  
  - Press top of inhaler canister whilst breathing in to inhale dose (co-ordination required)  
  - Repeat | 5 step process  
  - Open the mouthpiece until a click is heard  
  - Breath in forcefully and deep through the mouthpiece to inhale dose  
  - Hold breath for 10 seconds or as long as comfortably possible  
  - Repeat if necessary  
  - Close mouthpiece | 2 step process  
  - Slide down cover to load dose  
  - Inhalate dose |
| **Miscellaneous information** | NEXThaler is a breath-operated inhaler | Fostair is the only combination inhaler which needs to be stored in 160/4.5 mcg is equivalent to a metered dose of 200 mcg budesonide | The inhaler is in the 'closed' position when it is first taken out of its sealed pack |
### GMMMG Asthma Formulary Inhaler Options – August 2017

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<tr>
<th>After first opening the pouch, the medicinal product should be used within 6 months.</th>
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<td>Fostair NEXThaler does not require any special temperature storage conditions.</td>
<td>Fostair has shelf life of 5 months after dispensing (out of fridge).</td>
<td>If the inhaler cover is opened and closed without inhaling the medicinal product, the dose will be lost. The lost dose will be securely held inside the inhaler, but it will no longer be available to be inhaled.</td>
</tr>
<tr>
<td>Has a Dose counter</td>
<td>Fostair is the only pressurised metered dose inhaler (pMDI) licensed for treatment of COPD and is suitable for use with the AeroChamber Plus spacer device.</td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td><strong>£29.50 for 30 inhalations (30 day supply)</strong></td>
<td></td>
</tr>
</tbody>
</table>
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January 2017: ICS/LABA combination inhalers - Cost of treatment for 1 year [Dotted Bars = licensed for COPD]

- Symbicort 400/12 Turbuhaler®
  - DPI: £922.13
- Dulera Diskhaler 320/9
  - DPI: £727.27
- Seretide 200/50 inhaler
  - DPI: £621.69
- Fluticasone peel inhaler
  - DPI: £552.79
- Symbicort Turbuhaler
  - DPI: £541.79
- Seretide 50/5 inhaler
  - DPI: £496.27
- Albuterol Formby 500/60
  - DPI: £397.26
- Relair Ellipta 1842 inhaler
  - DPI: £357.93
- Faster 200/6 or NEBTherap®
  - MDI/DPI: £355.76
- Symbicort 10/2 Turbuhaler®
  - DPI: £461.17
- Seretide 250/50 inhaler
  - DPI: £426.87
- Seretide 125/25 inhaler
  - DPI: £404.67
- Dulera Diskhaler 200/5
  - DPI: £398.94
- Duo吸入器 Symbicort 160/4.5
  - DPI: £383.84
- Faster 100/6 or NEBTherap®
  - DPI: £355.76
- Fluticasone 12.5 inhaler
  - DPI: £355.73
- Symbicort 2006
  - DPI: £339.73
- Symbicort 125 inhaler
  - DPI: £318.50
- Relair Ellipta 2222 inhaler
  - DPI: £290.33
- Symbicort 500/12 Turbuhaler®
  - DPI: £230.03
- Seretide 50 Brookhaler®
  - DPI: £218.40
- Seretide 100/50 inhaler
  - DPI: £218.40
- Duo吸入器 Symbicort 160/4.5
  - DPI: £181.82
- Faster 100/6 or NEBTherap®
  - DPI: £177.87
- Fluticasone 50/5 inhaler
  - DPI: £174.72

Notes: The graph does not imply therapeutic equivalence.

High dose ICS in adult
High dose therapy is usually only after referring to a secondary care

Medium dose ICS in adult
A potential add-on therapy stage

Low dose ICS in adult
Regular treatment or minimal addition therapy stage

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