All Wales Adult Asthma Management and Prescribing Guideline

August 2020
This document has been prepared by the Respiratory Health Implementation Group, and has subsequently been endorsed by the All Wales Medicines Strategy Group (AWMSG).

AWMSG has endorsed the guidance developed by the Respiratory Health Implementation Group as 'Interim' guidance pending the publication of NICE/BTS/SIGN guidance which we anticipate will be published in 2021.

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CORE PRINCIPLES
- All patients with asthma should be treated with an inhaled corticosteroid (ICS) as the practice of using short acting bronchodilator (SABA) monotherapy is now outdated and no longer acceptable.
- Review control within a maximum of 3 months of change in therapy.
- Poor asthma control - Use of reliever (Including PRN doses of MART regime) ≥2 times per week, poor symptom control, exacerbations. More than 6 SABA prescriptions per year should prompt urgent review.
- Review inhaler technique, concordance and co-morbidity at every opportunity including prior to symptom control, exacerbations.
- All patients with asthma should be treated with an inhaled corticosteroid (ICS) as the practice of using Easyhaler (or Soprobec) 100mcg + spacer 2 puffs BD 100mcg ICS plus PRN SABA.
- Reinforce need to take ICS and that + spacer 2 puffs BD 100mcg. Salbutamol Clenil Modulite 2 puffs BD 2 puffs BD 50mcg.
- More than 6 SABA prescriptions per year should prompt urgent review.
- Discontinue if no benefit after 6 weeks.

INHALER PRINCIPLES
- Choice of inhaler is based on patient’s preference and technique.
- Only choose inhalers that you have observed the patient using correctly.
- Do not mix MDIs and DPIs whenever possible.
- Where indicated below, the MDIs should be inhaled via a spacer device such as an AeroChamber flow-vu.
- Always prescribe by brand to ensure consistent device.
- Inhaled corticosteroids (ICS) and long-acting bronchodilators (LABA) MUST be prescribed as a combination product to avoid the risk of patients inadvertently taking the LABA as mono-therapy, which has been associated with increased risk of mortality.

STEP 1: NEW ASTHMA DIAGNOSIS
Commence regular low-dose ICS plus PRN SABA.
- Reinforce need to take ICS and that SABA should not be required more than twice per week.
- If asthma with infrequent symptoms (e.g. less than twice a month) take ICS and SABA together on a PRN basis.

STEP 2: PERSISTENT ASThma
Change to regular low-dose ICS/LABA inhaler
- Fixed dose: See individual inhalers below.
- MART Regime: 1 inhalation twice daily plus PRN ICS/LABA Stop PRN SABA.

STEP 3: ADD-ON THERAPIES
Trial of montelukast 10mg nocte Discontinue if no benefit after 6 weeks.

STEP 4: ONGOING POOR CONTROL
Increase to regular moderate-dose ICS/LABA inhaler
- Fixed dose: See individual inhalers below. Prescribe PRN SABA.
- MART Regime: 2 inhalations twice daily plus PRN ICS/LABA Stop PRN SABA.

STEP 5: CONSIDER REFERRAL
Consider trial of add-on Spiiva Respimat discontinue if no benefit after 3 months

INDICATIONS FOR REFERRAL
- Diagnostic uncertainty
- Complex comorbidity
- Suspected occupational asthma
- Poor control following treatment at Step 4
- ≥2 courses of oral steroids/ year despite optimising therapy in primary care

High-Dose ICS/LABA
- Fostair Nexthaler 200/6 2 inhalations twice daily plus PRN ICS/LABA Stop PRN SABA
- Fostair MDI 200/6 2 puffs BD + spacer 2 puffs BD
- Symbicort Turbohaler 400/12 2 puffs BD + spacer
- Relvar Ellipta 184/22 1 puff OD (This is a low-moderate strength ICS/LABA)
- Relvar Ellipta 194/22 1 puff OD

HIGH-DOSE ICS/LABA (PLUS SABA)
- Fostair Nexthaler 200/6 2 puffs BD + spacer 2 puffs BD
- Fostair MDI 100/6 2 puffs BD + spacer
- Spiriva Respimat 2.5mcg 2 puffs OD
- Spiriva Respimat 320/9 2 puffs BD
- Spiriva Respimat 432/12 2 puffs BD
- Spiriva Respimat 125/7.5 2 puffs BD
- Relvar Ellipta 92/22 1 puff OD (This is a low-moderate strength ICS/LABA)
- Relvar Ellipta 194/22 1 puff OD

HIGH-DOSE ICS/LABA (PLUS SABA)
- Fostair Nexthaler 200/6 2 puffs BD + spacer 2 puffs BD
- Fostair MDI 100/6 2 puffs BD + spacer
- Spiriva Respimat 2.5mcg 2 puffs OD
- Spiriva Respimat 320/9 2 puffs BD
- Spiriva Respimat 432/12 2 puffs BD
- Spiriva Respimat 125/7.5 2 puffs BD
- Relvar Ellipta 92/22 1 puff OD (This is a low-moderate strength ICS/LABA)
- Relvar Ellipta 194/22 1 puff OD

More information at:
https://allwales.icst.org.uk/guidelines/all-wales-adult-asthma-management-guidelines/
All Wales Adult
Asthma Diagnosis
and Management
Guidelines
Supporting notes

THE ALL WALES ASTHMA DIAGNOSIS GUIDELINE
allwales.icst.org.uk/guidelines/all-wales-adult-asthma-diagnostic-guidelines/

THE ALL WALES ASTHMA MANAGEMENT & PRESCRIBING GUIDELINE
allwales.icst.org.uk/guidelines/all-wales-adult-asthma-management-guidelines/
DIAGNOSIS

The diagnosis of asthma is a clinical diagnosis supported by tests of airway hyper-responsiveness and airway inflammation. All patients with suspected asthma should undergo objective testing including spirometry/reversibility and peak flow diary monitoring to document evidence of variable airflow obstruction. Exhaled nitric oxide (where available) is a simple breath test that can identify eosinophilic airway inflammation. An elevated exhaled nitric oxide level (FeNO) is supportive (but not diagnostic) of asthma. The Respiratory Health Implementation Group (RHIG) has produced a consensus document on the use of FeNO.

It should be usual practice to perform objective testing prior to starting therapy for asthma. If inhalers have already been prescribed, these will need to be withheld prior to performing bronchodilator reversibility testing. Most inhaled corticosteroid/long-acting beta₂ agonists (ICS/LABAs) will need to be withheld for >12h however once daily preparations (e.g. Relvar) will need to be withheld for >24h. Short acting beta₂ agonists (SABAs) need to be withheld for >4h and long acting anti-muscarinic agents (LAMAs) for >36h. Inhalers do not need to be withheld prior to performing FeNO however levels of FeNO will be reduced by inhaled corticosteroids. Ideally objective tests should be performed prior to starting inhaled therapy.

Reversibility to either inhaled or oral corticosteroids could also be considered if initial spirometry is obstructive (forced expiratory volume in 1 second [FEV₁]/forced vital capacity [FVC] ratio < 0.7 or below lower limit of normal). A change in FEV₁ of >12% and 200ml confirms reversibility and supports an asthma diagnosis. Some patients with Chronic Obstructive Pulmonary Disease (COPD) also show reversibility and asthma and COPD can coexist (asthma/COPD overlap).

Clinical history is important in distinguishing asthma from COPD.

When diagnostic uncertainty remains, or both COPD and asthma are present, use the following findings to help identify asthma:
- A large (over 400 ml) response to bronchodilators
- A large (over 400 ml) response to 30mg oral prednisolone daily for 2 weeks
- Serial peak flow measurements showing 20% or greater diurnal or day-to-day variability.

Clinically significant COPD is not present if the FEV₁ and FEV₁/FVC ratio return to normal with drug therapy.

GENERAL PRINCIPLES OF MANAGEMENT

Asthma is an inflammatory condition and recent guidelines (British Thoracic Society and Scottish Intercollegiate Guidelines Network 2019 and NICE 2017) have highlighted the need to treat all individuals symptomatic of asthma with inhaled corticosteroids. The practice of using a short acting bronchodilator as monotherapy is now outdated and reports such as the National Review of Asthma Deaths (NRAD) have highlighted the potential dangers of this practice with underuse of inhaled corticosteroids and over reliance on beta-agonists a contributory factor in a number of deaths.

For individuals with mild, intermittent asthma there is increasing support for the use of inhaled corticosteroid taken together with short acting bronchodilators on an 'if and when required' basis (PRN). This is only recommended for individuals with symptoms less than twice per month. If an individual has more frequent symptoms they should take regular inhaled corticosteroid to reduce their risk of exacerbation and asthma related death. The GINA strategy 2019 supports this approach.
ASTHMA CONTROL

An objective measure of asthma control should be recorded during each consultation. This would usually include a symptom score, such as the ‘asthma control test’ [ACT] or a commonly used tool, the Royal College of Physicians [RCP] ‘three questions’, a measure of airflow obstruction (peak flow or spirometry) and an assessment of exacerbation risk and symptoms based on reliever use and any requirement for oral steroids.

Reliever inhalers should not be required more than twice per week and the use of more than one reliever inhaler per month reflects very poorly controlled asthma. Patients prescribed more than 6 reliever inhalers over the preceding 12 months should be invited for urgent review of their asthma control.

LEVELS OF ASTHMA CONTROL AND EXACERBATION RISK

Assessment of current clinical control (over last 4 weeks)\(^6\)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Completely Controlled</th>
<th>Partly Controlled</th>
<th>Uncontrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daytime symptoms more than twice per week</td>
<td>None of these</td>
<td>1-2 of these</td>
<td>3-4 of these</td>
</tr>
<tr>
<td>Limitation on activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nocturnal symptoms/ awakening</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for reliever/rescue treatment more than twice per week</td>
<td>25</td>
<td>20-24</td>
<td>&lt;20</td>
</tr>
<tr>
<td>Asthma Control Test</td>
<td>25</td>
<td>20-24</td>
<td>&lt;20</td>
</tr>
</tbody>
</table>

Additional risk factors for future exacerbation

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous exacerbation/asthma attack</td>
<td>Especially within last 12 months Intubation/intensive care admission (ever)</td>
</tr>
<tr>
<td>Medication concordance</td>
<td>Increased risk if poor ICS adherence (&lt;80%) and high SABA use (increased risk of mortality if &gt;1 SABA inhaler/month)</td>
</tr>
<tr>
<td>Lung function (Peak flow or FEV1)</td>
<td>Increased risk if reduced lung function, especially if &lt;60% predicted</td>
</tr>
<tr>
<td>Co-morbidities</td>
<td>Smoking, obesity, gastro-oesophageal reflux disease, pregnancy, chronic rhino-sinusitis, anxiety, depression, confirmed food allergy</td>
</tr>
</tbody>
</table>
DEVICE SELECTION

Always involve the patient when choosing the device. Take into account individual preference, ease at which the device can be used and prior success or failure with different preparations. Ensure continuity of device for individual patients so that only one inhaler technique is required. Whenever possible do not mix MDIs and DPIs as they require radically different inhaler techniques (slow and gentle vs forceful and deep).

A patient decision aid has been produced by NICE which may be useful in guiding device selection. Metered dose inhalers have a higher carbon footprint than dry powder devices and British Thoracic Society (BTS) guidelines recommend that inhalers with low global-warming potential should be used when they are likely to be equally effective. MDIs currently contribute an estimated 3.5% of the carbon footprint of the NHS. It is important to note however that some patients will have a better technique with (and prefer) a MDI device. Patients should also be encouraged to use any locally available inhaler recycling and recovery schemes.

Dry powder inhalers (DPIs) require inspiratory flow rates of 30-90 l/min. The In-Check DIAL device or training whistles should be used to check patients can achieve this. Metered dose inhalers (MDIs) should be used with a spacer device (Aerochamber flow-vu or Volumatic) to improve technique and lung deposition. The Flo-Tone device is also useful to optimise MDI technique. It is important to teach patients that they need to wait 30 seconds between activations of their MDI devices to allow time for the canister to recharge before administering a second dose.

Full instruction on the inhaler technique for specific devices can be found on the Right-Breathe app or asthma UK website, https://www.asthma.org.uk/advice/inhaler-videos

Inhaled corticosteroids and long-acting bronchodilators MUST be prescribed as a combination product to obviate the risk of patients inadvertently taking the LABA as mono-therapy, which has been associated with increased risk of mortality. All inhalers should also be prescribed by brand to prevent the wrong inhaler device being inadvertently issued by the pharmacy.

STEPPING-UP THERAPY

It is important to check and address factors known to be associated with poor asthma control at every opportunity including when considering a step up in treatment. The following factors should be considered:

• Inhaler technique
• Adherence with asthma medication. This can be checked by an open conversation with the patient - it is important to be non-judgemental and explore barriers to concordance with medication (e.g. dislike of device, side effects, chaotic lifestyle). The prescription ‘fill rate’ should be reviewed (i.e. the actual number of preventative inhalers collected [issued] in a 12 month period compared with the number that should have been collected [issued]). This is a surrogate measure of concordance and can prompt a conversation with a patient.
• Smoking status and referral to smoking cessation services
• Triggers and trigger avoidance (including occupation)
• Co-morbid conditions – e.g. weight management, obstructive sleep apnoea, dysfunctional breathing pattern, rhinitis

Asthma control should be re-assessed within 3 months of a change in therapy.
MAINTENANCE AND RELIEVER THERAPY (MART)

A number of combination inhalers are licensed for use in a variable dosing regime termed MART (Maintenance And Reliever Therapy). These include Fostair 100/6 MDI and NEXThaler, Symbicort 200/6 Turbohaler, Fobumix 160/4.5 and Duoresp Spiromax 160/4.5. The higher strength preparations are not licensed for this use.

The patient should take twice daily maintenance therapy and then also use the same product and device as a reliever medication if required. This enables the amount of inhaled steroid to be titrated against symptoms. There is no need to prescribe a separate reliever inhaler if a patient is on this regime.

MART regimes can help overcome poor concordance with ICS inhalers and historic over reliance on beta₂ agonist reliever therapy. There is also evidence these regimes can reduce exacerbation frequency.

LICENSED MART INHALERS

<table>
<thead>
<tr>
<th>Inhalar</th>
<th>Dose</th>
<th>Maximum daily dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fostair Nexthaler or MDI MART</td>
<td>100/6 – 1 puff twice daily plus PRN</td>
<td>8 puffs</td>
</tr>
<tr>
<td>Duoresp Spiromax MART</td>
<td>160/4.5 – Either 1 puff twice daily plus PRN or 2 puffs twice daily plus PRN</td>
<td>12 puffs</td>
</tr>
<tr>
<td>Fobumix Easyhaler MART</td>
<td>160/4.5 – Either 1 puff twice daily plus PRN or 2 puffs twice daily plus PRN</td>
<td>12 puffs</td>
</tr>
<tr>
<td>Symbicort Turbohaler MART</td>
<td>200/6 – Either 1 puff twice daily plus PRN or 2 puffs twice daily plus PRN</td>
<td>12 puffs</td>
</tr>
</tbody>
</table>

The maximum recommended number of puffs of an inhaler differs depending on which inhaler is used as part of the MART regime.

With Duoresp Spiromax, Fobumix Easyhaler and Symbicort Turbohaler it is recognised that a total daily dose of more than 8 puffs is not normally needed, however a total daily dose of up to 12 puffs could be used for a limited period. Patients using more than 8 inhalations daily should be strongly recommended to seek medical advice and their maintenance therapy should be reconsidered.

Even in patients using a MART regime the persistent requirement for PRN doses of their inhaler more than twice per week indicates poor asthma control and should prompt a review of therapy.

ADD-ON THERAPIES

STEP 3
Montelukast may be particularly helpful in those with exercise-induced asthma and in asthma associated with allergic rhinitis. If patients do not benefit from a 6 week trial of this agent it should be discontinued.

Always treat co-existing allergic rhinitis with a separate nasal steroid +/- antihistamines to prevent asthma triggering from nasal inflammation.

STEP 5
Spiriva Respimat (tiotropium) is the only long acting anti-cholinergic licensed for use in asthma. It is recommended within NHS Wales as an option in adult patients who are on maintenance moderate dose ICS/LABA therapy and have experienced one or more severe exacerbations in the previous year². This therapy may be of particular benefit in patients whose asthma and COPD are felt to overlap. This inhaler is a soft mist inhaler and requires a different inhaler technique. A spacer device can be used if preferred.

Oral theophylline is a further add-on therapy that can be trialled at step 5. Always review response to add-on therapies and discontinue if ineffective.
REFERRAL/SPECIALIST THERAPY

Patients who remain uncontrolled despite moderate dose ICS/LABA +/- additional controller agents have difficult to control or severe asthma. A proportion of these will have an alternative or co-existent condition that is contributing to their symptoms. Objective and structured evaluation can help identify and treat these conditions.

Some individuals will have severe eosinophilic asthma and will require high dose ICS/LABA combination inhalers. Others may have neutrophilic asthma and may benefit from additional bronchodilator therapy such as Spiriva Respimat.

In addition patients receiving 2 or more courses of oral steroids in a 12 month period despite concordance with optimised therapy should be referred.

There are a number of biological therapies now licenced for severe asthma. These can be prescribed where appropriate following review by a specialist in severe asthma, and discussion in the All Wales Difficult Asthma MDT.

STEPPING DOWN

All asthma guidelines recommend a step wise approach including the need to consider stepping down therapy once control is achieved and maintained. High-dose ICS carries a risk of systemic side effects (adrenal suppression, growth retardation, decrease in bone mineral density and cataracts) and these risks should be balanced against the benefits.

Reducions in asthma therapy should be considered if a patient has had complete asthma control over a three month period. A decision to step down should take into account how difficult it was to achieve stability and also whether previous step down attempts have resulted in exacerbations. Seasonal variation in symptoms should also be considered. Stop or reduce dose of medicines in an order that takes into account the clinical effectiveness when the medicine was introduced, side effects and the person’s preference. It is recommended that the dose of ICS is reduced by no more than 50% each time. The risks and benefits of dose reduction should be discussed with patients and their carers.
SELF MANAGEMENT & ASTHMA ACTION PLANS

The importance of supported self-management is highlighted in national guidelines\(^1,2\). This should include a written personalised asthma action plan containing advice on how to recognise a loss of asthma control (peak flow monitoring or symptoms) and what action to take to regain control, including when to start oral steroids and seek emergency advice. Patients should be prescribed a peak flow meter to aid self-management. Best peak flow should be ascertained when treatment is optimised and symptoms are stable. Best peak flow is more accurate than predicted peak flow. Trigger points should be individualised but as a guide oral steroids are usually required when peak flow reaches $\leq 60\%$ of best and emergency review is usually necessary when peak flow reaches $\leq 50\%$ of best. There is evidence that quadrupling ICS dose when asthma control starts to deteriorate (peak flow $\leq 80\%$ of best) can reduce the risk of an exacerbation\(^9\). In those individuals prescribed MART therapy this will usually be achieved through increased use of PRN reliever doses of their ICS/LABA inhaler.

In those individuals at step 1, it is relatively easy to achieve the required increase of ICS dose by quadrupling the use of their ICS inhaler. In those individuals on a fixed ICS/LABA regime (e.g. Relvar 92/22), prescribing an additional ICS inhaler may be required as part of an asthma management plan. For example if taking Relvar 92/22 OD prescribe additional fluticasone 250 accuhaler to take 3 puffs BD in addition to Relvar as part of action plan when peak flow $\leq 80\%$, for maximum of 14 days – see table below. If an individual is already taking high dose ICS/LABA (step 5) the evidence for increasing ICS is less clear and is not currently routinely recommended.

It is recognised that this approach does require a motivated patient and will not be appropriate in all cases. In some cases an action plan proceeding immediately to oral steroids will be more appropriate.

### HOW TO ACHIEVE A QUADRUPLING IN ICS AS PART OF PERSONALISED ACTION PLAN IN PATIENTS ON A FIXED DOSE COMBINATION INHALER

<table>
<thead>
<tr>
<th>ICS/LABA</th>
<th>Maintenance Dose</th>
<th>Method of achieving increase in ICS</th>
<th>Additional ICS (for use with action plan in addition to maintenance dose ICS/LABA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fostair MDI (Beclomethasone dipropionate with formoterol)</td>
<td>100/6 1 puff BD</td>
<td>Increase maintenance dose to 4 puffs BD</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>100/6 2 puffs BD</td>
<td>Provide additional ICS</td>
<td>Clenil 200mcg 6 puffs BD</td>
</tr>
<tr>
<td>Fostair Nexthaler (DPI) (Beclomethasone dipropionate with formoterol)</td>
<td>100/6 1 puff BD</td>
<td>Increase maintenance dose to 4 puffs BD</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>100/6 2 puffs BD</td>
<td>Provide additional ICS</td>
<td>N/A</td>
</tr>
<tr>
<td>Symbicort (DPI) (Budesonide with formoterol)</td>
<td>200/6 1 puff BD</td>
<td>Increase maintenance dose to 4 puffs BD</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>200/6 2 puffs BD</td>
<td>Provide additional ICS</td>
<td>Budesonide Turbohaler 200mcg 6 puffs BD</td>
</tr>
<tr>
<td>Fobumix (DPI) (Budesonide with formoterol)</td>
<td>160/4.5 1 puff BD</td>
<td>Increase maintenance dose to 4 puffs BD</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>160/4.5 2 puffs BD</td>
<td>Provide additional ICS</td>
<td>Budesonide Easyhaler 200mcg 6 puffs BD</td>
</tr>
<tr>
<td>Duoresp spiromax (DPI) (Budesonide with formoterol)</td>
<td>160/4.5 1 puff BD</td>
<td>Increase maintenance dose to 4 puffs BD</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>160/4.5 2 puffs BD</td>
<td>Provide additional ICS</td>
<td>Budesonide Turbohaler or Easyhaler 200mcg 6 puffs BD</td>
</tr>
<tr>
<td>Relvar (DPI) (Fluticasone furoate with Vilanterol)</td>
<td>92/22 one puff OD</td>
<td>Provide additional ICS</td>
<td>Fluticasone Accuhaler 250mcg 3 puffs BD</td>
</tr>
</tbody>
</table>
TEMPLE FOR ASTHMA REVIEW

All individuals with asthma should receive a review at least annually. This will need be more frequent if poor control is identified and will need to be face to face. All patients should be reviewed after an emergency admission or exacerbation.

• Assess asthma control (e.g. RCP 3 questions, Asthma Control Test)
• Check peak flow and/or spirometry
• Review medication including use of reliever medication, concordance with preventer therapies (check prescription fill rate)
• Number of exacerbations in last 12 months/since last review
• Review risk factors for asthma death (e.g. previous near fatal asthma, admission in last 12 months, heavy use of SABA, poor concordance, failure to attend reviews, alcohol/drug misuse)
• Review inhaler technique
• Review triggers e.g. pets, occupation, NSAIDs
• Smoking status – refer to smoking cessation if required
• Reinforce need for annual flu vaccination
• Review asthma action plan and ensure patient knows how to manage an exacerbation and when to seek advice
• If well controlled for >3 months consider stepping down therapy
• If poorly controlled consider and address reasons behind this (e.g. poor inhaler technique, concordance) – if no reversible factors can be identified then consider stepping up therapy.
• Refer to secondary care if poor control despite moderate-dose therapies or if required ≥2 courses oral corticosteroids/year

Computer based asthma annual review templates have been developed through RHIG.
## TABLE OF ICS EQUIVALENCE

The table below shows the available inhalers used to treat asthma and their inhaled steroid dose equivalents. It is recognised that generic versions of many of the combination inhalers are now available and not all have been included in this table.

<table>
<thead>
<tr>
<th>ICS</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Clenil Modulite (MDI) and Soprobec (MDI) (Beclomethasone dipropionate)</td>
<td>100mcg 2 puffs BD</td>
</tr>
<tr>
<td>Qvar Easi-breathe (Beclomethasone dipropionate)</td>
<td>50mcg 2 puffs BD</td>
</tr>
<tr>
<td>Budesonide Easyhaler (DPI) (Budesonide)</td>
<td>100mcg 2 puffs BD</td>
</tr>
<tr>
<td>Pulmicort Turbohaler (DPI) (Budesonide)</td>
<td>100mcg 2 puffs BD</td>
</tr>
<tr>
<td>Alvesco (MDI) (Ciclesonide)</td>
<td>80mcg 2 puffs OD</td>
</tr>
<tr>
<td>Flixotide Evohaler (MDI) (Flixotide)</td>
<td>50mcg 2 puffs BD</td>
</tr>
<tr>
<td>Fostair (MDI) and Nexthaler (DPI) (Beclomethasone dipropionate with formoterol)</td>
<td>100/6 1 puff BD</td>
</tr>
<tr>
<td>Symbicort Turbohaler (DPI) (Budesonide with formoterol)</td>
<td>200/6 1 puff BD</td>
</tr>
<tr>
<td>Fobumix Easyhaler (DPI) (Budesonide with formoterol)</td>
<td>160/4.5 1 puff BD</td>
</tr>
<tr>
<td>Duoresp Spiromax (DPI) (Budesonide with formoterol)</td>
<td>160/4.5 1 puff BD</td>
</tr>
<tr>
<td>Relvar Ellipta (DPI) (Fluticasone furoate with Vilanterol)</td>
<td>92/22 one puff OD</td>
</tr>
<tr>
<td>Flutiform (MDI/breath actuated) (Fluticasone propionate with formoterol)</td>
<td>50/5 2 puffs BD</td>
</tr>
<tr>
<td>Seretide (MDI) (Fluticasone propionate with salmeterol)</td>
<td>50/25 2 puffs BD</td>
</tr>
<tr>
<td>Seretide Accuhaler (Fluticasone propionate with salmeterol)</td>
<td>100/25 1 puff BD</td>
</tr>
</tbody>
</table>
REFERENCES


