RESPIRATORY INHALERS

The correct administration of inhaled therapy is essential for successful, cost-effective and safe therapy. Everyone, including the patient needs to understand the importance of ensuring correct inhaler technique. Patients should be instructed on how to use their inhaler and supervised when they are first prescribed a new inhaler and their inhalation technique should be checked by observation at every opportunity.

INHALED MEDICINE Generic Name Brand Name	DEVICE OPTIONS RED = DRY powder device BLUE = AEROSOL device	COST 30 day treatment / per dose based on BNF September 2014	USUAL DOSE www.medicines.org.uk or BNF for more details For children please confirm licensed indication and dose before prescribing	PHARMACOLOGICAL ACTION and key pharmacokinetic profiles	RECOMMENDED PLACE IN UK PRACTICE GUIDELINES	THINGS TO NOTE Common adverse effects, precautions for use etc.

SHORT ACTING BRONCHODILATORS

Short Acting Beta-2 agonist (SABA)

Salbutamol Airomir[R]; Salamol[R]; Ventolin[R] Salamol[R] Ventolin[R] Airomir[R] Asmasal[R] Salbulin[R]	Pulvinal[R] Easyhaler[R] MDI [+] Easi-Breathe[R] Accuhaler[R] Autohaler Clickhaler[R] Novolizer[R]	£4.85[1] £3.31[1] £1.50–£1.97[1] £6.30[2] £3.00[2] £6.02[2] £5.65[1] £2.75[1]	100–200 micrograms when required	**Mechanism of action:** • Bronchodilation through activation of beta-2 receptors on the airway smooth muscle • Reduction of lung hyperinflation, resulting in increased inspiratory capacity **Onset of action:** • within 5 minutes **Duration of action:** • approximately 4 to 6 hours No clinical pharmacological difference between salbutamol and terbutaline	Relief of breathlessness and chest tightness in people with asthma and COPD (according to the British Asthma guideline[1] and NICE COPD guideline).[3]	SABA inhalers should ideally be prescribed 'PRN - when required' as this helps to monitor control. Reliance on frequent use, or a sudden increase in dose, indicates poorly controlled or deteriorating disease. People with **asthma** using their SABA inhaler three times a week or more is a marker of uncontrolled asthma and should have their asthma control assessed.[1] Any person with asthma identified as requesting twelve or more[3] SABA canisters over 12 months should be invited for a structured review of their asthma. People with **COPD** may require more regular use of SABA, as using prior to movement/exercise may be beneficial. For people using SABA regularly ensure other medicines are prescribed and optimised to reduce breathlessness as per NICE COPD guideline.[3] **Side effects include:** Fine tremor (particularly in hands), muscle cramps and tachycardia. High doses associated with hypokalaemia. Most side effects are dose related.
Terbutaline Bricanyl[R]	Turbohaler[R]	£6.92[4]	500 micrograms when required			

Short Acting Muscarinic Antagonist (SAMA)

Ipratropium bromide Atrovent	MDI	£3.34–£6.67	20–40 micrograms three to four times a day (there is no benefit in using >4 times a day, although some patients may need up to 4 puffs at a time to obtain maximum benefit) For dose in children <12 years see BNF	**Mechanism of action:** • Bronchodilation through antagonism at muscarinic receptors on airway smooth muscle • Reduction of lung hyperinflation, resulting in increased respiratory capacity **Onset of action:** • within 20 minutes, **Duration of action:** • approximately 4 hours	Relief of breathlessness in people with COPD who have intermittent symptoms. Relief of breathlessness, wheeze and chest tightness (in addition to SABA treatment) in acute asthma exacerbations.	**Side effects include:** Dry mouth (most common), dizziness, nausea, gastro-intestinal motility disorder (i.e. constipation or diarrhoea), cough and headache. **Precautions for use:** Prescribe with caution in people with pre-existing bladder outflow obstruction or prostatic hyperplasia, and those susceptible to angle-closure glaucoma. Studies have suggested an increased risk of cardiovascular morbidity and mortality associated with the use of ipratropium bromide.[4] Patients should be reminded not to exceed the recommended dose.[4]

LONG ACTING BRONCHODILATORS

Long Acting Beta-2 agonists (LABA)

Salmeterol Vertine[R] Serevent[R] Serevent[R]	MDI[+] MDI[+] Accuhaler	£27.80 £29.26 £29.26	50 micrograms twice a day (higher doses not recommended as evidence for increased efficacy is limited)	**Mechanism of action:** • Bronchodilation through activation of beta-2 receptors on airway smooth muscle • Reduction of lung hyperinflation, resulting in increased respiratory capacity during exercise and at rest • Reduction of COPD exacerbations **Onset of action:** • formoterol within 3 minutes • salmeterol approximately 20 minutes • indacaterol within 5 minutes • olodaterol within 5 minutes **Duration of action:** • salmeterol and formoterol 12 hours • indacaterol and olodaterol have a longer duration of action of 24 hours, hence once daily dosing	Maintenance management of persistent asthma not controlled by inhaled corticosteroids Formoterol or salmeterol should be prescribed as an add-on therapy to an inhaled corticosteroid (≥ step 3 British Asthma Guideline). Maintenance treatment of COPD for people with persistent breathlessness. Maintenance treatment of COPD for people with persistent breathlessness (not licensed for asthma).	In people with asthma a LABA must be used in conjunction with an inhaled corticosteroid (ICS). Data from a large clinical trial showed an increased risk of series respiratory-related deaths when LABA used with no ICS.[5] A combination inhaler containing both LABA and ICS is recommended. In people with confirmed diagnosis of COPD (and no overlap with asthma) a LABA can be used with no concurrent ICS for people with persistent breathlessness (FEV1<50%). **Side effects include:** fine tremor (particularly in hands), headache, muscle cramps and tachycardia. High doses associated with hypokalaemia. In adults with indacaterol, upper respiratory tract infections, nasopharyngitis, sinusitis and rhinorrhoea were commonly observed. **Drug interactions:** All LABAs should be used cautiously with drugs that increase the risk of prolongation of the QTc interval (e.g. ketoconazole, tricyclic antidepressants, quinidine, disopyramide, procainamide, erythromycin).
Formoterol Oxis[R] Foradil[R] Atimos Modulite[R]	Easyhaler[R] Turbohaler[R] Dry powder MDI[+]	£11.87 £24.80 £23.38 £18.04	**Asthma:** 6–12 micrograms twice a day (Oxis® licensed up to 72 micrograms daily if needed) **COPD:** 12 micrograms twice a day			
Indacaterol Onbrez[R]	Breezhaler[R]	£29.26	**COPD:** 150 micrograms once a day, increased to maximum 300 micrograms once a day			
Olodaterol Striverdi[R]	Respimat[R]	£26.35	**COPD:** 5 micrograms once a day			
Vilanterol	Ellipta[R]		NOT LICENSED IN THE UK			

Long Acting Muscarinic Antagonist (LAMA)

Tiotropium bromide Spiriva[R] Spiriva[R]	Respimat[R] Handihaler[R]	£33.50 £34.87 (refill pack £33.50)	5 micrograms once a day 18 micrograms once a day	**Mechanism of action:** • Bronchodilation through antagonism at muscarinic receptors on airway smooth muscle • Reduction of dynamic hyperinflation, resulting in increased respiratory capacity during exercise and at rest • Antimuscarinics in theory should help reduce mucus secretion • May reduce COPD exacerbations **Onset of action:** • tiotropium bromide, aclidinium bromide and umeclidinium bromide within 30 minutes • glycopyrronium has a faster onset within 5 minutes **Duration of action:** • tiotropium bromide, glycopyrronium bromide and umeclidinium bromide at least 24 hours • aclidinium has a shorter duration of approximately 12 hours, hence the twice daily dosing	Maintenance treatment of COPD in those people with persistent symptoms. May help to reduce exacerbations of COPD. Tiotropium Respimat is also licensed for people with asthma, who are adherent to combined ICS (≥800 micrograms) and LABA with ≥1 severe exacerbations in the previous year. The BTS/SIGN guideline states at step 4 that 'LAMA appear to be as effective as salmeterol in the short term and may be superior to doubling the dose of ICS in fixed airways obstruction'. Addition to ICS/LABA may benefit patients who remain symptomatic despite ICS/LABA.	**Side effects include:** Dry mouth (relatively common), which may in the long term be associated with dental caries. Nasopharyngitis, headache, and diarrhoea commonly reported with both glycopyrronium bromide and aclidinium bromide. **Precautions for use:** Use with caution in people with prostatic hyperplasia, bladder outflow obstruction, those susceptible to angle-closure glaucoma, previous history of cardiovascular disease and renal impairment (see notes below). **Caution in cardiovascular disease:** Studies have suggested an increased risk of cardiovascular morbidity and mortality associated with the use of antimuscarinics.[4] Other studies have shown that tiotropium handihaler and respimat are not associated with the increased risk.[4,7] All LAMAs should be used with caution for people with unstable ischaemic heart disease, left ventricular failure, history of myocardial infarction or arrythmias.[4] Patients should be reminded not to exceed the recommended dose. **Caution in renal impairment:** Tiotropium bromide should only be used if the expected benefit outweighs the risk in people with moderate to severe renal impairment (creatinine clearance ≤50 ml/min). Glycopyrronium bromide has similar concerns but if creatinine clearance is <30 ml/min. Aclidinium bromide can be prescribed in renal impairment as it is mainly and extensively hydrolysed to pharmacological inactive metabolites. Umeclidinium can be prescribed in renal impairment. Once umeclidinium foil packaging is opened it has an in-use shelf life of 6 weeks.
Glycopyrronium bromide Seebri▼	Breezhaler[R]	£27.50	44 micrograms once a day			
Aclidinium bromide Eklira▼	Genuair[R]	£28.60	322 micrograms twice a day			
Umeclidinium Incruse[R]	Ellipta[R]	£27.50	55 micrograms once a day			

COMBINATION LONG-ACTING MUSCARINIC ANTAGONIST AND LONG-ACTING BETA-2 AGONIST (LAMA/LABA)

Umeclidinium (LAMA) / Vilanterol (LABA) Anoro▼	Ellipta[R]	£32.50	55/22 micrograms once a day at the same time of the day each day	**Mechanism of action:** • Bronchodilation through both activation of beta-2 receptors and antagonism at muscarinic receptors on airway smooth muscle • Reduction of dynamic hyperinflation, resulting in increased respiratory capacity during exercise and at rest	Maintenance treatment of COPD for people with persistent breathlessness.	Ensure patient has a correct diagnosis of COPD. LAMA/LABA combinations are not licensed for asthma. Data from a large clinical trial showed an increased risk of series respiratory-related deaths when LABA used with no ICS in people with asthma.[5] **Side effects include:** Urinary tract infection, sinusitis, nasopharyngitis, pharyngitis, upper respiratory tract infection, headache, cough, dry mouth and constipation. An increased incidence of cardiovascular and cerebrovascular events may occur with long-term use (robust >1 year safety data is not yet available). **Precautions for use:** Contra-indicated if patient has a severe hypersensitivity to milk proteins. Do not use in combination with an additional medicine containing LABA because of risk of overdose. Use with caution in people with prostatic hyperplasia, bladder outflow obstruction, those susceptible to angle-closure glaucoma, and previous history of cardiovascular disease. **Drug interactions:** All LABAs should be used cautiously with drugs that increase the risk of prolongation of the QTc interval (e.g. ketoconazole,clarithromycin, erythromycin itraconazole, tricyclic antidepressants, quinidine, disopyramide, procainamide). Co-administration of LAMA/LABA combinations with other LAMA, LABA or products containing either of these agents has not been studied and is not recommended. Once Anoro's foil packaging is open the in-use shelf life is 6 weeks.
Glycopyrronium (LAMA) / Indacaterol (LABA) Ultibro▼	Breezhaler[R]	£32.50	85/43 micrograms once a day			
Aclidinium (LAMA)/ Formoterol (LABA) DuaKlir▼	Genuair[R]	£32.50	340/12 micrograms twice a day			
Olodaterol (LABA) / Tiotropium (LAMA) Spiolto	Respimat[R]	£32.50	2.5/2.5 micrograms once a day			

MAST CELL STABILISERS

Nedocromil Tilade[R]	MDI[+]	£85.58 (initial) £42.79 (maintenance)	4mg four times a day, when control achieved reduce to twice a day	**Mechanism of action:** • not completely understood • non-steroidal agent, which has anti-inflammatory properties • inhibits the activation of many of the cell types involved in the development and progression of asthma – inhibiting the release of inflammatory mediators from mast cells **Onset of action:** • clinical improvement in symptoms and lung function usually occurs within 4 weeks of beginning treatment **Duration of action:** • protection against antigen or exercise challenge (up to 2 hours)	Prophylaxis of asthma where regular preventative anti-inflammatory therapy is indicated. Not currently recommended in the British Asthma Guideline for Adults.	May be of benefit in asthma with an allergic basis, but in practice, it is difficult to predict who will benefit. Give for a trial of 4 to 6 weeks and assess response. Stop inhaler if no positive response. **Side effects include:** Abdominal pain, vomiting, nausea, cough, bronchospasm, headache, dyspepsia and dysgeusia. Must be used regularly.
Sodium Cromoglicate Intal[R]	MDI[+]	£39.28 (initial) £19.64 (maintenance)	10mg four times a day, increased if necessary to 6–8 times daily, maintenance 5mg four times a day			

INHALED CORTICOSTEROIDS (ICS)

Budesonide Pulmicort[R] Budelin[R]	Easyhaler[R] Turbohaler[R] Novolizer[R]	£5.31–£21.25 £7.10–£33.26 £8.92–£35.66	Adults and children >12 years: 200 micrograms twice a day (Step 2), 400 micrograms twice a day (Step 3), and severe asthma (Step 4/5) up to 1600 micrograms/day Children ≤ 12 years (check BNF for licensing and dosing)	**Mechanism of action in asthma:** • Anti-inflammatory effect on bronchial mucosa (and hence reduce oedema and secretion of mucus into the airway) • Reduces hyperresponsiveness of the bronchial tract to exogenic challenges **Onset of action:** improvement in lung function has been shown to occur within 2 days after initiation of treatment, although maximum benefit may not be achieved for up to 6 weeks (full reduction in airway hyperresponsiveness may take 12 months) **Mechanism of action in COPD:** No inhaler containing only ICS is currently licensed for COPD in the UK. ICS (in combination with LABA) may reduce COPD exacerbations but do not improve symptoms	Prophylactic management of mild, moderate and severe persistent asthma (≥ Step 2 British Asthma Guideline). Please note, at step 3 one inhaler containing both ICS and LABA is preferred rather than individual inhalers, an approach that aims to improve medicine adherence and reduce the potential risks associated with people only using a LABA with no ICS. No inhaler containing only ICS is recommended for managing COPD.	Inhaled corticosteroid must be used regularly for maximum benefit. For most ICS this is twice a day, though ciclesonide and mometasone are daily doses, and guidelines recommend that once daily may be appropriate in some patients with milder disease and good control of their asthma. Current and previous smoking reduces the effectiveness of inhaled corticosteroids and higher doses may be necessary For people with asthma the maintenance dose of ICS should be individualised and titrated to the lowest dose at which effective control of asthma is maintained. **Side effects include:** Common local side-effects include oropharyngeal candidiasis (fungal), hoarseness, cough and headache. To reduce incidence of oral fungal infections patients should be advised to rinse their mouth out with water after use. Ciclesonide is metabolised to its biologically active metabolite by enzymes in the lung and therefore is not associated with oral fungal infections. Prolonged treatment with high dose inhaled corticosteroids (equivalence of >800 micrograms beclometasone per a day) may result in clinically significant adrenal suppression, growth retardation in children and adolescents (regularly monitor height), decrease in bone mineral density, cataract, glaucoma, increased susceptibility to infection, including pneumonia. For people prescribed high dose ICS give a 'steroid card' (usually blue). **Precautions for use:** Patients with active or quiescent pulmonary tuberculosis, and in patients with fungal or viral infections in the airways. **Drug interactions:** All current ICS are metabolised by the liver. Concomitant administration of potent inhibitors of cytochrome enzymes (e.g. ketoconazole, itraconazole) should be avoided unless the benefit outweighs the increased risk of potential systemic side effects of corticosteroids. All ICS appear to be equally clinically effective at equivalent doses. Care should be taken when switching people between different ICS. The available ICS vary in potency (e.g. fluticasone propionate is double the potency of beclometasone) and efficiency of lung deposition (e.g. beclometasone extrafine delivers twice the amount to the lung) influencing their comparative doses. See PCRS ICS Table on Equivalent Doses and relevant information. Qvar® and Clenil® are not interchangeable and should be prescribed by brand name.
Beclometasone Asmabec® Clenil Modulite®	Easyhaler® Pulvinal® Clickhaler® MDI[+]	£5.93–£23.52 £5.93–£23.52 £5.89–£14.77 £4.43–£19.55				
Beclometasone Extrafine Qvar® Qvar® Qvar®	MDI[+] Easi-Breathe® Autohaler®	£4.72–£20.65 £4.64–£20.34 £4.72–£20.65	Only licensed for adults and children ≥ 12 years: 100 micrograms twice a day (Step 2), 200 micrograms twice a day (Step 3), and severe asthma (step 4/5) up to 400 micrograms twice a day			
Ciclesonide Alvesco®	MDI[+]	£8.21–£9.66 max £58.62	Only licensed for adults and children ≥12 years: 80 to 160 micrograms once a day preferably in the evening (severe asthma maximum dose 320 micrograms twice a day)			
Fluticasone Proprionate Flixotide[Nev] Flixotide[Nev]	Accuhaler[DH] MDI[+]	£8.93–£36.14 £5.44–£36.14	Adults and children >12 years: 100 micrograms twice a day (Step 2), 250 micrograms twice a day (Step 3), and severe asthma (step 4/5) up to 500 micrograms twice a day Children ≤ 12 years (check BNF for licensing and dosing)			
Mometasone furoate Asmanex®	Twisthaler®	£21.78–£43.56	Only licensed for adults and children ≥12 years: 400 micrograms once a day (step 2). Maximum dose 400 micrograms twice a day (step 3)			

COMBINATION INHALED CORTICOSTEROID AND LONG-ACTING BETA-2 AGONIST (ICS/LABA)

Fluticasone propionate/ salmeterol Seretide® Seretide® Sirdupla AirFluSal	Accuhaler® MDI[+] MDI[+] Forspiro	£18.00–£40.92 (COPD £40.92) £18.00–£59.48 £26.25–£44.61 £32.74	**Asthma** Usual starting dose in adults at step 3 Seretide 100/50 micrograms twice a day, increased to 250/50 micrograms twice a day Few patients will require the maximum dose 500/50 microgram twice a day Sirdupla (over 18 years only) **COPD** Seretide Accuhaler® and AirFluSal Forspiro 500/50 micrograms twice a day	**Mechanism of action:** • Anti-inflammatory effect on bronchial mucosa (and hence reduce oedema and secretion of mucus into the airway) • Reduces hyperresponsiveness of the bronchial tract to exogenic challenges • Bronchodilation through activation of beta-2 receptors on airway smooth muscle • Reduction of lung hyperinflation, resulting in increased respiratory capacity during exercise and at rest • Reduction of COPD exacerbations **Onset of action (inhalers containing):** • formoterol within 3 minutes • salmeterol approximately 20 minutes • vilanterol approximately 15 minutes The ICS component of the inhaler will take longer to work (see notes above ICS) **Duration of action:** • approximately 12 hours See above for the different potency of ICS and the equivalent dosage schedules.	Prophylactic management of moderate and severe persistent asthma (≥ Step 3 British Asthma Guideline). Symptomatic treatment of people with COPD with a FEV1 ≤50% predicted normal (post-bronchodilator) with an exacerbations history despite regular therapy with long-acting bronchodilators.	Patients should be made aware that ICS/LABA inhalers must be used daily for optimum benefit, even when asymptomatic. **Side effects:** As these are combination inhalers containing ICS and LABA the type and severity of side effects associated with each of the compounds may be expected. There are no additional adverse effects following concomitant administration of the two compounds. See notes above for each drug class. **Precautions for use:** The precautions for use are related to both the ICS and the LABA component of the inhaler. See notes above for each drug class. **Drug Interactions:** The drug interactions are related to both the ICS component and the LABA component of the inhaler. See notes above for each drug class. DuoResp Spiromax is dispensed foiled wrapped. After opening the foil wrap the shelf life is 6 months. Symbicort (100/6 and 200/6) and DuoResp (160/4.5) are licensed for Maintenance and reliever therapy.[+] To avoid inadvertent switching between different devices it is advised to prescribe inhalers by brand name.
Budesonide / formoterol Symbicort® DuoResp®	Turbohaler Spiromax	£19.00–£76.00 (COPD £38.00) £29.97–£59.94 (COPD £29.97)	**Asthma** Usual starting dose in adults at step 3 Symbicort 200/6 micrograms twice a day, increasing to 400/12 micrograms twice a day (few patients require maximum dose 800/24 micrograms twice a day)[†] DuoResp (over 18 years only) 160/4.5 to maximum 640/18 micrograms twice a day **COPD** Symbicort 400/12 micrograms twice a day DuoResp 320/9 micrograms twice a day			
Bufomix®	Easyhaler	Unknown		NOT LICENSED IN THE UK (expected to be licensed for the management of asthma)		
Fluticasone Furoate / Vilanterol Relvar®	Ellipta	£27.80–£38.87 (COPD £27.80)	**Asthma** 92/22 micrograms once a day, increased to 184/22 micrograms once a day It is anticipated that few patients will require the higher dose Not licensed in children under 12 years **COPD** 92/22 micrograms once a day at the same time of the day If a dose is missed the next dose should be taken at the usual time the next day (the higher dose is not licensed and should not be prescribed)	As above.	As above.	See notes above. The exact bioequivalence of fluticasone fuorate to beclometasone (CFC or Clenil®) is not known. The SPC suggests that 92/22 microgram Relvar® is equivalent to 250/50 Seretide twice a day (equivalent to Step 4 BTS/SIGN asthma guidelines). Further studies are being undertaken. Once the foil packaging is open the in-use shelf life is 6 weeks.
Beclometasone extra-fine/formoterol Fostair®	MDI[+]	£14.66–£29.32 (COPD £29.32)	**Asthma** Usual starting dose 100/6 one puff twice a day, increased to two puffs twice a day Licensed in adults 18 years and older (licensed for MART therapy[†]) **COPD** 100/6 two puffs twice a day Adults 18 years and older: One or two inhalations twice daily The maximum daily dose is 4 inhalations daily	As above.	As above.	See notes above. Fostair® is characterised by an extrafine particle size distribution which results in more potent effect than formulations of beclometasone with a non-extrafine size distribution. 100 micrograms of belometasone extrafine in Fostair® are equivalent to 250 micrograms of beclometasone in non-extrafine formulations. Prior to dispensing Fostair MDI is stored in the refrigerator (2-8°C). Keep at room temperature for one hour before using. After dispensing Fostair MDI can be kept at room temperature (below 25 °C) for 5 months.
Fostair®	NEXThaler®	£14.66–£29.32	**Asthma** Usual starting dose 100/6 one puff twice a day, increased to two puffs twice a day Licensed in adults 18 years and older	As above.	Prophylactic management of moderate and severe persistent asthma (≥ Step 3 British Asthma Guideline). It is not licensed for people with COPD.	
Fluticasone proprionate/ formoterol Flutiform®	MDI[+]	£14.40–£45.00	Usual adult/ adolescent (>12yrs) starting dose 50/5 microgram two puffs twice a day, increasing to 125/5 micrograms two puffs twice a day Maximum dose 250/10 micrograms two puffs twice a day only for adults who remain symptomatic		Prophylactic management of moderate and severe persistent asthma (≥ Step 3 British Asthma Guideline). It is not licensed for people with COPD.	See notes above. Once the foil packaging is open the in-use shelf life is 3 months. The 50/5 microgram strength inhaler is grey/white but has a blue band around the top of the canister. This could potentially cause patients to mistakenly use it on an as needed basis rather than regularly twice a day.

KEY

Inhaler Devices: RED = Dry powder inhalers (Accuhaler®, Breezhaler®, Clickhaler®, Easyhaler®, Ellipta®, Forspiro, Genuair®, Handihaler®, NEXThaler®, Novolizer®, Pulvinal®, Spiromax®, Turbohaler®, Twisthaler®)
BLUE = Aerosol inhalers (Autohaler®, Easi-Breathe®, Metered dose inhaler (MDI), Respimat®)

Spacer compatibility*: + MDI with mouthpiece shape round (not compatible with Volumatic™ spacer device)
○ MDI with mouthpiece shape compatible with all spacer devices
* compatibility based on ability to fit spacer – not the evidence base to support optimal drug delivery

▼ This medicine is subject to additional monitoring. Please report any suspected adverse reactions to the Yellow Card scheme, including any possible side effects not listed in the Summary of Product Characteristics (SPC).

Δ Please remember to report suspected adverse reactions on a Yellow Card at www.yellowcard.gov.uk

† The delivered dose is equivalent to a metered dose of 200 or 400 micrograms budesonide and 6 or 12 micrograms of formoterol fumarate dihydrate

‡ MART stands for Maintenance and Reliever Therapy. Combination of ICS and LABA in a single inhaler prescribed as a twice a day maintenance treatment but can be used when required for symptoms relief. Maximum doses apply – see BNF

$ Cost based on 100 actuations of 200 micrograms

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Registered Address: PCRS-UK, Unit 2 Warwick House, Kingsbury Road, Curdworth, Warwicks, B76 9EE
Telephone: +44 (0)1675 477600 **Facsimile**: +44 (0)121 336 1914 **Websites**: http://www.pcrs-uk.org, http://www.thepcrj.com **Email**: info@pcrs-uk.org