






hRespiratory Update

Drug	Indication	Benefits	Limitations	Price (30 days)	Local position
Acclidinium Bromide (Eklira Genuair®▼) 	Inhaled dry powder long-acting muscarinic antagonist (LAMA), for maintenance of COPD. Dose: 375 mcg (≅322 mcg acclidinium/inhalation) 1 Inhalation BD.	The Inhaler device is simple to use, multi dose, breath actuated and has an audible click and colour change window to confirm correct inhalation. Effects on lung function and patient-reported outcomes are broadly comparable with those for tiotropium. ^{1,2} Twice daily use may result in more sustained night-time bronchodilation than morning use of tiotropium, dry mouth and other antimuscarinic effects may be less common. ^{3,4}	Although comparable, there is no robust evidence of any advantage over tiotropium. Acclidinium has not been compared to other long-acting bronchodilators in appropriately powered trials. Longer-term safety data and evidence for effects on exacerbations are limited.	£28.60	Approved as Green on the Barnsley Joint Formulary. To be used 2 nd line after Tiotropium if tiotropium is ineffective, not tolerated or the patient is unable to use the device.
Glycopyrronium Bromide (Seebri Breezhaler®▼) 	Inhaled dry powder long-acting muscarinic antagonist (LAMA), for maintenance of COPD. Dose: 50 mcg (≅44 mcg glycopyrronium/inhalation). 1 Inhalation OD.	Short term studies have shown glycopyrronium to have similar efficacy to tiotropium, and may provide more rapid bronchodilation. ^{5,6}	There is currently no robust evidence of any significant advantage over tiotropium. Like tiotropium, the glycopyrronium capsule must be removed from its blister pack, placed into the device and then pierced before inhalation can take place. This may be difficult for patients with dexterity issues.	£27.50	Grey on the Barnsley Joint Formulary.
Indacaterol (Onbrez Breezhaler®) 	Inhaled dry powder long-acting Beta2 agonist (LABA), for maintenance of COPD. Not indicated for the relief of acute bronchospasm. Dose: 150 – 300mcg OD	May provide an alternative treatment option in patients with moderate to severe COPD, who may be better suited to a once-daily dose, compared to the twice-daily dosing required by other LABAs.	Efficacy of indacaterol is clinically similar to that of formoterol. ⁷ Like tiotropium, the indacaterol capsule must be removed from blister pack, placed in device and pierced before inhalation can take place. Difficult for patients with dexterity issues.	£29.26	Approved as Green on the Barnsley Joint Formulary. Already included on the Barnsley COPD algorithm.

<p>Fluticasone propionate /Formoterol (Flutiform®▼)</p> 	<p>Inhaled combination MDI (ICS/LABA) Fluticasone propionate/Formoterol fumarate. Asthma 12yrs + Dose: 50/5mcg increasing to 125/5mcg. 2 puffs BD Asthma 18yrs + Dose: 250/10 mcg. 2 puffs BD.</p>	<p>Found to be of similar efficacy to Seretide in one fully published open labelled 12-week trial in 202 adults.¹³ Has a faster onset of action than Seretide.¹³</p>	<p>Current trial data shows no significant clinical benefit compared to other ICS/LABA combinations. There are currently no published studies in people with asthma who are under 18 years.</p>	<p>50/5mcg = £18.00 125/5mcg = £29.26 250/10mcg = £45.56</p>	<p>Approved as Green on the Barnsley Joint Formulary.</p>
<p>Fluticasone furoate/Vilanterol (Relvar Ellipta®▼)</p> 	<p>Inhaled dry powder combination inhaled corticosteroid (ICS) Fluticasone furoate/Vilanterol(LABA) Asthma 12yrs +: Dose – 92/22mcg 1 inhalation OD, increasing to 184/22mcg 1 inhalation OD. COPD Dose – 92/22mcg 1 inhalation OD.</p>	<p>Once daily dosing may be of benefit to some patients. Limited data suggest that fluticasone furoate/vilanterol 92/22 OD has comparable efficacy to Seretide 250/50 BD.¹⁰</p>	<p>The sparse comparative data does not suggest that there are likely to be important differences in efficacy compared to other combination products.¹¹ No safety data beyond 52 weeks. Relvar 184/22mcg (≡ 500mcg BD Fluticasone propionate) is not indicated for patients with COPD as there is no additional benefit compared to the 92/22mcg dose and there is a potential increased risk of pneumonia and systemic corticosteroid-related adverse reactions.¹²</p>	<p>92/22mcg = £27.80 184/22mcg = £38.87</p>	<p>Grey</p>
<p>1) FDA. Clinical Briefing Document: NDA 202-450 Acclidinium bromide: 2012 2) Karner C et al. Tiotropium versus placebo for chronic obstructive pulmonary disease. Cochrane Database Syst Rev 2012;7:CD009285. 3) Chrystyn H et al. The Genuair® inhaler: a novel, multidose dry powder inhaler. Int J Clin Pract 2012;66:309-17. 4) Fuhr R et al. Efficacy of aclidinium bromide 400 mug twice daily compared with placebo and tiotropium in patients with moderate to severe COPD. Chest 2012;141:745-52. 5) D'Urzo A et al. Efficacy and safety of once-daily NVA237 in patients with moderate-to-sever COPD: the GLOW1 trial. Respiratory Research 2011;12 6) Kerwin E et al. Efficacy and safety of NVA237 versus placebo and tiotropium in patients with moderate-to-severe COPD over 52-weeks: The GLOW2 study. ERJ Express 2012 7) Dahl R et al. Efficacy of a new once-daily long-acting inhaled beta2-agonist indacaterol versus twice-daily formoterol in COPD. Thorax;65:473-9 8) EMA. EPAR Document: EMA/CHMP/472738/2013 9) NICE. Evidence summary: new medicine ESMN33 10) Woodcock A et al. Efficacy and safety of fluticasone furoate/vilanterol compared with fluticasone propionate/salmeterol combination in adult and adolescent patients with persistent asthma: A randomized trial. Chest 2013;144:1222-29. 11) Prescription Cost Analysis - England 2012: Health and Social Care Information Centre. 12) SPC Relvar Ellipta 92 micrograms/22 micrograms inhalation powder. 13) Bodzenta-Lukaszyk A, Dymek A, McAulay K et al. Fluticasone/formoterol combination therapy is as effective as fluticasone/salmeterol in the treatment of asthma, but has a more rapid onset of action: an open label randomized study. BMC Pulm Med 2011;11:28</p>					