

Medicines Update

Indacaterol (Onbrez®)

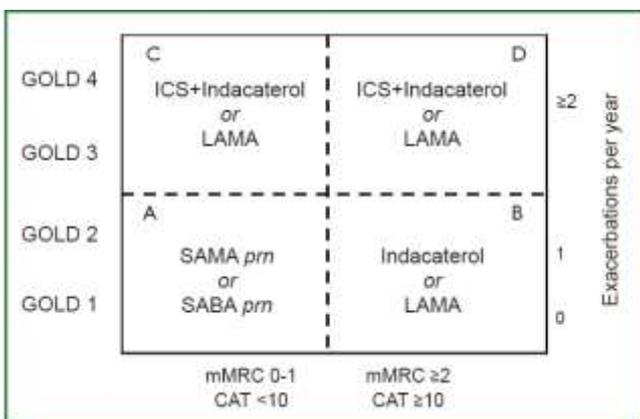
Long acting muscarinic antagonists (LAMA) and long acting beta agonists (LABA) are the recommended first-line treatment for many patients with COPD. Until now the only LABA's available have required twice daily dosing in combination with ICS in management of asthma or for COPD (mono or duo therapy). Indacaterol is a once daily inhaled LABA **indicated for COPD** – it is not indicated for the relief of acute bronchospasm or asthma. Advantages of indacaterol are that it only needs to be used once a day and does not require special authority.

Key Message: once daily beta agonist for COPD; fully funded; no Special Authority



- LABA with **once daily** dosing (150mcg or 300mcg) provides symptomatic relief in COPD with rapid-onset bronchodilation.
- Inhaled indacaterol provides similar symptomatic improvement and greater improvement in lung function compared with salmeterol and eformoterol in COPD.
- It is comparable to tiotropium in terms of safety and efficacy (non-inferior).
- Indicated for mild to severe COPD (FEV1 between 30-80% of predicted).

What is the place of indacaterol in practice?



- Can be used as monotherapy in the maintenance treatment of COPD.
- May be used in combination with LAMA if symptoms not controlled by monotherapy.
- If repeated exacerbations then can combine ICS with indacaterol.
- Triple therapy recommended for those still experiencing exacerbations or symptoms.

How effective is indacaterol?

Indacaterol and tiotropium had **similar efficacy in terms of FEV1** but indacaterol had statistically **better results in terms of dyspnoea, use of prn salbutamol and health status**. Percentage of days with **no rescue medication** were significantly higher in the indacaterol groups than the active comparators.

Precautions

In patients with comorbid asthma or unclear diagnosis monotherapy with LABA is **contraindicated** as it may increase cardiovascular mortality. **Caution in cardiovascular disease** as indacaterol can increase pulse rate, blood pressure and cardiovascular symptoms (eg chest pain). Side effects are atrial fibrillation, nasopharyngitis, headache, insomnia, tachycardia and muscle cramps. May potentiate the effects of drugs known to **prolong the QT** and has an increased risk of **hypokalaemia** with other medicines eg theophylline, thiazide diuretics, corticosteroids.

Glycopyrronium (Seebri®)

Key Messages: once daily LAMA for COPD; interchangeable Special Authority with tiotropium

Long acting bronchodilators are the mainstay of treatment of patients with symptomatic COPD. LAMA's are one option and prescribers can now choose between tiotropium and glycopyrronium bromide. Glycopyrronium has a more rapid onset of action than tiotropium and this may improve adherence due to prompt symptom relief. Glycopyrronium injection has been used off-license in hospitals via nebuliser for severe COPD and now has been formulated as an inhaler.



- LAMA with safety profile and symptom control similar to those of tiotropium. Dose is 50mcg inhaled once daily.
- Onset of action within 5 minutes after inhalation and duration of effect is sustained over 24 hours.
- Special authority form is now for Long-Acting Muscarinic Antagonists and is for either tiotropium or glycopyrronium.
- Acute angle-closure crisis and urinary retention are known adverse effects.

Indacaterol/Glycopyrronium (Ultibro®)

Key Messages: once daily LABA/LAMA combination product for COPD

- Currently not registered or funded but may be available in the future.
- Has shown significant improvement in lung function and patient-reported outcomes including rescue medication use, breathlessness, reduced rates of exacerbations and improved health-related quality of life.
- **Not to be used** in asthma or mixed airway disease.
- A short acting beta agonist eg salbutamol should be used for symptom relief prn

References

1. Cazzola M, Bardaro F, Stirpe E. The role of indacaterol for chronic obstructive pulmonary disease (COPD). J Thorac Dis 2013;5(4):559-566
2. Indacaterol (Onbrez) for chronic obstructive pulmonary disease. NPS Radar December 2011
3. Cazzola M, Page C. Long-acting bronchodilators in COPD: where are we now and where are we going? Breathe June 1 2014 vol 10 no 2 110-120
4. Glycopyrronium bromide (Seebri) for chronic obstructive pulmonary disease. NPS Radar April 2014
5. Indacaterol with glycopyrronium (Ultibro Breezhaler) for chronic obstructive pulmonary disease. NPS Radar December 2014

For further prescribing information go to The New Zealand National Formulary www.nzf.org.nz