

# National Essential Medicines List

## Tertiary/Quaternary Medication Review Process

### Summary

---

Date: July 2017

**Medication:** Long acting muscarinic antagonists (LAMA) e.g. Tiotropium or Glycopyrronium

**Indication:** Chronic Obstructive Pulmonary Disease (COPD) with following criteria:

- GOLD D patients: (FEV1 < 50% or frequently exacerbating) in combination with a LABA/ICS
- GOLD D patients: where the risks of Pneumonia from ICS are high (in combination with a LABA)
- GOLD B-D patients: as an alternative to LABA, and where ICS are not justified (i.e. exacerbations  $\leq 2$  /year)

**Context:**

Long Acting Muscarinic Antagonists (LAMA) such as tiotropium and glycopyrronium are the most widely recommended and used treatments for COPD worldwide and are considered first line therapy for all grades of severity apart from the mildest disease (GOLD 2016). They have been shown to improve lung function, quality of life, reduce exacerbations as well as hospitalisation and duration of hospital stay.

**Evidence:**

- Tiotropium has been shown to be more effective than LABAs as a group in preventing COPD exacerbations and disease-related hospitalisations.
- Small mean improvement in health-related quality of life and FEV1 for participants on a combination of tiotropium and LABA compared to either agent alone. In addition, adding tiotropium to LABA reduced exacerbations, although adding LABA to tiotropium did not.
- Indacaterol–glycopyrronium was more effective than salmeterol–fluticasone in preventing COPD exacerbations in patients with a history of exacerbation during the previous year.

**Costs:**

Both tiotropium and glycopyrronium are currently on the market. It is recommended that the most cost effective option be procured.

**Summary:**

There is evidence in terms of reduction of exacerbations and hospitalisations, to support the use of LAMAs in the management of COPD at tertiary level. An additional agent is required in cases where COPD patients are not responding to available agents and in cases where ICS are not appropriate. As a result there is merit in including a LAMA in the armamentarium of treatment approaches within the South African context.

**Recommendation:**

LAMAs are **not recommended** to be included on the Essential Medicines List for the maintenance treatment of COPD in the above outlined indication. Although there is benefit to this class of medicines, these agents cannot be considered until pricing is similar to that of LABA/ICS.

**Review indicator:** Price similar to LABA/ICS