**Title:** Long-term safety of twice-daily aclidinium bromide in COPD patients: A one-year, double-blind study

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**Body:**

**INTRODUCTION:** Aclidinium bromide is a novel, long-acting muscarinic antagonist currently under investigation for the maintenance treatment of COPD. Safety data from a long-term efficacy and safety trial of twice-daily (BID) aclidinium are presented here.

**METHODS:** In this 52-week study, moderate-to-severe COPD patients were randomized (1:1) to receive aclidinium 200 µg or 400 µg BID. Safety was assessed via adverse events (AEs), vital signs, and 12-lead ECG.

**RESULTS:** A total of 605 patients were randomized, and 602 (99.5%) were included in the safety population.

- Postbronchodilator FEV₁ and percent predicted at screening were (mean ±SD) 1.55 ±0.54 L and 52.3±13.2 L.
- The incidence of AEs was similar across the aclidinium 200 µg and 400 µg groups and most were mild or moderate.
- The most common AE and most frequently reported AE leading to discontinuation was COPD exacerbation, with a similar percentage of patients between groups who discontinued due to exacerbations [200 µg, 9 (2.9%); 400 µg, 8 (2.7%)].
- The incidence of typically expected anticholinergic AEs was low and similar between groups (e.g. dry mouth: 200 µg, 1.3%; 400 µg, 2.7%; constipation: 200 µg, 2.9%; 400 µg, 1.7%).
- Cardiac and cerebrovascular AEs did not occur in a dose-related manner.
- The 200 µg and 400 µg groups had similar incidences of serious AEs, with values [n (%)] of 29 (9.3) and 29 (10.0), respectively.
- One patient in each treatment group died during the study (200 µg, biliary sepsis; 400 µg, subarachnoid hemorrhage), but neither death was deemed to be related to treatment.

**CONCLUSIONS:** Twice-daily aclidinium 200 µg and 400 µg were safe and well tolerated over 52 weeks with a similar safety profile for both doses.