Reviewer’s report

**Title:** Comparison of resource use by COPD patients on inhaled therapies with long-acting bronchodilators: a database study

**Version:** 3  **Date:** 28 July 2011

**Reviewer:** Prakash Navaratnam

Reviewer’s report:

Major Compulsory Revisions:
1. More details on the propensity score matching process is needed. A list of the matching variables would be helpful to the reader to better understand the quality of the matching. It is unclear to what extent pre-index comorbidities were included in the propensity matching process (e.g. whether a composite algorithm such as the Charlson or Elixhauser Comorbidity Indices was used or certain specific confounding conditions were included). Additionally, it was not clear if pre-index adherence was taken into account in the propensity score matching process.

2. Additional information of the statistical results would be important. There are no details on the results of the statistical analyses (GEE model, etc) that were conducted (covariates in the modeling, regression coefficients, etc) except for the test for significance. This information will be helpful to the reader.

Minor Essential Revisions:
1. There were a few instances where the term 'along' was used instead of 'a long'. Please correct this.

Discretionary revisions:
1. Forcing a 1:1:1 propensity match may have been too aggressive given the small number of LABA and LAMA patients. A different propensity match or the use of other matching strategies may have been more optimal.

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I have worked and continue to work with Novartis (sponsor of this study) on a number of projects. However, none of these projects were in the respiratory area.