Reviewer’s report

Title: Indacaterol improves lung hyperinflation and physical activity in patients with moderate chronic obstructive pulmonary disease - a randomized, multicenter, double-blind, placebo-controlled study

Version: 2
Date: 24 August 2014

Reviewer: James Donohue

Reviewer’s report:

This is an interesting study of Indacaterol 150mcg and tiotropium 18mcg (open label) and placebo on hyperinflation and physical activity. The study was well conducted by expert investigators. The duration of each crossover period of 21 days, the appropriate dosing of indacaterol at 150 and the use of the armband to test physical activity with the lung function data are novel. The hierarchial statistical methods is very good to answer these questions.

Major compulsory Revisions: none

minor none

discretionary revisions: 1) It might be helpful to discuss the MCID for IC and the arm band mentioning that while no definite standards are established, these results are robust. Some consider 100mls in IC the mcid and there have been discussions on the increased activity time and steps but no mention of a standard. if you have any information on mcid with these tests they might be helpful for readers. Also you report both Peak and trough IC in the figures while many studies do not differentiate.

2) You might mention that tiotropium open label is standard and the results generally are the same as when placebo or blinded drug is given (KMBeeh RESPIR Research 2012) line 24 on page 13 in your report.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I have served as a ad hoc consultant to both Novartis and BI but have no financial competing interests at present. I have spoken at symposia such as ERS for both and received travel expenses and honoraria.

Stocks none

patents no
no nonfinancial competing interests