Reviewer's report

Title: Determinants of Arterial Stiffness in COPD

Version: 1 Date: 15 September 2013

Reviewer: Don Poldermans

Reviewer's report:

The authors have addressed the additional value of arterial stiffness to stratify patients with COPD for atherosclerotic disease. As expected there is a clear relation ship. The test might be extremely useful for those patients at intermediate risk. So, for patients with a intermediate or low risk with respect to the COPD severity. The addition of the test might improve their risk stratification. Perhaps also fir the high risk patient with respect to the COPD prognosis. This would indicate to divide the population into three groups, low-intermediate- and high risk. First for the COPD risk and than add the variables into the model taking for instance the coronary calcium score as a reference. This might skip the use of the coronary calcium score for treatment and prognosis.

In addition additional aspect might be discussed:

1: what was the impact of smoking duration?

2, the effect of lipids and lipid lowering therapy. The treatment targets for lipids for instance using LDL-C levels or even better the change after treatment.

3. what was the impact of diabetes, and diabetes complication such as nephropathy?

4. what was the impact of ACE-I on the stiffness measured?

5. did the pulse pressure added information for the stiffness. In the same vein was a difference between the left and right arm observed?

6. what was the impact on prognosis, for instance cardiovascular disease or COPD outcome?

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 declare that I have no competing interests'