Reviewer’s report

Title: Tiotropium’s cost-effectiveness for the treatment of COPD: a cost-utility analysis under real-world conditions.

Version: 2 Date: 16 March 2010

Reviewer: Huib Kerstjens

Reviewer’s report:

In general, I think the authors have very thoroughly and seriously addressed the comments, and have made many valuable additions to the text.

I think the above also applies to the responses to reviewer 2, who unfortunately you were not able to obtain an analysis of the responses from. I am least sure (not capable) of judging the answer to major point 5, but think the difference between the two points is not pivotal: in both cases, the incremental cost-effectiveness ratio is quite unfavourable.

Having said that to my opinion the response are quite adequate, I also have a more general remark to make.

I believe the results might well spark quite some controversy and correspondence. Basically, the authors apply the results obtained from a very large RCT (UPLIFT, n=6000) to an extremely large data-set (n=50,000) that however is totally uncontrolled. Nothing is known about any relevant characteristics of the group such as basic severity (GOLD stage). There was most probably not even a verification of the diagnosis of COPD (tiotropium is used off label also for asthma, and probably also for chronic bronchitis without COPD).

In other words, the use of extremely large, real world data should be balanced against the scientific soundness of the exercise. I think that it would be useful to the pulmonary field to have a discussion on this and this manuscript might spark it. But BMC pulmonary will receive letters! Perhaps an editorial could even fuel it and indicate that this critical consideration was taken into account.

Declaration of competing interests:

Finally, it is important to remark that I have served as consultant to Boehringer/Pfizer in the past, and am currently principal investigator of a study sponsored by Boehringer investigating tiotropium in asthma.