Reviewer's report

Title: Vitamin D in health and disease: Current perspectives

Version: 2 Date: 21 April 2010

Reviewer: Olivier Bruyere

Reviewer's report:

This is a disappointing review. All my previous comments have not been taken into account:

- The search methodology has not been included. This is not sufficient to state that “this systematic approach covers meta-analysis listed in PubMed during the past two decades”. Moreover, this is false as a lot of clinical trials have also been included in this review.

- The selections of papers are still not explained. Once again, this is not sufficient to state that “in a somewhat unorthodox approach some key studies will be discussed”.

- I do not believe that adding meta-analysis in a table is a critical analysis of the literature (see my previous comments).

- The authors state in their cover letter that “a selection on doses for infants has been added”. To the best of my knowledge, only one sentence has been added without any exhaustive explanation, as it was previously suggested.

- As stated in my previous comments, statement such as “increasing vitamin D level is vital in the management of several diseases” should be deleted or must have appropriate references. I do not believe that adding meta-analysis in table 3 is appropriate to answer my comment.

- The section on muscle weakness only deals with fall prevention. Once again, adding meta-analysis in table 3 is not sufficient to answer this.

- I would suggest, as in my previous comments, to include meta-analysis instead of individual randomized controlled trial, when possible.

- I still believe that a lot of sentences need references. I understand that there are 179 references (one of the longest list in the target journal). However, and as previously suggested, I recommend to reduce the number of references regarding the definition or the physiopathology of diseases.

- As previously suggested, across the whole manuscript, a clear definition of doses and duration of vitamin D supplementation or exposure needs to be exhaustively reported. Once again, table 3 is not sufficient to answer this comment.

In conclusion, this manuscript has not been improved. I would even believe that it is even worst as table 3 does not add a lot of interesting information as important information (e.g. relative risk for the outcome, search methodology) is missing.
and that a critical discussion has not been performed.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

For this particular manuscript, I declare that I have no competing interests. However, below is my general competing interests. Grant research, consulting fees, lecture fees or reimbursement for attending meetings: Servier, GlaxoSmithKline, MSD, Theramex, Galapagos, Rottapharm, IBSA, Wyeth.