Reviewer's report

Title: The global pediatric antiretroviral market: analyses of product availability and utilization reveal challenges for development of pediatric formulations and HIV/AIDS treatment in children

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Reviewer: Daniele Dionisio

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DISCRETIONARY REVISION

This is a commendable paper with regard to deep analysis level on a paramount subject. The authors are to be congratulated for their clarity and exhaustiveness, which also includes up-to-date figures, tables, and reference list. The section on study limits is well articulated and described.

The background section, though well documented, lacks concise information on field improvements hopefully arising from the expected enforcement of UNITAID patent pool plan. A short comment on this would be useful while adding to the outstanding results already achieved by UNITAID-CHAI coalition (as the authors correctly report: see fixed-dose generic combinations procurement).

-Page 13 of the draft: the authors correctly state that tenofovir use in infants and children is not recommended. However, at page 8, they state “……appropriate pediatric formulations are still lacking for a range of important ARVs including efavirenz, tenofovir,……”. I think that tenofovir mention should be eliminated for reasons of clarity.

-Likewise, a bit more information should be welcome on D4T risks, so as to explain why only 6 mg D4T is now recommended by WHO for pediatric FDC formulations.

-Again, concise information should be given on the recent approval of heat-stable 100 mg tablet version of Abbott ritonavir by both the European Medicines Agency (EMEA) and the US Food and Drug Administration: this move will expectedly add further FDC options to the field.

-With regard to draft page 18: “…This study cannot explain the reasons for low uptake of improved pediatric formulations outside of UNITAID…..”, I would like to remind that a recent work by Eloa Pinheiro let us notice that the 2007 market for FDC paediatric ARVs was already substantial and expected to grow with improved and scaled up diagnosis and monitoring of children. The results of her analysis provided an argument for immediate increase of production and development of FDC ARVs for children (CURRENT HIV RESEARCH, 2007 Volume 5, No. 2, March issue:155-187 http://www.ingentaconnect.com/content/ben/chr/2007/00000005/00000002/art00002
This paper should be added to the reference list because its value as multipronged, multinational collaborative effort in the field.

- With regard to draft page 18: “…uptake of new pediatric FDCs in GFATM countries without UNITAID funding is remarkably low…” I would like to report a 2007 GFATM presentation (Luca Li Bassi: power point presentation at the 1ST CLIA INTERNATIONAL WORKSHOP ACCESS TO ANTIRETROVIRAL DRUGS FOR CHILDREN WITH HIV/AIDS IN THE LOW-INCOME COUNTRIES - ROME, ITALY 29-30 NOVEMBER 2007: power-point attached) stating that “…Currently, only around 4% of the reported Global Fund expenditure on ARVs represent paediatric-specific formulations….This low percentage reflects the scant and poorly appropriate applications made by the Countries, wherein the FDCs are still very rare…”

Clearly, there is a need to increase the number of applications with a paediatric treatment component. All the more important, there is a need to strengthen the quality of these applications, with appropriate FDCs for children always to be included. Relevant food for thought (perhaps to be incorporated in the paper Discussion?) could include the suggestions below:

- Expectedly, the Global Fund would promptly increase the expenditure on paediatric ARVs if the Countries made adequate applications.
- May be, the Countries should directly be requested by the Global Fund to always include proper volumes of suitable paediatric ARVs (mainly FDCs) in their HIV/AIDS program applications.

- Eventually, though the authors are certainly aware, new data on pediatric ARVs availability and procurement were just released by Medecins Sans Frontieres (July 2010). Untangling the web of antiretroviral price reductions: 13th edition. Campaign for Access to Essential Medicines, available: www.msfaccess.org

**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'