**Reviewer's report**

**Title:** Identification of a Novel Mutation in MMACHC and Development of a New Prenatal Diagnostic Technique Using Genetic Sequencing

**Version:** 1  
**Date:** 27 November 2014

**Reviewer:** Raquel Yahyaoui

**Reviewer's report:**

This study investigates the feasibility of genetic-sequencing-based prenatal diagnosis for combined MMA and HCY, cblC type. The authors carried out a prenatal diagnosis study in 3 families. They have found a novel mutation (G155R) which may be a pathogenic mutation.

Major comments

- English has to be considerably improved.

Minor comments

- Change HC to HCY in all the document
- Include cblJ (MIM 603214) in line 50 and change to 9 subtypes.
- Change GC-detection to organic acid levels or MMA levels and define the kind of specimen used (urine or plasma), in all the document.
- Line 146. Change serum homocysteine detection to serum total homocysteine quantification. All this sentence is badly written. Please specify the methodology used for that measurements. Correct this matter also in line 188.
- Line 169. Provide more information of the results of these analysis if possible.
- Lines 189-190. The last sentence is not necessary.
- Line 198. Change "to have a risk of disease" to "to have the disease"
- Line 208. Change delayed to late-onset type.
- Line 171. Change the title to "Prenatal diagnosis of MMACHC gene and follow-up"
- Lines 134-142. Specify the time in which genetic-sequencing-based prenatal diagnosis was carried out.
- Line 192. Discuss the advantages of this technique vs the biochemical prenatal diagnosis.

**Level of interest:** An article of limited interest
Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:

Not to all of the above