Reviewer's report

Title: A missense founder mutation in VLDLR is associated with Dysequilibrium Syndrome without the quadrupedal locomotion

Version: 3 Date: 19 June 2012

Reviewer: Kym Boycott

Reviewer's report:

Reviewers Comments for Revised BMC Medical Genetics Submission:
A missense founder mutation in VLDLR is associated with Dysequilibrium Syndrome without the quadrupedal locomotion

General Comments: Ali and coauthors have addressed all of the suggested areas for improvement. Some minor essential revisions remain that will improve the manuscript further.

Minor Essential Revisions

General:
1. VLDLR should be italicized throughout the manuscript when it refers to the gene, including in the title.
2. Remove # sign in front of OMIM designations throughout.
3. Check the manuscript for several instances of the use of the term ‘affected’ that is not followed by individual or person and add the latter.
4. To be consistent Family should always be capitalized.
5. Growth parameters should be referred to as 10th centile vs 10%.
6. ‘Figure’ should always be capitalized in the text.

Title Page:
7. Title: ‘…without the quadrupedal…’ should be ‘without quadrupedal…’.
8. ‘Correspondance authors’ should read ‘Corresponding author’.

Abstract
9. ‘We combined SNP mapping with massive parallel exonic sequencing (and candidate gene analysis)….‘, bracket phrase should be included as this approach was also used.

Background

Materials and Methods
11. DNA methodologies: the word ‘candidate’ has a space in it.

Results:
13. Last paragraph of Family 2, last sentence, ‘consistent, strikingly similar’ – just use one of the terms.

Discussion and Conclusion:
14. End of paragraph 1, remove ‘this’ …..in (this) Arabian peninsula.
16. Paragraph 2, second sentence should read: ‘Affected individuals demonstrate significant truncal ataxia and either learn to walk…..’
17. Paragraph 2, forth sentence: ‘….complex interaction between environmental actors and the cerebellar malformation and not the type of causative mutation…..’
18. Add ‘inferior’ to ‘…portion of the cerebellar vermis…. in fifth sentence.
19. Last paragraph, last sentence should read: ‘The affected individuals in our two families……, suggesting that it should be possible to provide targeted testing for this mutation in patients……’
20. Conclusions: need comma after ‘VLDLR type, and….’

Figure Legends:
21. Define gray symbol as possibly affected status.

**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:**
I declare that I have no competing interests.