Reviewer’s report

Title: A very early diagnosis of Alström syndrome by next generation sequencing

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Reviewer's report:

The paper describes an interesting case, since through the NGS analysis the authors reached the early diagnosis of AS in a girl of only 2 years.

Nevertheless the paper cannot be accepted as it presents serious mistakes: The two mutations found in the patients are not novel: the authors did not understand that they match to c.1196_1202delCACAGGA (p.Thr399LysfsTer11; rs761292021) and to c.11310_11313delAGAG(p.Glu3771TrpfsTer18; rs747272625).

Frameshift mutations cannot be defined as mutations that produce a truncated protein, in the absence of an analysis of the protein product. This type of mutation generates a premature stop codon, which very often involves the decay of the mRNA. In the description of the NGS analysis, the authors indifferently use the terms Whole exome sequencing and target panel analysis, confusing the reader. The authors use the concept of “normal range” referring to cholesterolemia and triglyceridemia. This concept is obsolete.

The link between the identification of the mutations and the review of the clinical trials is not clear. Maybe, a review of the genetic bases of the AS would have been more useful.

Are the methods appropriate and well described? If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls? If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown? If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:

Acceptable

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