Author’s response to reviews

Title: Assessment of cellular cobalamin metabolism in Gaucher disease

Authors:

Suelen Basgalupp (suelenbasgalupp@gmail.com)
Marina Siebert (msiebert@hcpa.edu.br)
Charles Ferreira (neurocientista@hotmail.com)
Sidney Behringer (sidney.behringer@uniklinik-freiburg.de)
Ute Spiekerkoetter (ute.spiekerkoetter@uniklinik-freiburg.de)
Luciana Hannibal (luciana.hannibal@uniklinik-freiburg.de)
Ida Vanessa Schwartz (ischwartz@hcpa.edu.br)

Version: 2 Date: 29 Dec 2019

Author’s response to reviews:

December 29th, 2019.

To
Editor-in-Chief
BMC Medical Genetics

Dear Dr. Matteo Pasini,

Thank you for considering our manuscript entitled ‘Assessment of cellular cobalamin metabolism in Gaucher disease’ for publication in the BMC Medical Genetics.

We are unable to generate the intracellular cobalamin profiles with radioactive vitamin B12 and as we explained in our previous revision, we are preparing a separate full manuscript addressing plasma biomarkers of vitamin B12 metabolism in a cohort of patients with Gaucher disease.

Therefore, as requested by the Editorial and in consideration of the important remarks of reviewer 1, we have now reworded the Abstract to tone down our conclusions, as described below in Response to Reviewers.

We are grateful to the reviewers and to the editorial team for their time evaluating our manuscript and for providing constructive comments.
Sincerely,

Suelen Porto Basgalupp

Ida V. D. Schwartz

Luciana Hannibal (corresponding author)

Medical Center
University of Freiburg
Mathildenstr. 1, Freiburg 79106, Germany
E-mail – luciana.hannibal@uniklinik-freiburg.de

Reviewer reports:

Editor Comments:

We appreciate the response provided to the comments of Reviewer #1, especially in regards to further analyses that might be included in further investigations.

As we also agree these will support the study, we kindly ask you to tone down the conclusions drawn, especially in the Abstract - in line with what is stated in the main article Conclusions.

Response: Thank you for the constructive feedback. We fully agree and have now toned down the conclusions section in the Abstract as follows:

Previous conclusions:

‘Our results indicate that cobalamin transport and cellular processing pathways are overall protected from lysosomal storage damage in GD cells. To our knowledge, this is the first study to investigate cellular metabolism of vitamin B12 in Gaucher disease.’

Revised conclusions:

‘Our results indicate that cobalamin transport and cellular processing pathways are overall protected from lysosomal storage damage in GD fibroblasts. Extending these studies to hepatocytes, macrophages and plasma will shed light on cell- and compartment-specific vitamin B12 metabolism in Gaucher disease.’
Reviewer reports:

Jean-Louis Gueant (Reviewer 1): The author have addressed satisfactorily the first comment of my previous review. The incorporation tests of radiolabelled vitamin B12 and data on markers of plasma transport of the GD cases would be helpful to address the aim of the study.

Response: Thank you for the constructive feedback. Unfortunately, we are unable to perform the requested experiments with radioactive vitamin B12 in our laboratories. Data on plasma markers of vitamin B12 status in GD cases will be published soon in a separate manuscript. In consideration of these two important points, we have now toned down and reworded the conclusions in the abstract to clearly illustrate these necessary further investigations.

Helen Michelakakis (Reviewer 2): The authors have adequately addressed all the comments made.

Response: Thank you for the positive feedback and support of our work.