Scientific Editing Report

DE2300c5: a potential therapeutic treatment for hyponatremia

SUMMARY

A prolonged decrease in serum sodium concentration can cause chronic hyponatremia, a condition that frequently occurs in elderly people. In spite of a reputation for being asymptomatic, this condition is increasingly recognized as being potentially harmful. This paper proposes the inhibition of 11β-hydroxyysteroid dehydrogenase type 2 (11β-HSD2) as a novel means of treating chronic hyponatremia. DE2300c5 is identified as a potent and specific inhibitor of 11β-HSD2, and a marked increase in intracellular sodium in renal cortical cells treated with this agent is described.

Although this study seems to address an important issue, in our opinion, the novel aspects of this study may not be entirely clear to the reader. Thus, we recommend clearly identifying the specific novel aspects of the study in the manuscript. Our editing and suggestions highlight areas of the paper that we think could be revised to better convey the advances achieved in the study; such revisions might include providing more detailed background to establish the current state of the field and emphasizing key results to help readers to understand the novelty and potential impact of your work.

Guide to the Scientific Edit

- **Throughout**: While we found the manuscript to be generally well organized into clear, logical sections and subsections, we found the narrative a bit difficult to follow at times, particularly in highly detailed sections such as the Results. Ideas are often introduced suddenly, and their relevance to the surrounding text is unclear. It is important to connect ideas together in a cohesive flow, as this helps readers understand key points of the argumentation, such as the logic and rationale underpinning key experimental choices. We have left comments with specific suggestions to add or develop introductory and concluding phrases and sentences in paragraphs throughout the manuscript to improve clarity and flow.

- **Title**: While the Title contains some key words required to understand the key outcomes of this work, we recommend omitting the name of the agent – this term will not be meaningful to your target audience until they have already read the paper. Instead, we recommend emphasizing the scientific findings and the action of the agent, as this seems likely to draw the interest of a wider range of scientists. Please see the edited manuscript for a possible alternative title.

- **Abstract**: The Abstract is generally well structured, but we recommend more specifically conveying the rationale behind the study. For example, this section would benefit from the inclusion of background information on hyponatremia (causes, symptoms, underlying biology, treatment options) to help establish the main research gap addressed by the study. We have left comments where we think this information could be added.

- **Introduction**: Similar to the Abstract, this section appears to start from a rather focused view of the study, making it difficult to understand the broader context of the field with respect to hyponatremia. We recommend beginning with more basic information about the field and motivation for the work. Once readers are given this context, they will be ready to read about specific treatment options.

[Rest of sample report deleted. Typical report length is 2-3 pages.]