Review of: "Targeting Alzheimer's disease hallmarks with the Nrf2 activator Isoeugenol"

Ivan Sanchis[1]

1 Universidad Nacional del Littoral

Potential competing interests: No potential competing interests to declare.

This work by Silva and co-workers is a commendable and well-conducted study.

I have a few recommendations regarding the analysis of Aβ40/Aβ42 inhibition:

1. Ensure consistency in referring to Aβ40 and Aβ42, whether using subscript or not (Aβ40 and Aβ42), as both forms are present in various sections of the text.

2. To enhance reader comprehension, consider including a concise explanation in either the introduction or discussion section about the functions and distinctions between Aβ40 and Aβ42. This is crucial for understanding their varying toxicity and aggregation properties. The absence of this clarification may leave readers without a clear understanding of why experiments are conducted on both isoforms, hindering the interpretation of results. For example, Aβ42 has a higher propensity for aggregation and is the primary component of amyloid plaques, making it a key target for aggregation inhibition. Isoeugenol demonstrated a reduction in the levels of only Aβ40 in N2A-APPswe cells, while affecting both Aβ40 and Aβ42 in mice. Providing this background information will assist readers in interpreting the obtained results.

I also suggest enhancing the text's readability by making it more concise, particularly in the Abstract, Introduction and Discussion sections.