

OPEN PEER REVIEW REPORT 1

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Title: Pentadecapeptide BPC 157 and the central nervous system

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COMMENTS TO AUTHORS

In the present review, the authors summarize the current knowledge on the biological effects of Pentadecapeptide BPC 157 and focusing on its effect on the central nervous system.

The review is interesting, it is well written, the references are recent, figures help to understand the main concepts in the text. Nevertheless, some content gaps must be filled in to get a complete and current review of the topic.

1 - There is little information on the mechanism of action and the description below needs to be clearer: "mRNA expression studies at 1 h, and 24 h provided significantly elevated (Egr1, Akt1, Kras, Src, Foxo, Srf, Vegfr2, Nos3, and Nos1) and decreased (Nos2, Nfkb) gene expression (Mapk1 not activated), indicative of the potential mechanism of action of BPC 157 (Vukojevic et al., 2020)".

This sentence is not sufficient clear and need to be rephrased.

2- The stable gastric pentadecapeptide BPC 157 has pleiotropic beneficial effects in the central nervous system. Authors should summarize these effects and assessed study models in a table or figure to emphasize its multiple potential.