RETRACTION NOTE

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Retraction Note: Preservation of dendritic spine morphology and postsynaptic signaling markers after treatment with solid lipid curcumin particles in the 5xFAD mouse model of Alzheimer's amyloidosis

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Retraction Note: Alz Res Ther 13, 37 (2021) https://doi.org/10.1186/s13195-021-00769-9

The Editors-in-Chief have retracted this article at the authors' request. After publication, concerns were raised regarding a number of cases of image overlap within the Figures, which the authors addressed by a Correction [1]. However, subsequent concerns have been raised about further image similarities within the article, as well as with previous studies. Specifically:

The original article can be found online at https://doi.org/10.1186/s13195-021-00769-9

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- Fig. 3b 5xFAD + Veh CAI 12-month-old group image appears highly similar to an image representing the same group in [2].
- In Fig. 3B, 5xFAD + SCLP Cortex and Entorhinal cortex images appear to originate from the same sample.
- In Fig. 3E, the beta-tubulin blots presented for the cortex 6- and 12-month-old groups appear highly similar; the beta-tubulin blot image for hippocampus in the 6-month-old group appears highly similar to that representing beta-tubulin in the 12-month-old group in Figs. 5F and 7A.
- The updated Fig. 4G 5xFAD Primary 6-month-old group image appears to overlap with Fig. 4I 5xFAD Secondary 12-month-old group.
- The top beta-tubulin blot in Fig. 6F appears highly similar to the beta-tubulin (hippocampus) blot in Fig. 7A.
- The blots in Fig. S2I appear highly similar to those in Fig. 3D of [3, now retracted].
- Fig. S5A appears highly similar to the Merged 5xFAR+SLCP (2d) image in Fig. 1B of [3, now retracted].

Despite internal data validation, the authors no longer have sufficient confidence in the findings of this study. All authors agree to this retraction.



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References

- Maiti P, Bowers Z, Bourcier-Schultz A, et al. Correction to: Preservation of dendritic spine morphology and postsynaptic signaling markers after treatment with solid lipid curcumin particles in the 5xFAD mouse model of Alzheimer's amyloidosis. Alz Res Ther. 2022;14:42. https://doi.org/10. 1186/s13195-022-00980-2.
- Maiti P, Manna J, Burch ZN, et al. Ameliorative Properties of Boronic Compounds in In Vitro and In Vivo Models of Alzheimer's Disease. Int J Mol Sci. 2020;21(18):6664. https://doi.org/10.3390/ijms21186664.
- Maiti P, Paladugu L, Dunbar GL. RETRACTED ARTICLE: Solid lipid curcumin particles provide greater anti-amyloid, anti-inflammatory and neuroprotective effects than curcumin in the 5xFAD mouse model of Alzheimer's disease. BMC Neurosci. 2018;19:7. https://doi.org/10.1186/ s12868-018-0406-3.