

BRIEF COMMUNICATION ARISING Omission of previous publications by an author should be corrected

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ARISING FROM: M. Geng et al. Cell Res. 29, 787-803 (2019)

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As a member of the Editorial Board of *Cell Research*, I am writing to provide essential information to readers of the Wang et al.¹ paper on GV971 published in the October 2019 issue of *Cell Research*.

It should be noted that the corresponding author of the paper, Dr Meiyu Geng, has previously published 12 papers on or closely related to GV971, including both in vitro and in vivo studies. Because not a single one of these papers was cited in Wang et al.,¹ they are listed here so that the readers would be aware of them. Seven papers are original research papers on GV971,^{2–8} while others are reviews or related papers.^{9–13}

To summarize, previous papers by Dr Geng have claimed that GV971 can treat Parkinson's disease in animal models,² that GV971 can directly bind to amyloid β peptides,^{4,9} that GV971 can protect neurons from amyloid β toxicity,^{4,5} that GV971 can ameliorate memory loss caused by amyloid β peptide injection into the brain,⁶ that GV971 can inhibit H₂O₂ induced neuronal death directly,³ that GV971 can attenuate scopolamine induced memory impairment in rats,³ that GV971 can act on astrocytes in vitro⁸ and that GV971 can bind to proteins inside neurons.⁷ While those effects were directly on the AB peptide, or directly on neurons or glial cells, all inside the nervous system, Wang et al.¹ now claim that GV 971 works on Alzheimer's animal model indirectly through regulating gut microbiomes and inflammation. These effects are so strikingly different with regard to drug target(s), location of effective sites and therapeutic mechanisms that they raised a potential concern of credibility. It should not escape the attention of readers that, while usually the existence of diverse targets means side effects, the authors claim all targets and effects of GV971 are helping to alleviate the Alzheimer's disease.

In my own study of the history of biomedical research, ranging from that in China which includes but is not limited to, the discovery of the antimalaria drug artemisinin and the antileukemia drug arsenic trioxide,¹⁴ to that in the rest of the world,¹⁵ I have never come across a single drug with so many targets for curing or alleviating one disease.

ADDITIONAL INFORMATION

Competing interests: The authors declare no competing interests.

REFERENCES

- 1. Wang, X. et al. Cell Res. 29, 787-803 (2019).
- Dong, X., Geng, M., Guang, H. & Xie, J. Chin. J. Mar. Drugs 9, 9–12 (2003). (in Chinese).
- 3. Fan, Y. et al. Neurosci. Lett. 374, 222-226 (2005).
- 4. Hu, J. et al. J. Pharmacol. Sci. 95, 248-255 (2004).
- 5. Jiang, R. et al. Acta Pharmacol. Sin. 34, 1585-1591 (2013).
- 6. Kong, L. et al. Yao Xue Xue Bao 40, 1105-1109 (2005). (in Chinese).
- 7. Liu, M., Nie, Q., Xin, X. & Geng, M. Chin. J. Ocenol. Limnol. 26, 394-399 (2008).
- 8. Wang, S., Li, J., Xia, W. & Geng, M. Neurol. Res. **29**, 96–102 (2007).
- 9. Geng, M. Zhongguo Yao Li Tong Xun 24, 8 (2007). (in Chinese).
- 10. Guo, X., Geng, M. & Du, D. Biochem. Genet. 43, 175-187 (2005).
- 11. Hu, J. F., Geng, M. Y. & Zhang, J. T. Zhongguo Yao Li Xue Tong Bao 19, 12–16 (2003). (in Chinese).
- 12. Nie, Q., Du, X. & Geng, M. Acta Pharmacol. Sin. 32, 545–551 (2011).
- 13. Wang, S., Li, J. & Geng, M. Sheng Li Ke Xue Jin Zhan 36, 67-70 (2005). (in Chinese).
- 14. Rao, Y., Li, R. H. & Zhang, D. Q. Sci. China Life Sci. 56, 495-502 (2013).
- 15. Rao, Y. Trends Endocrinol. Metab. 30, 331-334 (2019).

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