Molecular Medicine

RETRACTION NOTE

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Retraction Note: The α7 nicotinic acetylcholine receptor agonist GTS-21 improves bacterial clearance in mice by restoring hyperoxia-compromised macrophage function

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Retraction Note to:

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The Editors-in-Chief have retracted this article (Sitapara et al. 2014) following an investigation by the University of Liverpool. The investigation concluded that the mass spectra data contained in Fig. 4 demonstrate evidence of data manipulation, duplicate publication and figure fabrication and are thus unreliable. The mass spectra published in Fig. 4c are identical to mass-spectra published in Supplementary Fig. 2 from another publication (Wang et al. (2015)) and Fig. 3c in (Entezari et al. (2014)). In addition to this, there are inconsistencies between mass stated on the spectral peaks and the m/z (Da) value on the x-axis. There is also further possible figure duplication with some adjustment to the size of the peaks and labels. There is obvious similarity between spectra published in Fig. 4b in (Sitapara et al. 2014) and the spectra published in Fig. 3c in (Ju et al. 2014), with some alterations in peak size and mass labelling. There is further circumstantial evidence of research misconduct through inconsistencies in data produced by specific mass-spectrometers as detailed in the figure. The co-authors of the article were found by the investigation not to be complicit in any research misconduct, and they have been invited to resubmit a revised version of the manuscript for further peer review. More information on the university's investigation can be found on the university website (Further update on research misconduct investigation 2020).

All authors agree to this retraction.

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References

Entezari M, Javdan M, Antoine DJ, Morrow DM, Sitapara RA, Patel V, Wang M, Sharma L, Gorasiya S, Zur M, Wu W. Inhibition of extracellular HMGB1 attenuates hyperoxia-induced inflammatory acute lung injury. Redox Biol. 2014;2:314–22. https://doi.org/10.1016/j.redox.2014.01.013.

Ju Z, Chavan SS, Antoine DJ, Dancho M, Tsaava T, Li J, Lu B, Levine YA, Stiegler A, Tamari Y, Al-Abed Y. Sequestering HMGB1 via DNA-conjugated beads ameliorates murine colitis. PLoS ONE. 2014;9:8. https://doi.org/10.1371/journal.pone.0103992.

The original article can be found online at https://doi.org/10.2119/molmed.2013.00086.

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Further update on research misconduct investigation, 17 August 2020. https://news.liverpool.ac.uk/2020/08/17/further-update-on-research-misconduct-investigation/

Sitapara RA, Antoine DJ, Sharma L, Patel VS, Ashby CR, Gorasiya S, Yang H, Zur M, Mantell LL. The α7 nicotinic acetylcholine receptor agonist GTS-21 improves bacterial clearance in mice by restoring hyperoxia-compromised macrophage function. Mol Med. 2014;20:238–47. https://doi.org/10.2119/molmed.2013.00086.

Wang M, Gorasiya S, Antoine DJ, Sitapara RA, Wu W, Sharma L, Yang H, Ashby CR, Vasudevan D, Zur M, Thomas DD. The compromise of macrophage functions by hyperoxia is attenuated by ethacrynic acid via inhibition of NF-κB–mediated release of high-mobility group box-1. Am J Respir Cell Mol Biol. 2015;52(2):171–82. https://doi.org/10.1165/rcmb.2013-0544OC.

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