RETRACTION NOTE Open Access



Retraction Note: Heme oxygenase-1-modified bone marrow mesenchymal stem cells combined with normothermic machine perfusion to protect donation after circulatory death liver grafts

Huan Cao¹, Liu Yang^{1,2}, Bin Hou^{1,3}, Dong Sun^{1,4}, Ling Lin¹, Hong-Li Song^{2,5*} and Zhong-Yang Shen^{2,6*}

Retraction to: Stem Cell Research & Therapy (2020) 11:218 https://doi.org/10.1186/s13287-020-01736-1

The Editors-in-Chief have retracted this article. After publication, concerns were raised regarding potential image overlap within the published figures. Specifically:

- In Fig. 4A, the HBP images for the Naive and 14 d groups appear to contain an overlapping area.
- In Fig. 5B, there appears to be overlap between the Sham-14 d and HBP-7 d, as well as NMP-1 d and BP-14 d images.
- In Fig. 9A, the western blot images representing MYD88-1 d and p-IκBα-7 d, as well as p-IκBα-Naive and p-p65-7 d appear highly similar.

The authors have stated that these errors occurred due to mishandling of the data. The Editors-in-Chief therefore no longer have confidence in the presented data.

All authors agree to this retraction.

Author details

¹Tianjin First Central Hospital Clinic Institute, Tianjin Medical University, Tianjin 300070, People's Republic of China. ²Department of Organ Transplantation, Tianjin First Central Hospital, No. 24 Fukang Road, Nankai District, Tianjin 300192, People's Republic of China. ³Tianjin Clinical Research Center for Organ Transplantation, Tianjin, People's Republic of China. ⁴NHC Key Laboratory of Critical Care Medicine, Tianjin, People's Republic of China. ⁵Tianjin Key Laboratory of Organ Transplantation, Tianjin, People's Republic of China. ⁶Key Laboratory of Transplant Medicine, Chinese Academy of Medical Sciences, Tianjin, People's Republic of China.

Published online: 01 November 2022

The original article can be found online at https://doi.org/10.1186/s13287-020-01736-1.

*Correspondence: hlsong26@163.com; shenzhy@tmu.edu.cn

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



© The Author(s) 2022. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated in a credit line to the data.

² Department of Organ Transplantation, Tianjin First Central Hospital, No. 24 Fukang Road, Nankai District, Tianjin 300192, People's Republic of China Full list of author information is available at the end of the article