RETRACTION NOTE

Open Access

Retraction Note: A paradigm shift in cell-free approach: the emerging role of MSCs-derived exosomes in regenerative medicine



Soudeh Moghadasi¹, Marischa Elveny², Heshu Sulaiman Rahman^{3,4}, Wanich Suksatan⁵, Abduladheem Turki Jalil⁶, Walid Kamal Abdelbasset^{7,8}, Alexei Valerievich Yumashev⁹, Siavash Shariatzadeh¹⁰, Roza Motavalli¹¹, Farahnaz Behzad¹², Faroogh Marofi¹³, Ali Hassanzadeh¹⁴, Yashwant Pathak¹⁵ and Mostafa Jarahian^{16*}

Retraction Note: Journal of Translational Medicine

The online version of the original article can be found at https://doi.org/10.1186/s12967-021-02980-6.

*Correspondence:

Mostafa Jarahian

mostafajarahian@gmail.com

¹Department of Biochemistry and Molecular Biology, School of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

²DS & CI Research Group, Universitas Sumatera Utara, Medan, Indonesia ³College of Medicine, University of Sulaimani, Sulaymaniyah, Iraq

⁴Department of Medical Laboratory Sciences, Komar University of Science and Technology, Sulaymaniyah, Iraq

⁵Faculty of Nursing, HRH Princess Chulabhorn College of Medical Science, Chulabhorn Royal Academy, Bangkok 10210, Thailand

⁶Faculty of Biology and Ecology, Yanka Kupala State University of Grodno, Grodno, Belarus

⁷Department of Health and Rehabilitation Sciences, College of Applied Medical Sciences, Prince Sattam Bin Abdulaziz University, Al Kharj, Saudi

⁸Department of Physical Therapy, Kasr Al-Aini Hospital, Cairo University, Giza. Egypt

⁹Sechenov First Moscow State Medical University, Moscow, Russia

¹⁰Department of Pharmacology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

¹¹Stem Cell Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

¹²Research Institute of Bioscience and Biotechnology, University of Tabriz,

13 Department of Hematology, Faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran

¹⁴Department of Applied Cell Sciences, School of Advanced Technologies in Medicine, Tehran University of Medical Sciences, Tehran, Iran

¹⁵Taneja College of Pharmacy, University of South Florida, Tampa Florida,

¹⁶German Cancer Research Center, Toxicology and Chemotherapy Unit (G401), 69120 Heidelberg, Germany

(2021) 19:302

https://doi.org/10.1186/s12967-021-02980-6

The Editor in Chief has retracted this article. An investigation by the Publisher has found a number of articles, including this one, which share similar concerns, involving but not limited to, irregularities with respect to submission and authorship. The Editor-in-Chief therefore no longer has confidence in the results and conclusions presented in this article. Abduladheem Turki Jalil, Siavash Shariatzadeh, Roza Motavalli, Faroogh Marofi, Yashwant Pathak and Mostafa Jarahian disagree to this retraction. Soudeh Moghadasi, Marischa Elveny, Heshu Sulaiman Rahman, Wanich Suksatan, Walid Kamal Abdelbasset, Alexei Valerievich Yumashev, Farahnaz Behzad and Ali Hassanzadeh did not respond to correspondence from the Editor about this retraction.

Published online: 04 March 2025

Publisher's note

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



© The Author(s) 2025. **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.