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CORRIGENDUM

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Corrigendum to: DUOX1 inhibits the progression of rheumatoid arthritis by regulating the NF- κ B pathway in vitro

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In the abovementioned article,¹ the authors wish to correct several points related to reporting consistency, statistical terminology, and citation accuracy. These corrections do not affect the results or the conclusions of the study.

Upon a post-publication review, the authors have identified several errors in the reference citations within the article. Unfortunately, these inaccuracies were introduced by the reference management software during the final formatting stages. Following the editor's valuable suggestions, the authors have conducted a thorough review and revision of the references.

Specifically, the following corrections are respectfully submitted for your approval:

Corrections to in-text citations:

Reference 11 was missing from the original manuscript and has now been added. Consequently, the original in-text citations for References 11, 12, and 13 should be renumbered to 12, 13, and 14, respectively.

Furthermore, the in-text citation for what is now Reference 15 was previously missing. As a result of adding this citation, the subsequent in-text citations originally numbered 16-32 should be renumbered to 15-31.

Correction to the Reference List:

Upon reexamination, the authors found that some references in the list were not relevant to the article's content. These have been removed and replaced with more appropriate ones to ensure the accuracy and relevance of our bibliography. The revised reference list, with the updated entries, is as follows:

6. Ashtiwani NM, Sarr D, Rada B. DUOX1 in mammalian disease pathophysiology. *J Mol Med (Berl)*. 2021;99(6):743-54. <https://doi.org/10.1007/s00109-021-02058-2>
8. Sarr D, Gingerich AD, Ashtiwani NM, Almutairi F, Sautto GA, Ecker J, et al. Dual oxidase 1 promotes antiviral innate immunity. *Proc Natl Acad Sci U S A*. 2021;118(26):e2017130118. <https://doi.org/10.1073/pnas.2017130118>. Erratum in: *Proc Natl Acad Sci U S A*. 2021;118(49):e2119174118. <https://doi.org/10.1073/pnas.2119174118>
11. Cui P, Wang Y, Li Y, Ge L. Vitamin D attenuates hypoxia-induced injury in rat primary neuron cells through downregulation of the dual oxidase 1 (DUOX1) gene. *Med Sci Monit*. 2020;26:e925350. <https://doi.org/10.12659/MSM.925350>

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15. Smolen JS, Aletaha D, McInnes IB. Rheumatoid arthritis. *Lancet*. 2016;388(10055):2023-38. [https://doi.org/10.1016/S0140-6736\(16\)30173-8](https://doi.org/10.1016/S0140-6736(16)30173-8). Erratum in: *Lancet*. 2016;388(10055):1984. [https://doi.org/10.1016/S0140-6736\(16\)30794-2](https://doi.org/10.1016/S0140-6736(16)30794-2)
22. Bartok B, Firestein GS. Fibroblast-like synoviocytes: Key effector cells in rheumatoid arthritis. *Immunol Rev*. 2010;233(1):233-55. <https://doi.org/10.1111/j.0105-2896.2009.00859.x>
24. Maeda K, Yoshida K, Nishizawa T, Otani K, Yamashita Y, Okabe H, et al. Inflammation and bone metabolism in rheumatoid arthritis: Molecular mechanisms of joint destruction and pharmacological treatments. *Int J Mol Sci*. 2022;23(5):2871. <https://doi.org/10.3390/ijms23052871>
25. Yue S, Fan J, Xie D, Cao C, Wang Z, Huang J, et al. Unveiling the therapeutic potential: Targeting fibroblast-like synoviocytes in rheumatoid arthritis. *Expert Rev Mol Med*. 2025;27:e18. <https://doi.org/10.1017/erm.2025.11>
27. Bilski R, Nuzkiewicz J. Antioxidant therapies as emerging adjuncts in rheumatoid arthritis: Targeting oxidative stress to enhance treatment outcomes. *Int J Mol Sci*. 2025;26(7):2873. <https://doi.org/10.3390/ijms26072873>
28. Hitchon CA, El-Gabalawy HS. Oxidation in rheumatoid arthritis. *Arthritis Res Ther*. 2004;6(6):265-78. <https://doi.org/10.1186/ar1447>
30. Liu L, Ding M, Zheng M, Xu G, Gao L, Yang W, et al. Transformable peptide blocks NF- κ B/I κ B α pathway through targeted coating I κ B α against rheumatoid arthritis. *Biomaterials*. 2025;314:122839. <https://doi.org/10.1016/j.biomaterials.2024.122839>
31. Aupperle K, Bennett B, Han Z, Boyle D, Manning A, Firestein G. NF-kappa B regulation by I kappa B kinase-2 in rheumatoid arthritis synoviocytes. *J Immunol*. 2001;166(4):2705-11. <https://doi.org/10.4049/jimmunol.166.4.2705>

The authors sincerely apologize for these errors and any inconvenience they may have caused. We are committed to ensuring the accuracy of the scientific record and would be very grateful if you could facilitate the publication of a correction note to address these issues.

Mandatory Disclosure on Use of Artificial Intelligence

The authors declare that no AI-assisted tools were used in the preparation of this manuscript.

Reference

1. Xuan D, Feng D, Qiang F, Xia Y. DUOX1 inhibits the progression of rheumatoid arthritis by regulating the NF- κ B pathway in vitro. *Allergologia Et Immunopathologia*. 2025;53(2):160-8. <https://doi.org/10.15586/aei.v53i2.1293>