

Retraction

Medical Sciences

Retraction for “Hypoxia-inducible factors are required for chemotherapy resistance of breast cancer stem cells,” by Debangshu Samanta, Daniele M. Gilkes, Pallavi Chaturvedi, Lisha Xiang, and Gregg L. Semenza, which was first published December 1, 2014; 10.1073/pnas.1421438111 (*Proc. Natl. Acad. Sci. U.S.A.* **111**, E5429–E5438).

The authors note, “We are retracting this article due to concerns with several of the published figures, which we believe to be the result of the wrong images having been selected during construction of the figures. Details of the concerns include: Possible duplication of data between the Pac + IL8 nAb panel of Figure 3E and the Vehicle panel of Figure 5F. Possible splicing between the first and second lanes of the HIF-1 α panel of Figure 4. Possible duplication of data between the full SUM-159 Actin panel of Figure 6C and lanes 2–5 of the MDA-231 Actin panel of Figure 8A. Possible duplication of data between the Digoxin and the Gemcitabine + Digoxin panels of Figure S5A. Possible duplication of data between the Actin panels of Figure S6C and S6E. The correct images were identified and no new experimentation was required to correct the issues noted above. These updated figures can be found in a preprint article posted on bioRxiv, ‘Enrichment of breast cancer stem cells following cytotoxic chemotherapy is mediated by hypoxia-inducible factors’ (<https://doi.org/10.1101/2022.06.27.497729>). We believe that the overall conclusions of the paper remain valid, but we are retracting the work due to these underlying concerns about the figures. We apologize for the inconvenience.”

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