

May 8, 2019

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Subject: Retraction Request

Dear Dr. Bishop,

I am writing as the Responsible Official at the University of Maryland, Baltimore regarding the following manuscripts:

Zhou, H., Yang, Y.-H., & Basile, J. R. (2014). The Semaphorin 4D- Plexin-B1-RhoA signaling axis recruits pericytes and regulates vascular permeability through endothelial production of PDGF-B and ANGPTL4. *Angiogenesis*, 17(1), 261–274.
<http://doi.org/10.1007/s10456-013-9395-0>

1. Figure 1C: The graph showing PDGF-B does not match the original data for the 24 hour time point. The graph shows the value to be over 1000 pg/ml, but the original data have a value of 106.626.
2. Figure 1F: The data were entered manually to create the standard deviation bars. The data manually entered do not match the original data. When the standard deviations for the original data were calculated, the p values were no longer significant using a paired student t test.
3. Figure 2C: The original data do not match the published data.
4. Figure 4B: The images in the first lane and the fifth lane are from the same micrograph (i.e., the same set of conditions, but the published figure claims them to be of different conditions).
5. Figure 4B: The metadata shows different cell lines than those noted in the article. The first and last images are labeled as “Du145 shAR3 anti AR3.jpg”. The second image is labeled as “Du145 shAR8 anti AR8.jpg”. The third image is labeled as “Cos1 mARs3 mS3-2 antibody-2.jpg.” The fourth image is labeled as “R1 3634 bleed.jpg”.
 - a. This work was supported by the National Cancer Institute grant R01-CA133162 to John R. Basile.

Zhou, H., Binmadi, N. O., Yang, Y. H., Proia, P., & Basile, J. R. (2012). Semaphorin 4D cooperates with VEGF to promote angiogenesis and tumor progression. *Angiogenesis*, 15(3), 391-407.

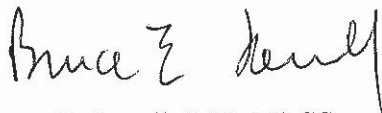
1. Figures 1B & 1D: The cell lines are different and all published histograms show SEMA4D mRNA level whereas Excel data have 2 histograms showing SEMA4D expression and 2 histograms showing VEGF expression.
2. Figure 2B: The metadata for one image shows different treatment conditions than those reported in the article. The published image labeled "VEGF + VEGFR-2 shRNA" has a metadata label of "S4d-plexinB1 shRNA2".
3. Figure 2E: Statistical significance was shown in the published figure for four comparisons, but upon recalculation, one comparison noted as significant was not.
4. Figure 6A: The lower left image is labeled "VEGF shRNA" in the published figure, but the metadata label is "S4DshRNA-HN121-20X".
5. Figure 6C: Specifically, within columns 2-4, for each antibody used for immunocytochemistry, the three images have been swapped so that the original images do not match the shRNA labels in the figure. (The labels for the two antibodies were correct.)
6. Figure 7D: The first published image is labeled as "IgG" in the paper, but the metadata show a label of "Restore (V+S). tif". The third published image has a label of "anti-VEGF IgG", and the metadata show a label of "con sh.tif".
 - a. This work was supported by the National Cancer Institute grant R01-CA133162 to John R. Basile.

Binmadi, N. O., Proia, P., Zhou, H., Yang, Y. H., & Basile, J. R. (2011). Rho-mediated activation of PI (4) P5K and lipid second messengers is necessary for promotion of angiogenesis by Semaphorin 4D. *Angiogenesis*, 14(3), 309.

1. Figure 3C: The standard deviation values were not calculated correctly. A single standard deviation value was used for all 5 time points for each condition.

The University of Maryland, Baltimore conducted an internal investigation which found that the evidence supports retraction of the publications in order to correct the scientific record and ensure its integrity.

Sincerely,



Bruce E. Jarrell, MD, FACS
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University of Maryland, Baltimore