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Retraction Note: Discovery of nanoscale sanal flow choking in cardiovascular system: exact prediction of the 3D boundary-layer-blockage factor in nanotubes

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Retraction of: *Scientific Reports* https://doi.org/10.1038/s41598-021-94450-8, published online 29 July 2021

The Editors have retracted this Article.

Following publication, concerns were raised about the rationale for the approach presented, the assumptions and approximations used and the validity of its application to cardiology. A post-publication review of the Authors' mathematical arguments revealed a lack of clarity in the terms presented and inferences that are not adequately justified. The main concerns are that the model is based on circular reasoning which makes it non-predictive, that it assumes that blood behaves as an ideal gas, and hypothesizes that quasi-sonic flow velocities exist in the cardiovascular system while all experimental evidence shows that cardiovascular flow velocities are orders of magnitude lower than the speed of sound and do not involve any compressibility effects. The Editors therefore no longer have confidence in the conclusions presented.

None of the Authors has responded to correspondence from the Editors about this retraction.