

Titre: Voxelized simulation of cerebral oxygen perfusion elucidates hypoxia in aged mouse cortex. Supplément

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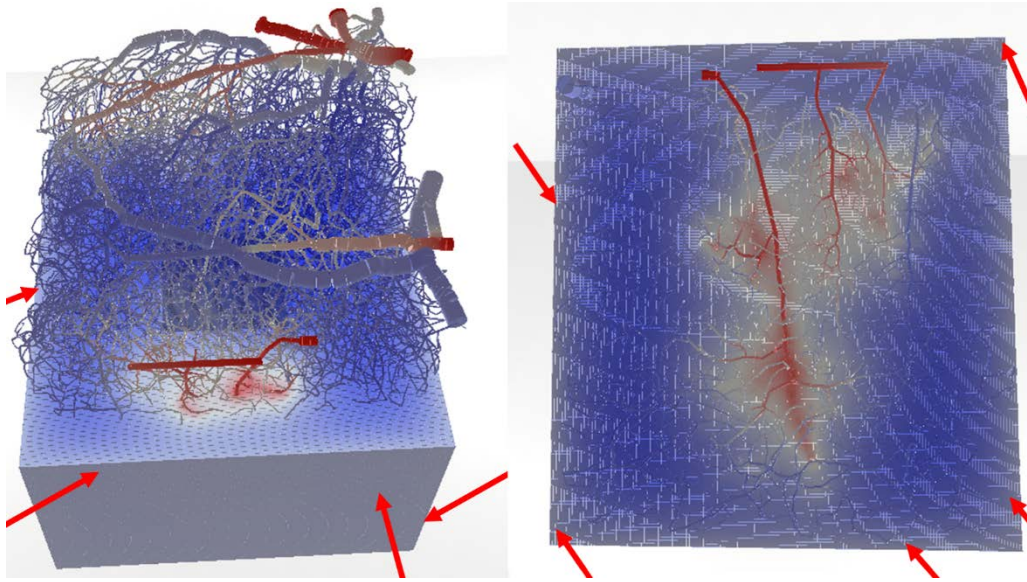
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S4 Text. Boundary effects in smaller networks



S4. Fig 1-A. Simulations of smaller networks have significant boundary effects (identified with red arrows) permeating throughout the simulation domain. This is not only due to the small size of the network, but is a limitation to the simulation domain; where the artificial boundary edges are not representative of the living tissue which has no such edges. The regions near the boundary then become devoid of vessels, which reduces blood flow and oxygen exchange to the surrounding tissue. To overcome these effects, in the main manuscript we successfully simulated a much larger domain, where the region of interest was far removed from the boundaries and thus did not observe these drastic effects.