S1 Table. Formulary

| Full name | Abbrev. | Unit | Formula | Explanation |
| :---: | :---: | :---: | :---: | :---: |
| Area (stereology) | TRA, VPA | [ $\mathrm{mm}^{2}$ ] | Area $=N_{p} *\left(\frac{\text { area }}{\text { point }}\right)$ | Where $N_{p}$ is the number of points obtained by counting, area/point= the applied size of the grid (point associated area) $d L=$ distance between grid lines. |
| Length (stereology) | CL | [m] | Length $=N_{p} * \frac{\pi}{2} * d$ L |  |
| Vessel Area Density | VAD | [\%] | $\mathrm{VAD}=\frac{\mathrm{VPA}}{\mathrm{TRA}} * 100$ |  |
| Average Vessel Diameter | D | [ $\mu \mathrm{m}$ ] | $\mathrm{d}=\frac{2 * \mathrm{VPA}}{\mathrm{CL}}$ | Assumptions that vessels are round structures and the diameter of a vessel is smaller than its length. |
| Vascular Exchange Surface | VES | $\left[\mu m^{2}\right]$ | VES $=\pi *$ VPA | We assessed the vascular exchange surface, as the area of the outer surface of the vasculature. Assumption that vessels are cylindric structures. |

