

Table 1. Default values of the parameters used for numerical calculations.

Quantity	Notation	Value
Blood density	ρ_b	1.05 g/cm ³
Tissue density	ρ	1.03 g/cm ³
Specific heat of blood	c_b	3.8 J/(g·°C)
Thermal conductivity	K	5·10 ⁻³ W/(cm·°C)
oxygen extraction fraction (at rest)	OEF	0.4
GM blood flow (at rest)	F_G	11.2·10 ⁻³ ml/(g·sec)
WM blood flow (at rest)	F_W	3.8·10 ⁻³ ml/(g·sec)
Effective heat transfer coefficient	h	1.2·10 ⁻³ W/(cm ² ·°C)
Arterial blood temperature	T_a	37 °C
Ambient temperature	T_{ext}	20 °C