Table S1. Abbreviations used in the cardiovascular system model and equations.

Nomenclature		lica	left internal carotid artery
p	pressure	rva	right vertebral artery
V	volume	lva	left vertebral artery
Q	flow rate	roa	right ophthalmic artery
t	time	loa	left ophthalmic artery
R	resistance	ba	basilar artery
L	inertance	pca	posterior cerebral arteries
C	compliance	rpca	right posterior cerebral artery
AV	aortic valve	lpca	left posterior cerebral artery
MV	mitral valve	rpcoa	right posterior communicating artery
PV	pulmonary valve	lpcoa	left posterior communicating artery
TV	tricuspid valve	rsca	right superior cerebellar artery
MAP	mean arterial pressure	lsca	left superior cerebellar artery
CO	cardiac output	racha	right anterior choroidal artery
S	sensitivity	lacha	left anterior choroidal artery
E	elastance	rmca	right middle cerebral artery
A	coefficient	lmca	left middle cerebral artery
B	coefficient	mca	middle cerebral artery
K	coefficient	raca	right anterior cerebral artery
l	long axis length	laca	left anterior cerebral artery
r	radius	acoa	anterior communicating artery
n	operating speed	pc	pial circulation
Subscripts		cc	cerebral capillaries
la	left atrium	vc	cerebral veins
lv	left ventricle	es	end-systolic
ra	right atrium	lcora	left coronary artery
rv	right ventricle	rcora	right coronary artery
ao	aorta	arcor	coronary arterioles
aa	aortic arch	ccor	coronary capillaries
af	femoral artery	sincor	coronary sinus
ars	systemic arterioles	set	set point
cs	systemic capillaries	m	mean
vs	systemic veins	1	segment one
ap	pulmonary arteries	2	segment two
arp	pulmonary arterioles	IMP	Impella 2.5
vp	pulmonary veins	IABP	Intra-aortic balloon pump
rica	right internal carotid artery	TH	TandemHeart