

INLINE SUPPLEMENTARY TABLE S1

Table S1. Numerical values of the eleven parameters that have been modified to investigate their effects on the spectra predicted by the hemodynamic model. Here, k is the asymptotic amplitude ratio of the flow velocity to blood volume oscillations, i.e. $k = |\mathbf{f}^{(c)}|/|\mathbf{v}| \Big|_{\omega \gg \omega_c^{(\text{AutoReg})}}$ [see Eq. (41)], and is related to the inverse of the modified Grubb's exponent. The first row reports the reference set of Table II. For each of the eleven parameters, a low value (set "a") and a high value (set "b") are considered. The spectra of phase difference and amplitude ratio shown in Figs. S1-S6 correspond to the twenty-two sets of parameter values reported in this Table. The parameter values that are modified in each set are highlighted in bold face.

Table S1.

	$\alpha_{\dot{O}}$ (s ⁻¹)	$\phi^{(a)}$	$\phi^{(c)}$	$\phi^{(v)}$	$t^{(c)}$ (s)	$t^{(v)}$ (s)	$\frac{\omega_c^{(\text{AutoReg})}}{2\pi}$ (Hz)	k	$ \mathbf{v}^{(a)} $	$ \mathbf{v}^{(c)} $	$ \mathbf{v}^{(v)} $
Ref. Set	0.8	0.005	0.015	0.005	0.75	1.0	0.15	5	0.02	0.02	0.02
Set 1a	0.4	0.005	0.015	0.005	0.75	1.0	0.15	5	0.02	0.02	0.02
Set 1b	1.2	0.005	0.015	0.005	0.75	1.0	0.15	5	0.02	0.02	0.02
Set 2a	0.8	0.001	0.015	0.005	0.75	1.0	0.15	5	0.02	0.02	0.02
Set 2b	0.8	0.015	0.015	0.005	0.75	1.0	0.15	5	0.02	0.02	0.02
Set 3a	0.8	0.005	0.005	0.005	0.75	1.0	0.15	5	0.02	0.02	0.02
Set 3b	0.8	0.005	0.030	0.005	0.75	1.0	0.15	5	0.02	0.02	0.02
Set 4a	0.8	0.005	0.015	0.001	0.75	1.0	0.15	5	0.02	0.02	0.02
Set 4b	0.8	0.005	0.015	0.015	0.75	1.0	0.15	5	0.02	0.02	0.02
Set 5a	0.8	0.005	0.015	0.005	0.3	1.0	0.15	5	0.02	0.02	0.02
Set 5b	0.8	0.005	0.015	0.005	1.0	1.0	0.15	5	0.02	0.02	0.02
Set 6a	0.8	0.005	0.015	0.005	0.75	0.4	0.15	5	0.02	0.02	0.02
Set 6b	0.8	0.005	0.015	0.005	0.75	2.0	0.15	5	0.02	0.02	0.02
Set 7a	0.8	0.005	0.015	0.005	0.75	1.0	0.03	5	0.02	0.02	0.02
Set 7b	0.8	0.005	0.015	0.005	0.75	1.0	0.3	5	0.02	0.02	0.02
Set 8a	0.8	0.005	0.015	0.005	0.75	1.0	0.15	2.5	0.02	0.02	0.02
Set 8b	0.8	0.005	0.015	0.005	0.75	1.0	0.15	10	0.02	0.02	0.02
Set 9a	0.8	0.005	0.015	0.005	0.75	1.0	0.15	5	0	0.02	0.02
Set 9b	0.8	0.005	0.015	0.005	0.75	1.0	0.15	5	0.1	0.02	0.02
Set 10a	0.8	0.005	0.015	0.005	0.75	1.0	0.15	5	0.02	0	0.02
Set 10b	0.8	0.005	0.015	0.005	0.75	1.0	0.15	5	0.02	0.1	0.02
Set 11a	0.8	0.005	0.015	0.005	0.75	1.0	0.15	5	0.02	0.02	0
Set 11b	0.8	0.005	0.015	0.005	0.75	1.0	0.15	5	0.02	0.02	0.1