

S5 Table. Emergent constitutive biomechanical parameters (Eqs. (2,16,17)).

Parameter	Value	Source
C_{10}^{Skin} : value for unwounded skin	12 kPa	Median from experiment fitting, Fig. 4a
k_1^{Skin} : value for unwounded skin	1.6 MPa	Median from experiment fitting Fig. 4b
k_2^{Skin} : value for unwounded skin	0.88 MPa	Median from experiment fitting Fig. 4c
$C_{10}^{i.w.}$: value for just-wounded tissue	0.0 kPa	Due to tissue removal as part of wounding
$k_1^{i.w.}$: value for just-wounded tissue	0.0 MPa	Due to tissue removal as part of wounding
$C_{10}^{Clot, d0}$: value for a freshly-formed clot	300.0 kPa	Assumed in line with Ref. [1]
$C_{10}^{d0, lb}$: lower bound for a d0 wound	2.5 kPa	Linear extrapolation from known d7 and d14 values
$C_{10}^{d7, lb}$: lower bound for a d7 wound	1.2 kPa	2.5 th percentile from experiment fitting, Fig. 4a
$C_{10}^{d14, lb}$: lower bound for a d14 wound	0.0 kPa	2.5 th percentile from experiment fitting, Fig. 4a
$k_1^{d0, lb}$: lower bound value for d0 wound	0.0 MPa	= $k_1^{i.w.}$ since no collagen is deposited prior to d0
$k_1^{d7, lb}$: lower bound value for d7 wound	0.6 MPa	2.5 th percentile from experiment fitting, Fig. 4b
$k_1^{d14, lb}$: lower bound value for d14 wound	1.2 MPa	2.5 th percentile from experiment fitting, Fig. 4b
$C_{10}^{d0, m}$: median value for d0 wound	51.2 kPa	Linear extrapolation from known d7 and d14 values
$C_{10}^{d7, m}$: median value for d7 wound	25.9 kPa	50 th percentile from experiment fitting, Fig. 4a
$C_{10}^{d14, m}$: median value for d14 wound	0.6 kPa	50 th percentile from experiment fitting, Fig. 4a
$k_1^{d0, m}$: median value for d0 wound	0.0 MPa	= $k_1^{i.w.}$ since no collagen is deposited prior to d0
$k_1^{d7, m}$: median value for d7 wound	19.0 MPa	50 th percentile from experiment fitting, Fig. 4b
$k_1^{d14, m}$: median value for d14 wound	9.0 MPa	50 th percentile from experiment fitting, Fig. 4b
$C_{10}^{d0, ub}$: upper bound value for d0 wound	167.2 kPa	Linear extrapolation from known d7 and d14 values
$C_{10}^{d7, ub}$: upper bound value for d7 wound	94.3 kPa	97.5 th percentile from experiment fitting, Fig. 4a
$C_{10}^{d14, ub}$: upper bound value for d14 wound	21.4 kPa	97.5 th percentile from experiment fitting, Fig. 4a
$k_1^{d0, ub}$: upper bound value for d0 wound	0.0 MPa	= $k_1^{i.w.}$ since no collagen is deposited prior to d0
$k_1^{d7, ub}$: upper bound value for d7 wound	86.2 MPa	97.5 th percentile from experiment fitting, Fig. 4b
$k_1^{d14, ub}$: upper bound value for d14 wound	148.1 MPa	97.5 th percentile from experiment fitting, Fig. 4b

References

1. Lee YU, Lee A, Humphrey J, Rausch M. Histological and biomechanical changes in a mouse model of venous thrombus remodeling. *Biorheology*. 2015;52(3):235–245.