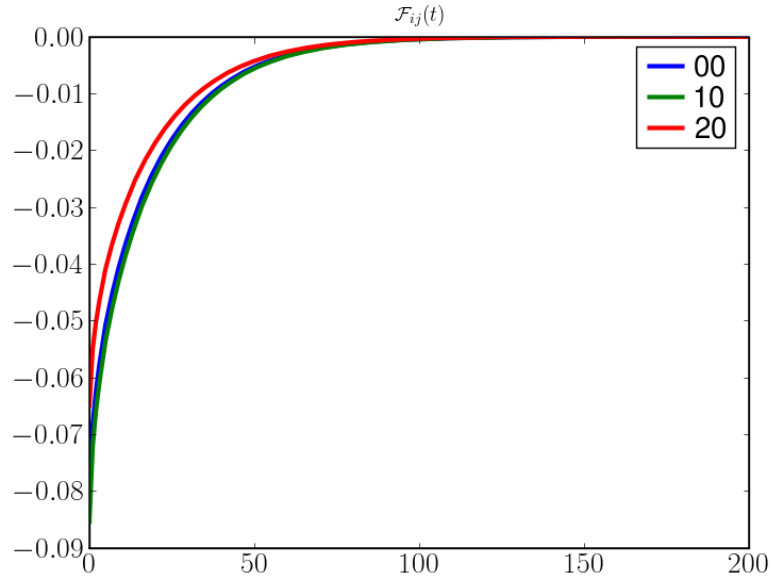
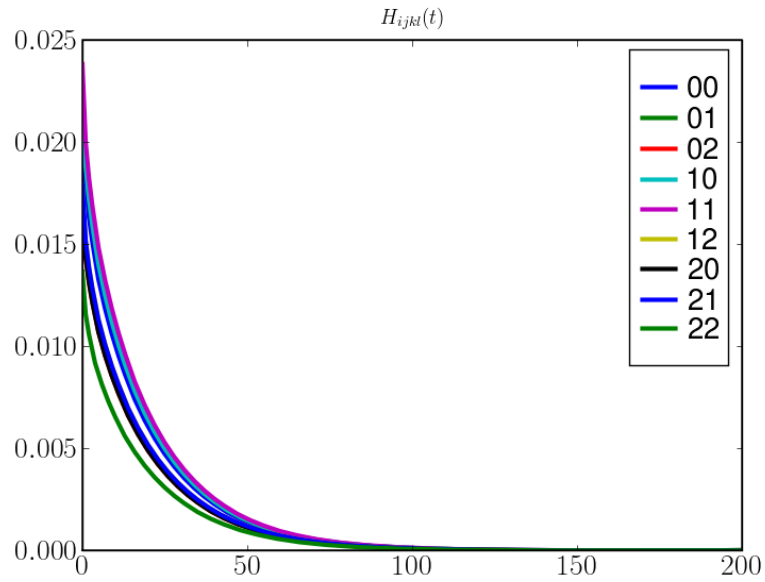


1 Homogenized Coefficients

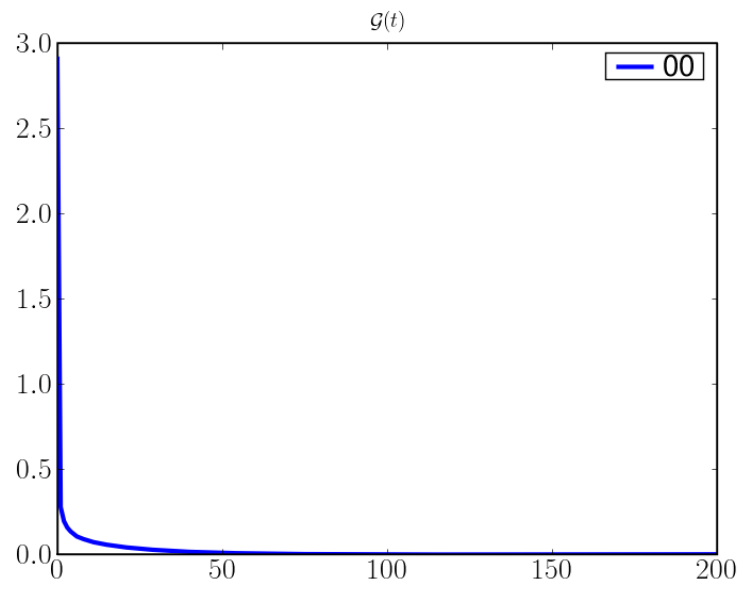
- $\mathcal{F}_{ij}(t)$



- $H_{ijkl}(t)$



- $\mathcal{G}(t)$

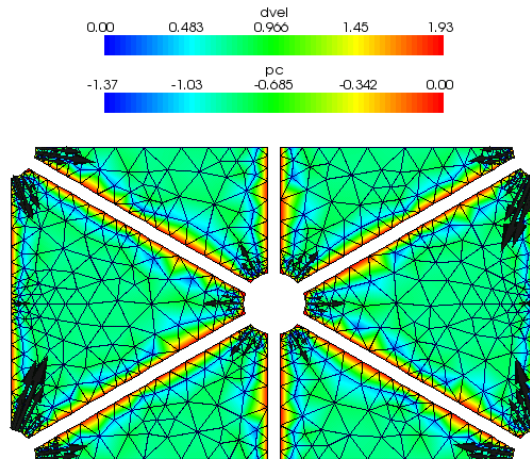


2 Correctors

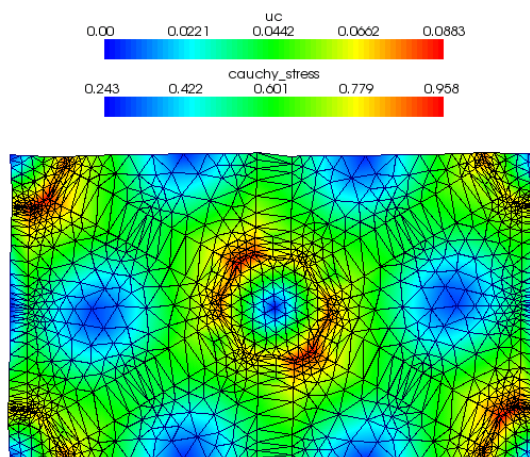
- pressure-like correctors: color = pressure, arrows = perfusion velocities (possibly scaled)
- displacements-like correctors: color = displacement, warped (possibly scaled), `cauchy_stress` colorbar only to see stress ranges

2.1 Steady-state pressure correctors

- pressure ... $\tilde{\pi}^P(0+)$, perfusion velocities
scaling: $1.55\text{e-}01\times$

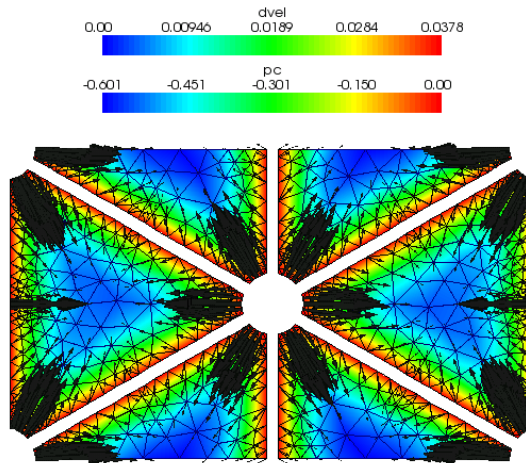


- displacements ... $\omega^{*,P}$
scaling: $1.00\text{e+}00\times$

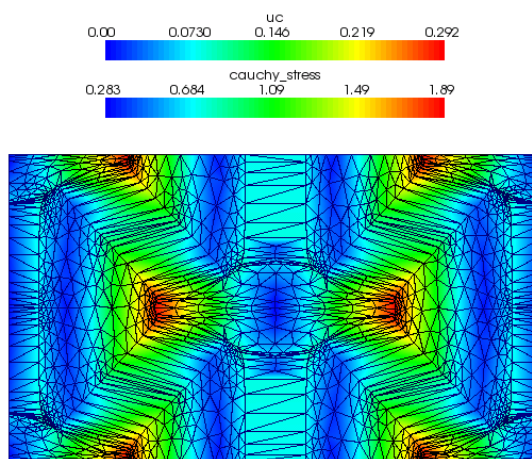


2.2 Steady-state RS correctors

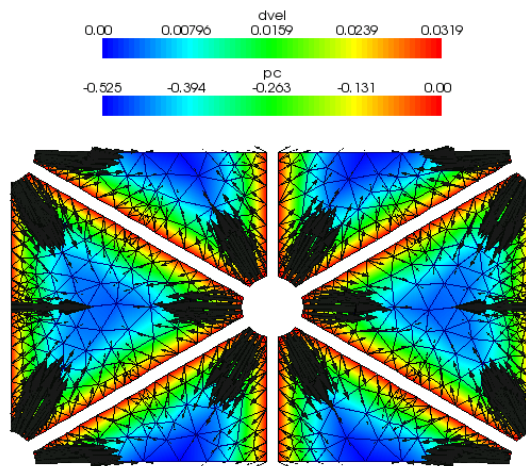
- pressure $\dots \bar{\pi}^{11}$, perfusion velocities
scaling: $7.93\text{e}+00\times$



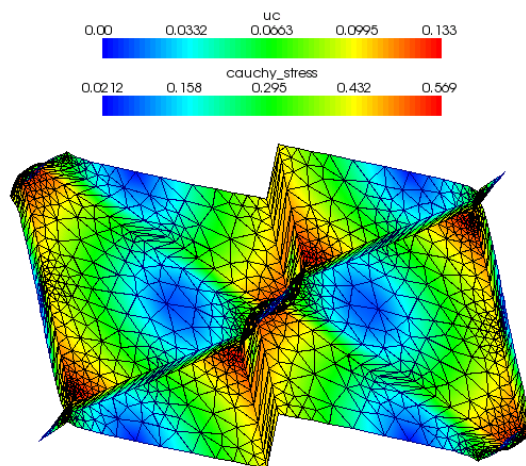
- displacements $\dots \bar{\omega}^{11}$
scaling: $1.00\text{e}+00\times$



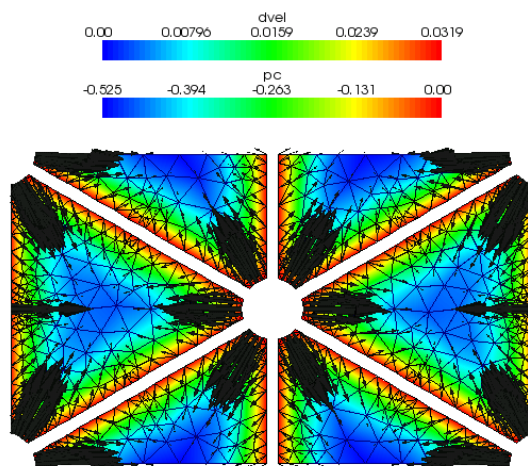
- pressure ... $\bar{\pi}^{12}$, perfusion velocities
scaling: $9.42\text{e}+00\times$



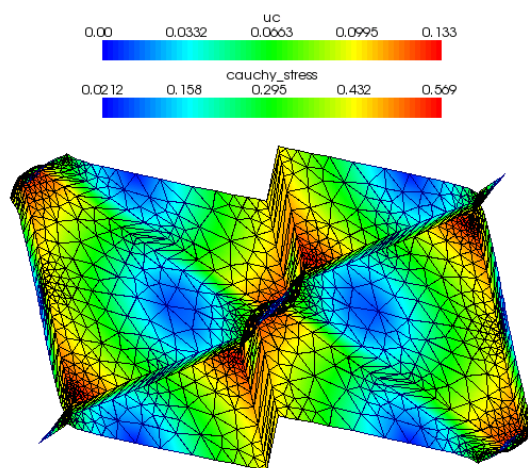
- displacements ... $\bar{\omega}^{12}$
scaling: $1.00\text{e}+00\times$



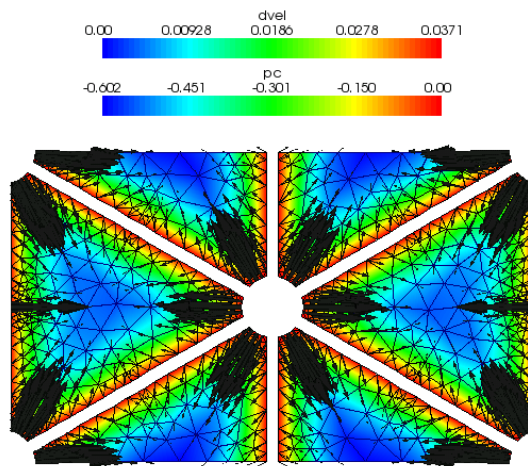
- pressure ... $\bar{\pi}^{21}$, perfusion velocities
scaling: $9.42\text{e}+00\times$



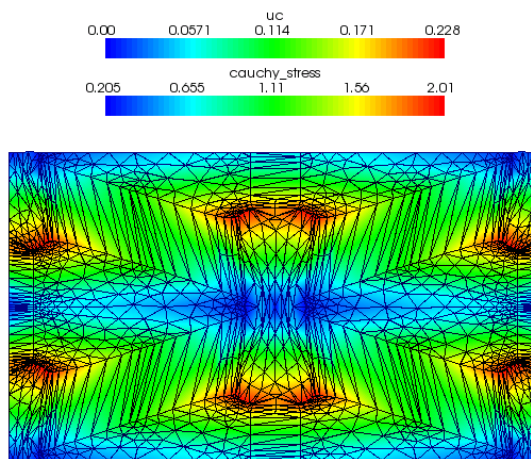
- displacements ... $\bar{\omega}^{21}$
scaling: $1.00\text{e}+00\times$



- pressure $\dots \bar{\pi}^{22}$, perfusion velocities
scaling: $8.08\text{e}+00\times$

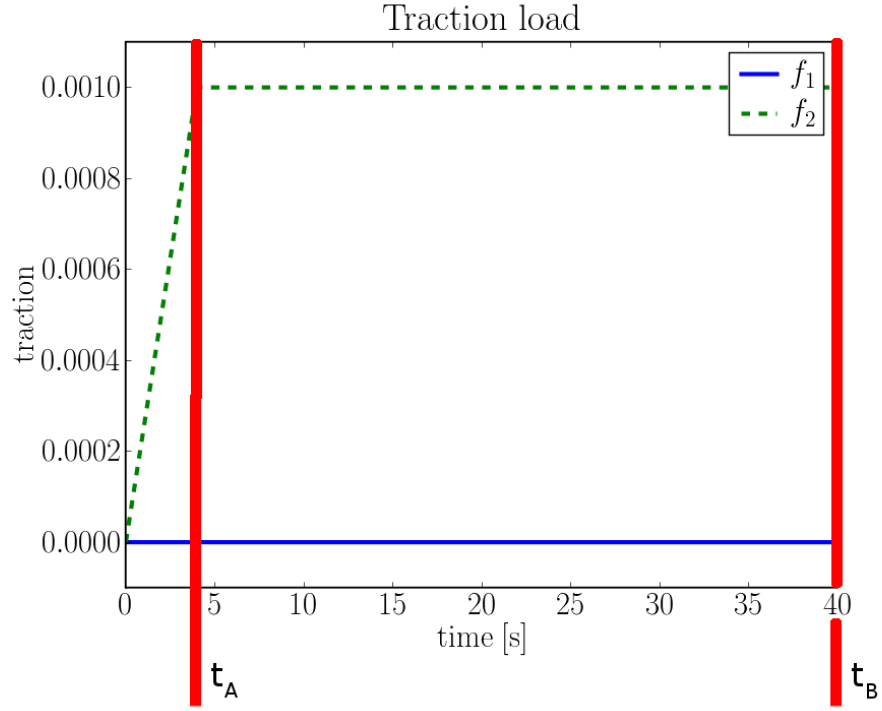


- displacements $\dots \bar{\omega}^{22}$
scaling: $1.00\text{e}+00\times$



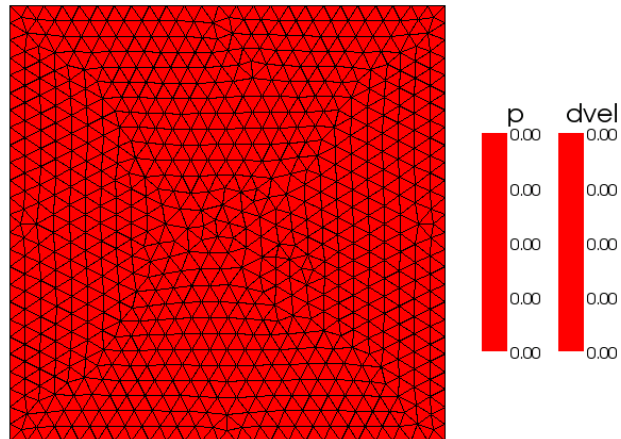
3 Macroscopic Solution

The structure is fixed on its left side and loaded by traction in y direction on the right side boundary:

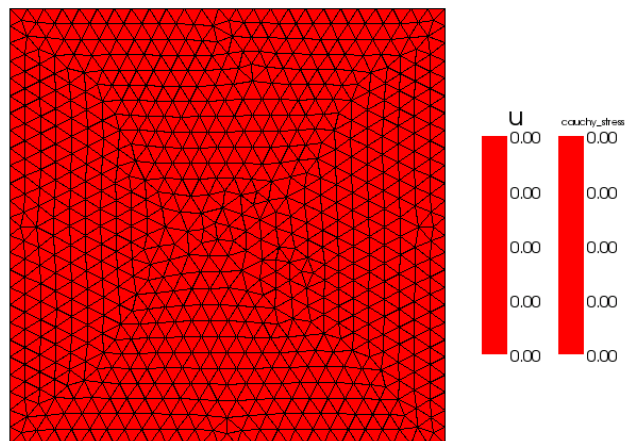


3.1 Bones macro-problem

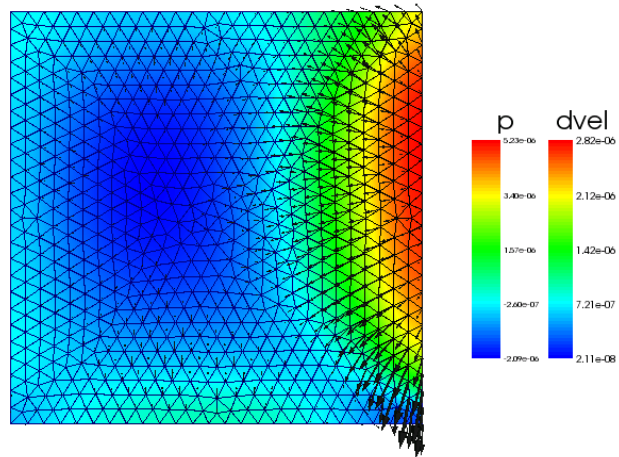
- step 0: pressure ... p , perfusion velocities
scaling: $\text{inf}\times$



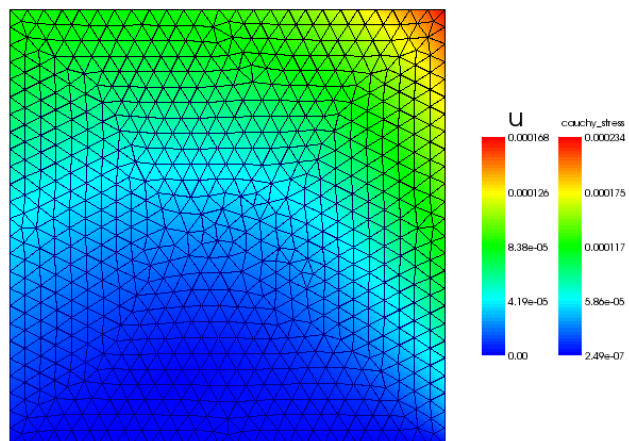
- step 0: displacements ... u
scaling: $1.00\text{e}+01\times$



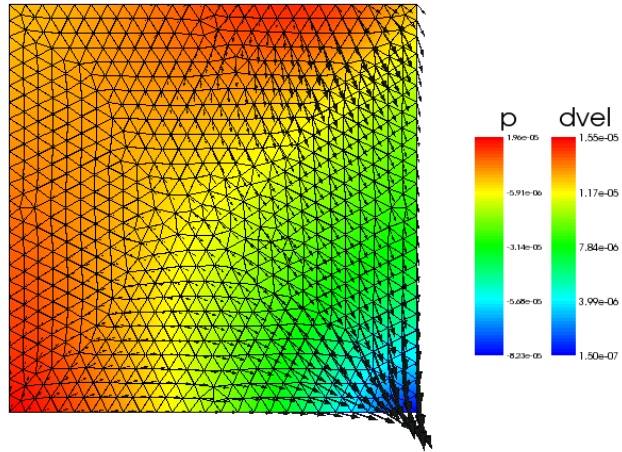
- step 1: pressure $\dots p$, perfusion velocities
scaling: $1.06\text{e}+05\times$



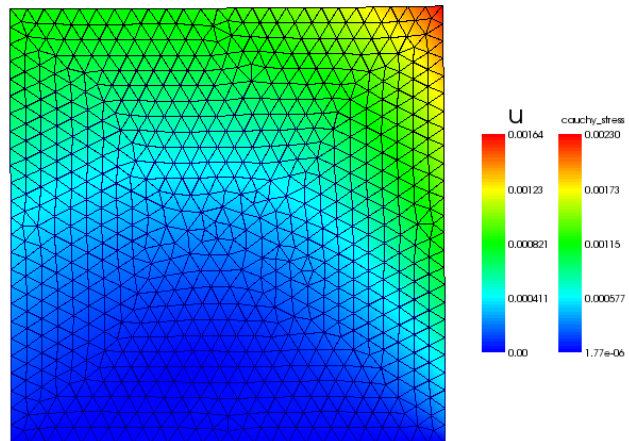
- step 1: displacements $\dots u$
scaling: $1.00\text{e}+01\times$



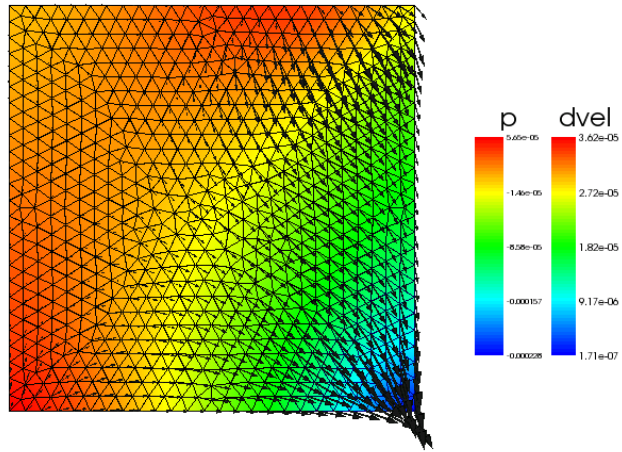
- step 10: pressure ... p , perfusion velocities
scaling: $1.93\text{e}+04\times$



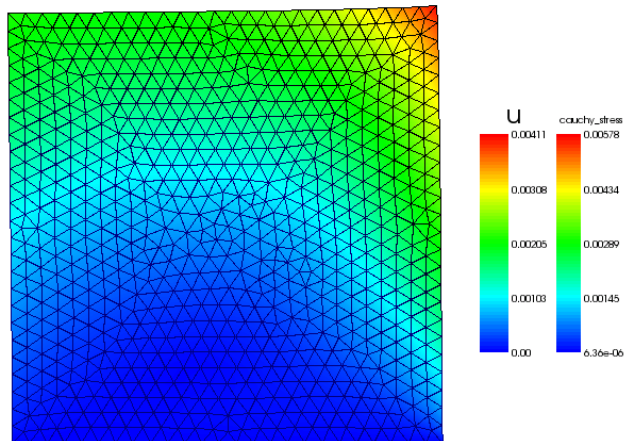
- step 10: displacements ... u
scaling: $1.00\text{e}+01\times$



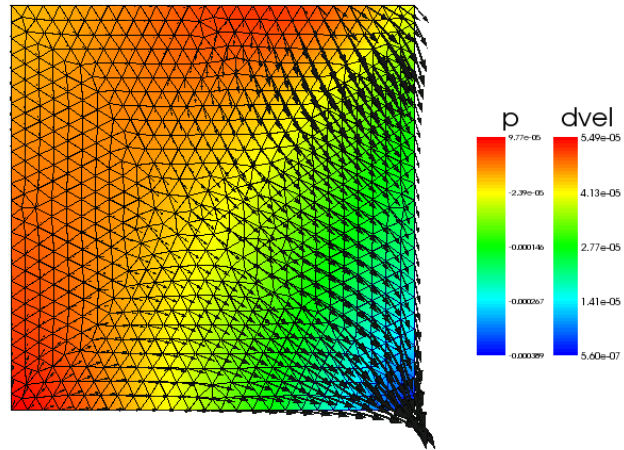
- step 25: pressure ... p , perfusion velocities
scaling: $8.30\text{e}+03\times$



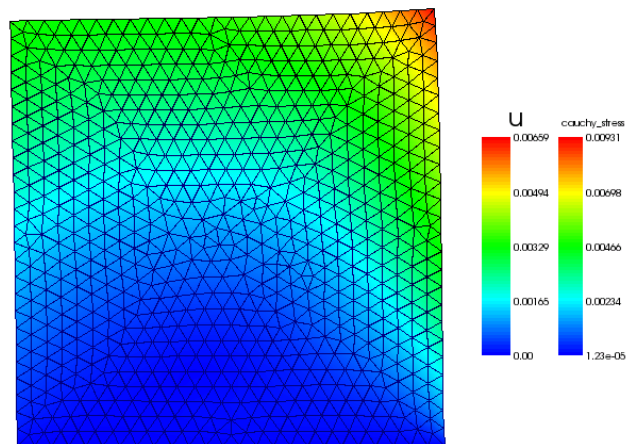
- step 25: displacements ... u
scaling: $1.00\text{e}+01\times$



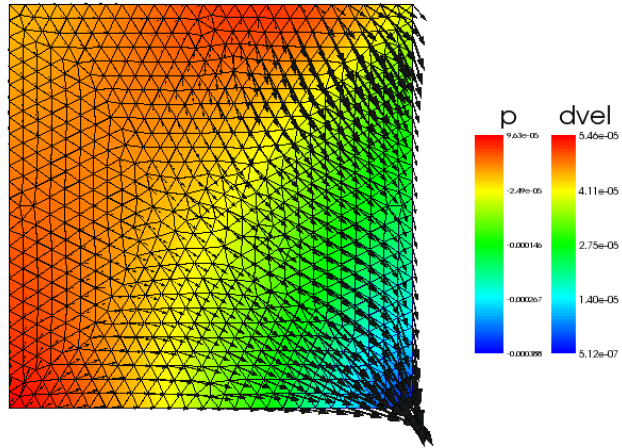
- step 50: pressure ... p , perfusion velocities
scaling: $5.47\text{e}+03\times$



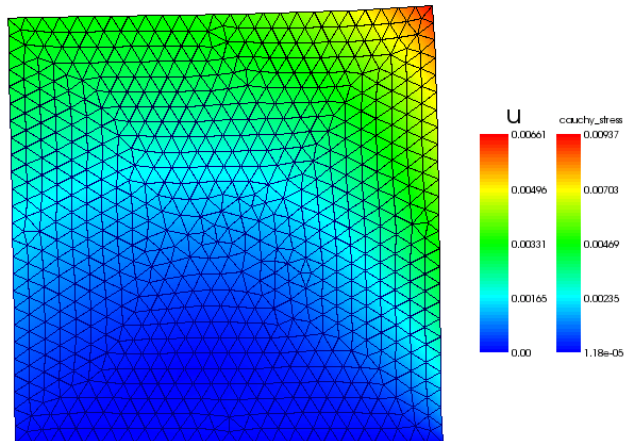
- step 50: displacements ... u
scaling: $1.00\text{e}+01\times$



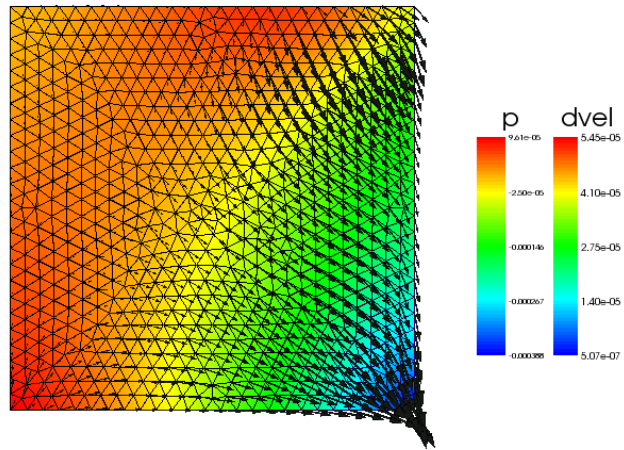
- step 100: pressure ... p , perfusion velocities
scaling: $5.50\text{e}+03\times$



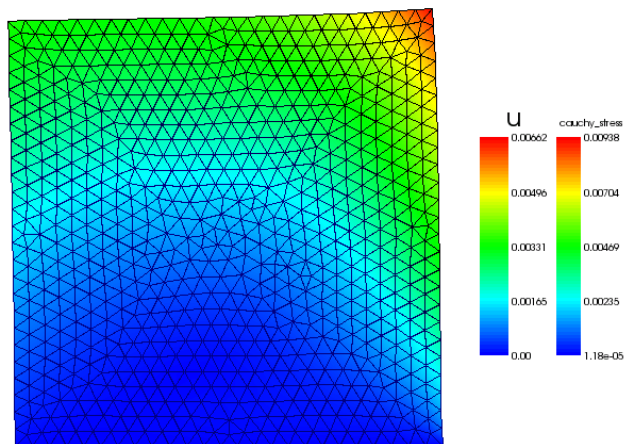
- step 100: displacements ... u
scaling: $1.00\text{e}+01\times$



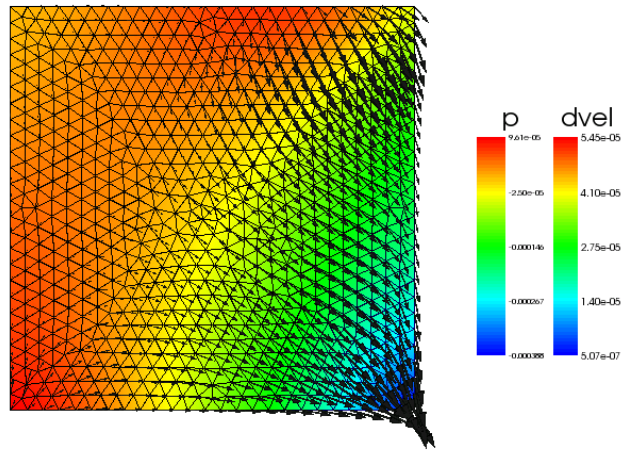
- step 200: pressure ... p , perfusion velocities
scaling: $5.50\text{e}+03\times$



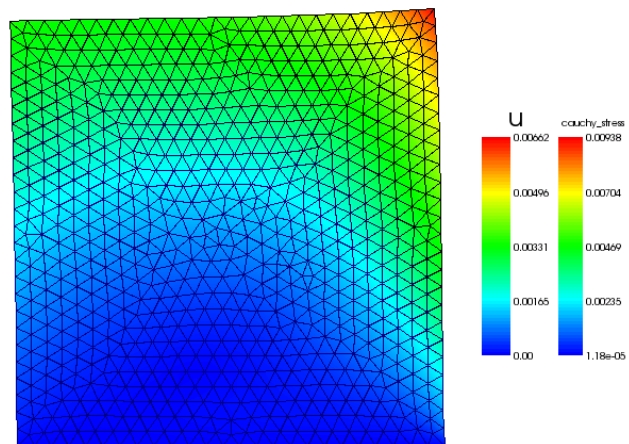
- step 200: displacements ... u
scaling: $1.00\text{e}+01\times$



- step 400: pressure ... p , perfusion velocities
scaling: $5.50\text{e}+03\times$

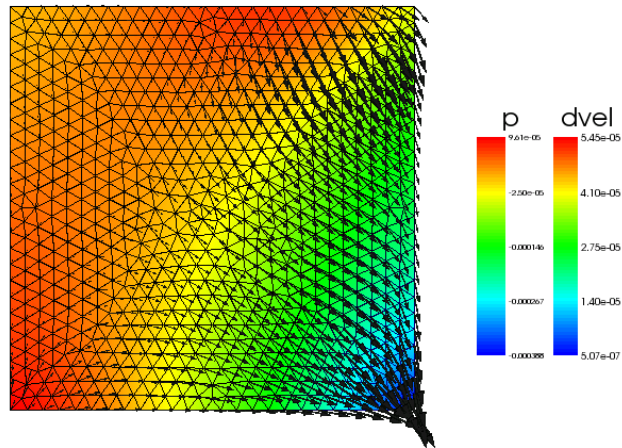


- step 400: displacements ... u
scaling: $1.00\text{e}+01\times$



3.2 Steady-state solution of bones macro-problem

- pressure ... p , perfusion velocities
scaling: $5.50\text{e}+03\times$



- displacements ... u
scaling: $1.00\text{e}+01\times$

