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Viktor Grigoryan* (grigoryan@simmons.edu), Department of Mathematics and Statistics, Simmons College, 300 The Fenway, Boston, MA 02115. *Finite element simulation of wound healing*. Preliminary report.

We numerically investigate chemical biological and mechanical interplay contributing to wound healing and scar formation. The underlying equations in the mathematical model are of coupled reaction-diffusion type for the biological and chemical fields, and of visco-elastic type for the mechanical fields. The overall system is modeled by a finite-element method and the results are interpreted in the biological context. (Received February 20, 2018)