

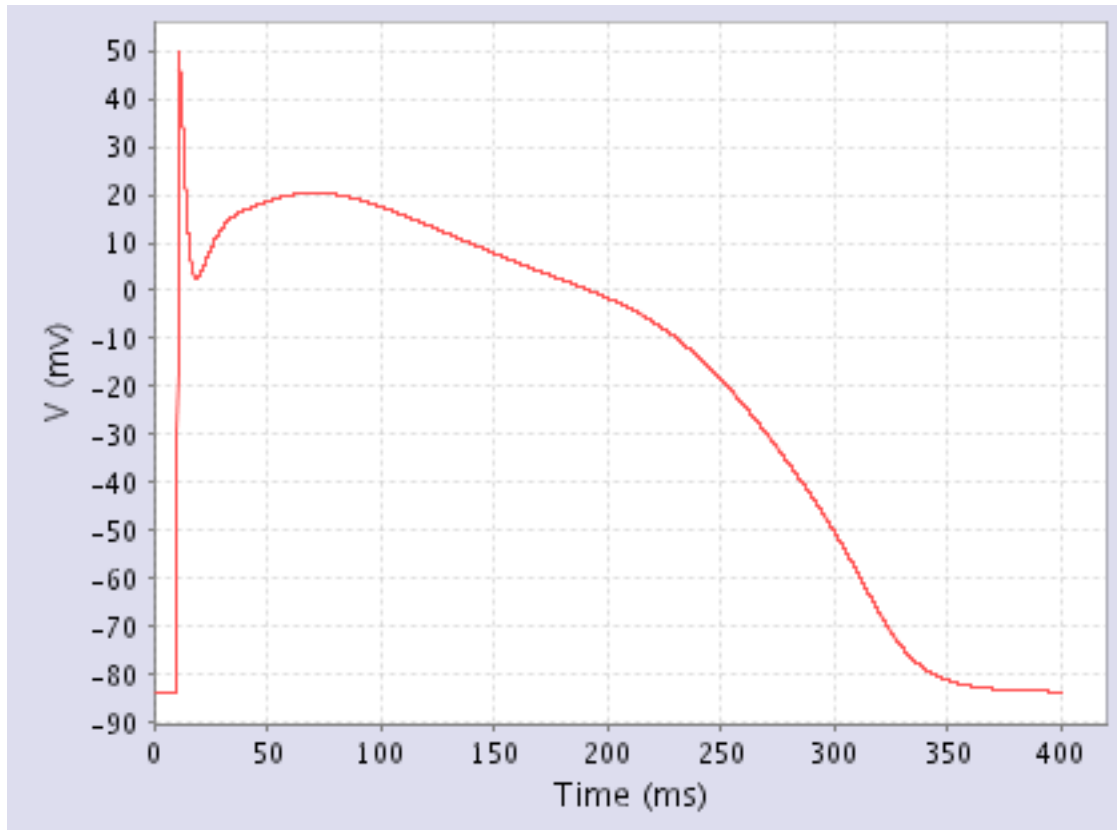
Human Ventricular PB98-ESM

Enhanced Simucore Model Based Upon: Priebe-Beuckelmann Model of Human Ventricular Cardiac Action Potentials, 1998; v. 2.0

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1. Description



Example action potential (BCL = 400 ms).

This model simulates human ventricular action potentials. This model is based on the Luo-Rudy II model of a guinea-pig ventricular myocyte with currents scaled to fit human cell data. In addition, major ionic currents (I_{Ca} , I_{to} , I_{Kr} , I_{Ks} , and I_{K1}) were reformulated based on data obtained from human myocytes.

Abstract excerpt: *"In the present study, selected ionic currents based on human data are incorporated into a model of the ventricular action potential for the purpose of studying the cellular electrophysiological consequences of heart failure. Ionic currents that are not yet sufficiently characterized in human ventricular myocytes are adopted from the action potential model developed by Luo and Rudy (LR model)."*

2. References

- Priebe L, Beuckelmann DJ.
Simulation study of cellular electric properties in heart failure.
Circ Res. 1998 Jun 15;82(11):1206-23.
PMID: [96339204](#)

3. Ordering

- [Order this model](#) or [request further information](#).