



Cardiac Action Potential Analysis

Software for Automatic Analysis of
Cardiac Action Potential Recordings
on MS Windows 64-bit Systems

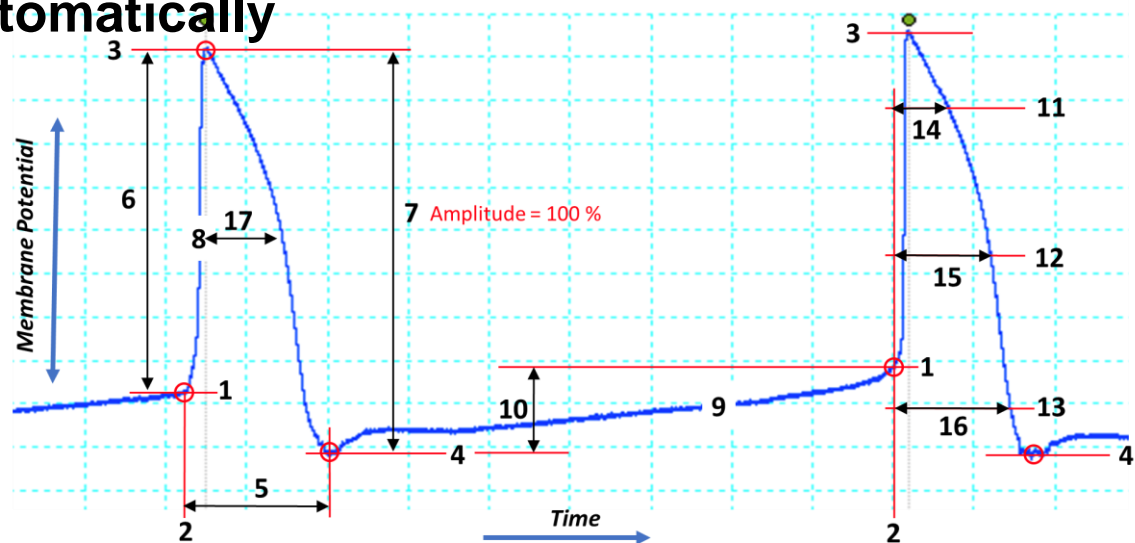
By

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Action potentials (AP), spontaneous or evoked, are automatically detected and parameterized with **CAPA** in a user-independent manner. Membrane potential recordings of stem-cell derived or primary cultured cardiomyocytes or multicellular cardiac muscle preparations, respectively, can be analyzed. Analysis results and figures created during analysis are saved to PowerPoint and Excel files, respectively.

CAPA provides a very efficient and objective, unbiased, reliable, and reproducible procedure of AP data analysis.

Selection of Parameters Obtainable with CAPA Automatically



Meaning of Parameters in Relation to the Threshold

- | | | | |
|-----------|---|---|--|
| 1 | Threshold Potential (THRpot) | 11-17 Selected Parameters from AP Scanning | |
| 2 | Threshold Time | 11 | Pot. at 20% Repolarization rel. to Ampl. 7 (AP ₂₀) |
| 3 | Peak Potential (PP) | 12 | AP Width at AP ₂₀ (APW ₂₀) |
| 4 | Minimum Diastolic Potential (MDP) | 13 | Pot. at 50% Repolarization rel. to Ampl. 7 (AP ₅₀) |
| 5 | Time from Threshold to MDP | 14 | AP Duration from THRpot to AP ₅₀ (APD ₅₀) |
| 6 | AP Amplitude from THRpot to PP | 15 | Pot. at 90% Repolarization rel. to Ampl. 7 (AP ₉₀) |
| 7 | AP Amplitude from MDP to PP | 16 | AP Duration from THRpot to AP ₉₀ (APD ₉₀) |
| 8 | Maximum Depolarization Rate
(MDR = $(dV/dt)_{max}$) | 17 | AP Width at point of MDR |
| 9 | Diastolic Depolarization Rate (DDR)* | | |
| 10 | Diastolic Potential (DP) | | |

Downloads

Booklet with detailed description of CAPA

<https://e.pcloud.link/publink/show?code=XZdKvsZFsvASdnyIBHLv56rLUCU68eFuyS7>

Analyzed sample files (Power-Point and Excel)

<https://e.pcloud.link/publink/show?code=XZiKvsZYrCQdrl2CCREIacU3ny3ppvk0Gek>

<https://e.pcloud.link/publink/show?code=XZ7lvsZcEQ5irX3FiFCFw8bkH60kmFyWEmV>

CAPA_Quick_Installation_Guide.pdf

<https://e.pcloud.link/publink/show?code=XZqKvsZXbHv2VQmvA4YwLGluXE8W0uofXW7>

Current version of CAPA software package (1GB)

<https://e.pcloud.link/publink/show?code=XZ61jgZqsioCGh6rnfnrqbg6TVKRF0PEyxk>

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