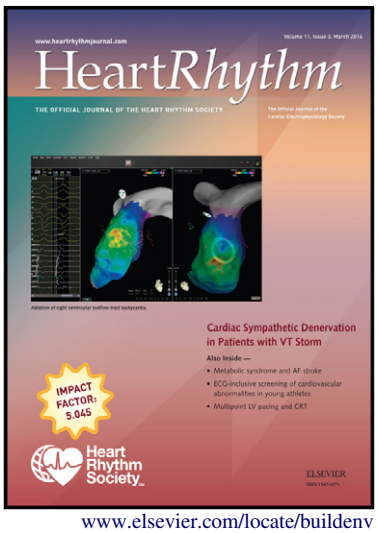

www.elsevier.com/locate/buildenv

An activation-repolarization time metric to predict localized regions of high susceptibility to re-entry

Nicholas Child BM, Martin J. Bishop DPhil, Ben Hanson PhD, Ruben Coronel MD, PhD, Tobias Opthof PhD, Bastiaan J. Boukens PhD, Richard D. Walton PhD, Igor R. Efimov PhD, Julian Bostock PhD, Yolanda Hill BSc, Christopher A Rinaldi MBBS, FHRS, Reza Razavi MBBS, MD, Jaswinder Gill MD, Peter Taggart MD, DSc

PII: S1547-5271(15)00426-9
DOI: http://dx.doi.org/10.1016/j.hrthm.2015.04.013
Reference: HRTHM6230

To appear in: *Heart Rhythm*

Cite this article as: Nicholas Child BM, Martin J. Bishop DPhil, Ben Hanson PhD, Ruben Coronel MD, PhD, Tobias Opthof PhD, Bastiaan J. Boukens PhD, Richard D. Walton PhD, Igor R. Efimov PhD, Julian Bostock PhD, Yolanda Hill BSc, Christopher A Rinaldi MBBS, FHRS, Reza Razavi MBBS, MD, Jaswinder Gill MD, Peter Taggart MD, DSc, An activation-repolarization time metric to predict localized regions of high susceptibility to re-entry, *Heart Rhythm,* http://dx.doi.org/10.1016/j.hrthm.2015.04.013

An activation-repolarization time metric to predict localized regions of high susceptibility to re-entry

Short title: Act/Repolarization mapping to predict VT site

Authors:

Nicholas Child, BM[1*]; Martin J. Bishop, DPhil[1*]; Ben Hanson, PhD[2]; Ruben Coronel, MD PhD[3,5]; Tobias Opthof, PhD[3]; Bastiaan J. Boukens, PhD[4]; Richard D. Walton, PhD[5,6]; Igor R. Efimov, PhD[4,5,7]; Julian Bostock, PhD[8]; Yolanda Hill, BSc[1], Christopher A Rinaldi, MBBS FHRS[8]; Reza Razavi, MBBS MD[1]; Jaswinder Gill, MD[8]; Peter Taggart, MD DSc[9]

*Joint first authors

Institute:

1. Division of Imaging Sciences, Kings College London, UK.

2. Dept. Mechanical Engineering, University College London, UK.

3. Academic Medical Center, Amsterdam, NL

4. Dept. Biomedical Engineering, George Washington University, USA

5. L'Institut de RYthmologie et de Modelisation Cardiaque (LIRYC), Fondation Université Bordeaux, France

6. INSERM, Universite de Bordeaux, Centre Recherche, Cario-Thoracique de Bordeaux U1045, Bordeaux, France

7. Dept. Biomedical Engineering, Washington University, USA

8. Dept. Cardiology, Guys and St Thomas' Hospital, UK

9. Dept. Cardiovascular Sciences, University College London, UK.

Corresponding author: Dr Nicholas Child, Dept. Imaging Sciences, St Thomas' Hospital, London SE1 7EH, UK.

E-mail: peter.taggart@uclh.nhs.uk Tel:+ 44 2034567898 Fax: +44 20 71885442