

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/23056> holds various files of this Leiden University dissertation

Author: Velders, Matthijs A.

Title: Optimization of care for ST-elevation myocardial infarction

Issue Date: 2014-01-23

Optimization of Care for ST-Elevation Myocardial Infarction

M.A. Velders

The research described in this thesis was performed at the departments of cardiology of the Leiden University Medical Center and the Medical Center Leeuwarden, the Netherlands, and the Uppsala Clinical Research Center, Sweden.

Cover and layout by: M.A. Velders

Cover image: iStockphoto

Printed by: Offpage

ISBN: 978-94-6182-393-9

Copyright © 2013 M.A. Velders, Sneek, the Netherlands.

Financial support by the Heart Center Friesland, Abbott Vascular BV and St. Jude Medical BV for the publication of this thesis is gratefully acknowledged.

Optimization of Care for ST-Elevation Myocardial Infarction

Proefschrift

ter verkrijging van

de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof.mr. C.J.J.M. Stolker,
volgens besluit van het College voor Promoties
te verdedigen op donderdag 23 januari 2014

klokke 10:00 uur

door

Matthijs Alexander Velders

geboren te Sneek
in 1986

Promotiecommissie

Promotor: Prof. dr. M.J. Schalij

Copromotores: Dr. A.J. van Boven (Medisch Centrum Leeuwarden)
Dr. V.A.W.M. Umans (Medisch Centrum Alkmaar)

Overige leden: Prof. dr. D.E. Atsma
Dr. S.K. James (Uppsala Clinical Research Center, Zweden)
Prof. dr. J.W. Jukema
Prof. dr. R.J.M. Klautz
Prof. dr. J.J. Piek (Academisch Medisch Centrum Amsterdam)

Financial support by the Dutch Heart Foundation for the publication of this thesis
is gratefully acknowledged.

"If you wish to make an apple pie from scratch, you must first invent the universe."

Carl Sagan

Table of contents

Chapter 1:	General introduction and outline of the thesis.	11
Part 1.	High-risk sub-populations	
Chapter 2:	Influence of gender on ischemic times and outcomes after ST-elevation myocardial infarction. <i>Am J Cardiol 2013</i>	39
Chapter 3:	Association between angiographic culprit lesion and out-of-hospital cardiac arrest in ST-elevation myocardial infarction patients. <i>Resuscitation 2013</i>	55
Chapter 4:	Outcome after ST-elevation myocardial infarction in cancer patients treated with primary percutaneous coronary intervention. <i>Am J Cardiol 2013</i>	69
Chapter 5:	Prognosis of elderly patients suffering ST-elevation myocardial infarction during 2001-2011: a report from the SCAAR registry. <i>Submitted 2013</i>	85
Part 2.	Treatment optimization	
Chapter 6:	Long term outcome of second generation everolimus-eluting stents and Endeavor zotarolimus-eluting stents in a prospective registry of ST-elevation myocardial infarction patients. <i>Eurointervention 2013</i>	103
Chapter 7:	Second generation everolimus-eluting stents versus first generation sirolimus-eluting stents in acute myocardial infarction: 1-year results of the randomized XAMI (XienceV stent vs. Cypher stent in primary PCI for Acute Myocardial Infarction) trial. <i>J Am Coll Cardiol 2012</i>	119
Chapter 8:	Two-year results of an open-label randomized comparison of everolimus-eluting stents and sirolimus-eluting stents. <i>PLoS One 2013</i>	135

Chapter 9:	Everolimus- and sirolimus-eluting stent implantation in patients with and without ST-segment elevation myocardial infarction. <i>Submitted 2013</i>	149
Chapter 10:	Summary, conclusions and future perspectives. Samenvatting, conclusies en toekomstperspectieven.	165
Chapter 11:	List of publications. Authors and affiliations. Dankwoord / Acknowledgements. Curriculum Vitae.	179

