



**Universiteit
Leiden**
The Netherlands

Leukocytes and complement in atherosclerosis

Alipour, A.

Citation

Alipour, A. (2012, February 9). *Leukocytes and complement in atherosclerosis*. Retrieved from <https://hdl.handle.net/1887/18459>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/18459>

Note: To cite this publication please use the final published version (if applicable).

Leukocytes and Complement in Atherosclerosis

Arash Alipour

ISBN: 978-94-6169-141-5

Cover: Arash Alipour

Layout & Print: Optima Grafische Communicatie, Rotterdam

Copyright © 2011 by Arash Alipour. All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without prior permission of the author.

Leukocytes and Complement in Atherosclerosis

proefschrift

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. P.F. van der Heijden,
volgens besluit van het College voor Promoties
te verdedigen op donderdag 9 februari 2012
klokke 15.00 uur

door

Arash Alipour
geboren te Babolsar, Iran
in 1978

PROMOTIECOMMISSIE

Promotor: Prof. Dr. J.W. Jukema

Co-promotores: Dr. M. Castro Cabezas, Sint Franciscus Gasthuis, Rotterdam, Nederland
Dr. J.W.F. Elte, Sint Franciscus Gasthuis, Rotterdam, Nederland

Overige leden: Prof. Dr. ir. A.M. Havekes
Prof. Dr. A. van der Laarse
Prof. Dr. L. Masana, Universitat Rovira i Virgili, Reus, Spain
Dr. H.W.M. Plokker, Sint Antonius Ziekenhuis, Nieuwegein, Nederland
Prof. Dr. A.J. Rabelink
Prof. Dr. E.E. van der Wall

Financial support by the Dutch Heart Foundation and the Sint Franciscus Gasthuis Rotterdam for the publication of this thesis is gratefully acknowledged.

Financial support for printing this thesis was kindly provided by: J.E. Jurriaanse Stichting, Genzyme Nederland, Merck Sharp & Dohme BV, Novartis Pharma BV, Actelion, sanofi-aventis and Daiichi Sankyo.

*Aan mijn ouders
Voor Josine, Noah en Timo*

TABLE OF CONTENTS:

General introduction and outline of the thesis; published in part as 'novel aspects of postprandial lipemia in relation to atherosclerosis' in <i>Atheroscler Suppl.</i> 2008;9:39-44.	9
Part I: Leukocyte activation by triglyceride-rich lipoproteins and glucose	23
a. Leukocyte activation by triglyceride-rich lipoproteins. <i>Arterioscler Thromb Vasc Biol.</i> 2008;28:792-797.	25
b. The effects of acute glucose loading on leukocyte activation in familial hyperlipidemic disorders. <i>Submitted.</i>	45
c. Exploring the value of apoB48 as marker for atherosclerosis in clinical practice. <i>Eur J Clin Invest.</i> in press.	59
Part II: Leukocyte activation in coronary artery disease	75
a. Gender differences in leukocyte activation in subjects with and without coronary artery disease. <i>Submitted.</i>	77
b. Markers of leukocyte activation and mRNA expression in different vascular compartments in patients with coronary artery disease. <i>Submitted.</i>	91
c. Monocyte CD11b expression is a predictor of future vascular events in patients with and without pre-existent coronary artery disease. <i>Submitted.</i>	107
Part III: Mannose binding lectin and atherosclerosis	119
a. Mannose binding lectin deficiency and triglyceride-rich lipoprotein metabolism in normolipidemic subjects. <i>Atherosclerosis.</i> 2009;206:444-450.	121
b. Mannose binding lectin 2 haplotypes do not affect the progression of coronary atherosclerosis in men with proven coronary artery disease treated with pravastatin. <i>Atherosclerosis.</i> 2011;215:125-129.	137
c. Review: Cell-mediated lipoprotein transport: a novel anti-atherogenic concept. <i>Atheroscler Suppl.</i> 2010;11:25-29.	151
General discussion and future perspectives	165
Nederlandse samenvatting en toekomstperspectieven	171
APPENDIX List of abbreviations	181
Publications	183
Curriculum vitae	186

