



Universiteit
Leiden
The Netherlands

Modulation of HDL metabolism : studies in APOE*3-Leiden.CETP mice

Haan, W. de

Citation

Haan, W. de. (2009, April 16). *Modulation of HDL metabolism : studies in APOE*3-Leiden.CETP mice*. Retrieved from <https://hdl.handle.net/1887/13730>

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/1887/13730>

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

Modulation of HDL Metabolism

Studies in APOE*3-Leiden.CETP Mice

Modulation of HDL Metabolism

Studies in APOE*3-Leiden.CETP Mice

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 16 april 2009
klokke 15.00 uur

door

Willemke de Haan
geboren te Drachten
in 1980

Promotie commissie

Promotores:	Prof. Dr. Ir. L.M. Havekes Prof. Dr. J.W. Jukema
Co-promotor:	Dr. P.C.N. Rensen
Overige Leden:	Prof. Dr. J.J. Kastelein (AMC, Amsterdam) Prof. Dr. J.A. Romijn Prof. Dr. F. Kuipers (UMCG, Groningen) Dr. H.M.G. Princen (TNO, Leiden) Dr. M. van Eck

The research described in this thesis was supported by a grant of the Netherlands Heart Foundation (NHF-2003B136).

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

Modulation of HDL Metabolism - Studies in APOE*3-Leiden.CETP mice

ISBN: 978-90-6464-332-3

Printed by: GVO drukkers & vormgevers B.V. | Ponsen & Looijen

© 2009 W. de Haan. No part of this thesis may be reproduced or transmitted in any form or by any means, without written permission of the author.

The printing of this thesis was kindly supported by:

AstraZeneca BV
Bayer BV
F. Hoffmann-La Roche Ltd
Genzyme BV
JE Jurriaanse Stichting
Merck Sharp & Dohme BV
Pfizer BV
Roche Nederland BV
Schering-Plough BV
Snijders Scientific BV
TNO Quality of Life

Contents

Chapter 1	General introduction	9
Chapter 2	Fenofibrate increases HDL-cholesterol by reducing cholesteryl ester transfer protein expression <i>J Lipid Res 2007; 48: 1763-1771</i>	43
Chapter 3	Atorvastatin increases HDL cholesterol by reducing CETP expression in cholesterol fed APOE*3-Leiden.CETP mice <i>Atherosclerosis 2008; 197: 57-63</i>	63
Chapter 4	Niacin increases HDL by reducing hepatic expression and plasma levels of cholesteryl ester transfer protein in APOE*3Leiden.CETP mice <i>Arterioscler Thromb Vasc Biol 2008; 28: 2016-2022</i>	79
Chapter 5	Torcetrapib does not reduce atherosclerosis beyond atorvastatin and induces a more pro-inflammatory lesions than atorvastatin <i>Circulation 2008; 117: 2515-2522</i>	99
Chapter 6	PXR agonism decreases plasma HDL levels in APOE*3-Leiden.CETP mice <i>Biochim Biophys Acta 2009; In Press</i>	115
Chapter 7	Apolipoprotein CI inhibits scavenger receptor BI and increases plasma HDL levels <i>in vivo</i> <i>Biochem Biophys Res Commun 2008; 377:1294-1298</i>	131
Chapter 8	Identification of a C-terminal domain in apolipoprotein CI that inhibits CETP activity but not LPL activity, by structure-function analysis <i>Submitted for publication</i>	143
Chapter 9	General discussion	157
Chapter 10	Summary Samenvatting List of abbreviations Publication list Curriculum vitae	171

