

University of Groningen

## Clinical applications of positron emission tomography in coronary atherosclerosis

Siebelink, Hans-Marc José

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*

Publisher's PDF, also known as Version of record

*Publication date:*

2000

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Siebelink, H-M. J. (2000). *Clinical applications of positron emission tomography in coronary atherosclerosis*. s.n.

### Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

### Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

**Clinical Applications of  
Positron Emission Tomography  
in Coronary Atherosclerosis**

**Financial support by The Netherlands Heart Foundation and the Rijksuniversiteit Groningen, The Netherlands, for the publication of this thesis is gratefully acknowledged.**

Publication of this thesis was also supported by generous contributions from:

Fornix Biosciences NV, Schering Nederland BV, Guerbet Nederland BV, ASTAMedica BV, Yamanouchi Pharma BV, Bayer Nederland BV, Amersham Cygne, Astra Zenica, Servier Nederland BV, PCH Nederland, Bristol-Meyers Squibb BV, Boehringer Ingelheim BV.

ISBN 90-367-1319-6  
NUGI 742

© Copyright 2000 H.J. Siebelink

All rights are reserved. This publication is protected by copyright. No part of it may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means — electronic, mechanical, photocopy, recording, or otherwise — without the prior written permission of the author.

Vormgeving: P. van der Sijde, Groningen, The Netherlands  
Druk: Ponsen en Looijen bv, Wageningen, The Netherlands

RIJKSUNIVERSITEIT GRONINGEN

**Clinical Applications of  
Positron Emission Tomography  
in Coronary Atherosclerosis**

**Proefschrift**

ter verkrijging van het doctoraat in de  
Medische Wetenschappen  
aan de Rijksuniversiteit Groningen  
op gezag van de  
Rector Magnificus, dr. D.F.J. Bosscher,  
in het openbaar te verdedigen op  
woensdag 20 december 2000  
om 14.15 uur

door

**Hans-Marc José Siebelink**

geboren op 28 december 1969  
te Vlaardingen

Promotores : Prof. dr. H.J.G.M. Crijs  
Prof. dr. E.E. van der Wall

Co-promotor: Dr. P.K. Blanksma

Referent: Dr. A.J. van Boven

Beoordelingscommissie:

Prof. dr. W.H. van Gilst  
Prof. dr. W. Vaalburg  
Prof. dr. W. Wijns

Paranimfen:

Drs. R.A. de Boer  
Dr. A.F.M. van den Heuvel

To them the truth would be literally nothing  
but the shadows of the images

Plato's dialogues: The allegory of the cave

Voor Ben en Justine,  
mijn vader en moeder

# CONTENTS

## **Part I Introduction, aim and outline**

Chapter 1	11
Introduction, aim and outline of the thesis.	

## **Part II Vascular function and intervention**

Chapter 2	33
Cholesterol-lowering therapy with fluvastatin improves myocardial perfusion reserve in healthy humans with hypercholesterolemia. <i>Submitted</i>	

Chapter 3	51
PTCA but not atorvastatin normalises dipyridamole induced myocardial perfusion and perfusion reserve in target vessel areas after 6 months. A randomised study using positron emission tomography. <i>Submitted</i>	

## **Part III Cardiac function**

Chapter 4	69
Automated ejection fraction determination from gated myocardial FDG-PET data. <i>Journal of Nuclear Cardiology 1999;6:577-582</i>	

## **Part IV Clinical management**

Chapter 5	85
Detecting hibernating myocardium: how and why? <i>International Journal of Cardiology 2000;73:209-211</i>	

Chapter 6	91
No different cardiac event free survival in positron emission tomography and single photon emission computed tomography guided patient management. A prospective randomized comparison in patients with suspicion of jeopardized myocardium. <i>In press : Journal of the American College of Cardiology</i>	

## **Part V Summary and future perspectives**

Chapter 7	113
Summary and future perspectives	

<b>Nederlandse samenvatting en conclusies</b>	123
---	-----

<b>Dankwoord</b>	129
<b>Bibliografie</b>	133
<b>Curriculum vitae</b>	135



