

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/20497> holds various files of this Leiden University dissertation.

**Author:** Siegerink, Bob

**Title:** Prothrombotic factors and the risk of myocardial infarction and ischaemic stroke in young women : differences, similarities and implications

**Issue Date:** 2013-02-05

**Prothrombotic factors and the risk of myocardial infarction and  
ischaemic stroke in young women;  
*differences, similarities and implications***

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 dinsdag 5 februari 2013  
klokke 13.45 uur

door

Bob Siegerink

geboren te Deventer  
in 1983

## **PROMOTIECOMMISSIE**

Promotores: Prof. dr. A. Algra  
Prof. dr. F.R. Rosendaal

Overige leden: Prof. dr. H. ten Cate  
Prof. dr. J.W. Jukema  
Dr. M.J.H. Wermer

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

## CONTENTS

<b>Chapter 1</b>	Introduction	1
<b>Chapter 2</b>	Family history differs between young women with myocardial infarction and ischaemic stroke.	15
<b>Chapter 3</b>	Intrinsic coagulation activation and the risk of myocardial infarction and ischaemic stroke in young women.	29
<b>Chapter 4</b>	Antigen levels of coagulation factor XI and the risk of myocardial infarction and ischaemic stroke in young women.	47
<b>Chapter 5</b>	Antigen levels of coagulation factor XII and prekallikrein and the risk of myocardial infarction and ischaemic stroke in young women.	65
<b>Chapter 6</b>	High Molecular Weight Kininogen and the risk of myocardial infarction and ischaemic stroke in young women.	81
<b>Chapter 7</b>	Mendelian randomisation: use of genetics to enable causal inference in observational studies.	97
<b>Chapter 8</b>	Genetic variation in fibrinogen; its relationship to fibrinogen levels and the risk of myocardial infarction and ischaemic stroke in young women.	109
<b>Chapter 9</b>	Genetic variants of coagulation factor XIII and the risk of myocardial infarction in young women	125
<b>Chapter 10</b>	Clot lysis time and the risk of myocardial infarction and ischaemic stroke in young women	133
<b>Chapter 11</b>	High VWF, low ADAMTS13, and oral contraceptives increase the risk of myocardial infarctions and ischaemic stroke in young women	147
<b>Chapter 12</b>	Antiphospholipid antibodies and risk of myocardial infarction and ischaemic stroke in young women	165
<b>Chapter 13</b>	Summary and general discussion	181
<b>Chapter 14</b>	Nederlandse samenvatting	213
	List of publications	233
	Curriculum Vitae	237
	Dankwoord	239