



Universiteit  
Leiden  
The Netherlands

## Liver transplantation : chimerism, complications and matrix metalloproteinases

Hove, W.R. ten

### Citation

Hove, W. R. ten. (2011, October 4). *Liver transplantation : chimerism, complications and matrix metalloproteinases*. Retrieved from <https://hdl.handle.net/1887/17891>

Version: Corrected Publisher's Version

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

License: <https://hdl.handle.net/1887/17891>

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

# **Liver transplantation**

## Chimerism, complications and matrix metalloproteinases

### **Proefschrift**

ter verkrijging van  
de graad van Doctor aan de Universiteit Leiden,  
op gezag van de Rector Magnificus prof. mr. P.F. van der Heijden,  
volgens besluit van het College van Promoties  
te verdedigen op dinsdag 4 oktober 2011 klokke 16:15 uur  
door

### **Willem Rogier ten Hove**

geboren te Oegstgeest in 1965

# Promotiecommissie

*Promotor:*

Prof. dr. B. van Hoek

*Co-promotor:*

Dr. ir. H.W. Verspaget

*Overige leden:*

Prof. dr. R.J. Porte

Prof. dr. H.L.A. Janssen

Prof. dr. A.E. Meinders

Dr. L.F.S.J. Crobach

Prof. dr. P.C.W. Hogendoorn

# Contents

<i>Chapter 1</i>	7
Introduction	
<i>Chapter 2</i>	15
Extensive chimerism in liver transplants: vascular endothelium, bile duct epithelium, and hepatocytes.	
<i>Liver Transplantation 2003;9:552-556.</i>	
<i>Chapter 3</i>	27
Liver chimerism after allogeneic blood stem cell transplantation.	
<i>Transplantation Proceedings 2007;39:231-236.</i>	
<i>Chapter 4</i>	39
MMP-2 and MMP-9 serum levels change but their gene promoter polymorphisms are not associated with late phase I/R injury or rejection after orthotopic liver transplantation.	
<i>The Open Transplantation Journal 2008;2:66-72.</i>	
<i>Chapter 5</i>	55
Sequential liver chemistry profiling and abdominal ultrasound assessments to predict biliary strictures after liver transplantation.	
<i>Submitted.</i>	
<i>Chapter 6</i>	69
Matrix metalloproteinase 2 genotype is associated with nonanastomotic biliary strictures after orthotopic liver transplantation.	
<i>Liver International 2011;31:1110-1117.</i>	
<i>Chapter 7</i>	85
Chimerism as assessed by matrix metalloproteinase genotyping after orthotopic liver transplantation.	

<i>Chapter 8</i>	99
Summarizing discussion.	
<i>Chapter 9</i>	109
Nederlandse samenvatting.	
<i>List of abbreviations</i>	115
<i>Author affiliations</i>	117
<i>List of publications</i>	118
<i>Curriculum vitae</i>	120