

University of Groningen

## Hemostasis in Pediatric Liver Transplantation

Werner-Paap, Maureen

DOI:  
[10.33612/diss.144145936](https://doi.org/10.33612/diss.144145936)

**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:*  
2020

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

*Citation for published version (APA):*  
Werner-Paap, M. (2020). *Hemostasis in Pediatric Liver Transplantation*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.144145936>

### 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.

# **Hemostasis in Pediatric Liver Transplantation**

---

Maureen J.M. Werner

## **COLOPHON**

Hemostasis in Pediatric Liver Transplantation  
Maureen J.M. Werner

© Copyright Maureen J.M. Werner 2020, Groningen, The Netherlands  
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without written permission of the author or the publisher holding the copyright of the published articles.

Cover and Layout: Birgit Vredenburg | [www.persoonlijkproefschrift.nl](http://www.persoonlijkproefschrift.nl)  
Printing: Ridderprint | [www.ridderprint.nl](http://www.ridderprint.nl)

Financial support for printing of this thesis was obtained by kind contributions from the University of Groningen, University Medical Center Groningen, Graduate School of Medical Sciences.



rijksuniversiteit  
groningen

# Hemostasis in Pediatric Liver Transplantation

**Proefschrift**

ter verkrijging van de graad van doctor aan de  
Rijksuniversiteit Groningen  
op gezag van de  
rector magnificus prof. dr. C. Wijmenga  
en volgens besluit van het College voor Promoties.

De openbare verdediging zal plaatsvinden op  
maandag 23 november 2020 om 12.45 uur

door

**Maureen Jacoba Maria Werner**

geboren op 3 augustus 1990  
te Hardenberg

## **PROMOTORES**

Prof. dr. R.J. Porte

Prof. dr. J.A. Lisman

## **BEOORDELINGSCOMMISSIE**

Prof. dr. A.A.E. Verhagen

Prof. dr. J.P.P.M. de Vries

Prof. dr. L.W.E. van Heurn

## **PARANIMFEN**

Jara E. Jonker

Joyce Hellegering



## TABLE OF CONTENTS

<b>Chapter 1</b>	General introduction and outline of this thesis	9
<b>Chapter 2</b>	Liver transplantation in pediatric patients in the Netherlands; Evolution over the past two decades <i>Nederlands Tijdschrift voor Geneeskunde, 2017; 161: D2136</i>	17
<b>Chapter 3</b>	Routine postoperative antithrombotic therapy in pediatric liver transplantation: Impact on bleeding and thrombotic complications <i>Thrombosis and Haemostasis, 2020; 120(4): 627-637</i>	31
<b>Chapter 4</b>	Evidence for a rebalanced hemostatic system in pediatric liver transplantation: A prospective cohort study <i>American Journal of Transplantation, 2020; 20(5): 1384-1392</i>	53
<b>Chapter 5</b>	<i>In vitro</i> evaluation of pro- and anticoagulant drugs in children with end-stage liver disease undergoing liver transplantation <i>Thrombosis and Haemostasis, 2020; 120(09): 1240-1247</i>	73
<b>Chapter 6</b>	The Pediatric Retransplantation Risk Score: A prognostic model for survival after pediatric liver retransplantation <i>Submitted for publication</i>	91
<b>Chapter 7</b>	First report of successful transplantation of a pediatric donor liver graft after hypothermic machine perfusion <i>Pediatric Transplantation, 2019; 23(3): e13362</i>	111
<b>Chapter 8</b>	Summary, discussion and future perspectives	121
<b>Appendices</b>	Nederlandse samenvatting ( <i>Dutch summary</i> )	138
	Bibliography	142
	Dankwoord ( <i>Acknowledgements</i> )	144
	Over de auteur ( <i>About the author</i> )	148



