

University of Groningen

Optimizing utilization and quality assessment of deceased donor kidneys

Schutter, Rianne

DOI:
[10.33612/diss.689517043](https://doi.org/10.33612/diss.689517043)

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:
2023

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

Citation for published version (APA):

Schutter, R. (2023). *Optimizing utilization and quality assessment of deceased donor kidneys*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.689517043>

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.

**Optimizing utilization and quality assessment
of deceased donor kidneys**

Rianne Schutter

The printing of this thesis was kindly supported by:
Graduate School of Medical Sciences
University Medical Center Groningen
Nederlandse Transplantatie Vereniging
Stichting SBOH



Optimizing utilization and quality assessment of deceased donor kidneys

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

woensdag 5 juli 2023 om 12.45 uur

door

Rianne Schutter

geboren op 3 november 1985
te Slochteren

Layout and design: Proefschrift All In One
Printing: Proefschrift All In One

Copyright © 2023 Rianne Schutter
All rights reserved. No part of this thesis may be reproduced, stored, or transmitted
in any way or by any means without the author's permission.

Promotor

Prof. dr. H.G.D. Leuvenink

Copromotores

Dr. C. Moers

Dr. R.J.H. Borra

Beoordelingscommissie

Prof. dr. S.P. Berger

Prof. dr. M. Bock

Prof. dr. M.E.J. Reinders

Paranimfen

L. Kasteel

E. Schakelaar

TABLE OF CONTENTS

Chapter 1	General Introduction	9
Part A	Organ Donation and Kidney Utilization	
Chapter 2	Kidney utilization in the Netherlands – do we optimally use our donor organs?	27
Chapter 3	Considerable variability among transplant nephrologists in judging deceased donor kidney offers - a nationwide survey study.	53
Chapter 4	Hypothermic machine perfusion vs standard cold storage – outcome after 10 years.	83
Part B	Magnetic Resonance Imaging: pre- and post-transplant kidney assessment	
Chapter 5	Magnetic resonance imaging during warm ex vivo kidney perfusion.	107
Chapter 6	Magnetic resonance imaging assessment of renal flow distribution patterns during ex vivo normothermic machine perfusion in porcine and human kidneys.	137
Chapter 7	MRI for diagnosis of post-renal transplant complications: current state-of-the-art and future perspectives.	163
Chapter 8	Summary	192
	General Discussion, and Future Perspectives	196
Appendices	Nederlandse samenvatting	210
	List of publications	216
	List of contributing authors	218
	Dankwoord	220
	About the author	226