

University of Groningen

Acknowledging differences in Acute Kidney Injury

Koeze, Jacqueline

DOI:
[10.33612/diss.129582657](https://doi.org/10.33612/diss.129582657)

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):
Koeze, J. (2020). *Acknowledging differences in Acute Kidney Injury: a complex clinical syndrome in critically ill patients*. University of Groningen. <https://doi.org/10.33612/diss.129582657>

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).

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.

Acknowledging differences in Acute Kidney Injury

a complex clinical syndrome
in critically ill patients

Jacqueline Koeze



Printed by Ipskamp Printing
Enschede, the Netherlands

Design & layout Bianca Pijl, www.pijlldesign.nl
Groningen, the Netherlands

Foto's Nuukio NP, Finland 30 november 2019

ISBN 978-94-034-2813-0 (*print*)
978-94-034-2814-7 (*digital*)

© Copyright: 2020 J. Koeze, Groningen, the Netherlands
All rights reserved. No part of this thesis may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, without prior written permission of the author, or when appropriate, of the publishers of the publications included in this thesis.



rijksuniversiteit
 groningen

Acknowledging differences in Acute Kidney Injury

a complex clinical syndrome
 in critically ill patients

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 26 augustus 2020 om 14.30 uur

door

Jacqueline Koeze

geboren op 23 april 1975
 te Smalingerland

Promotores

Prof. dr. J.G. Zijlstra

Prof. dr. J.C.C. van der Horst

Copromotor

Dr. M. van Meurs

Beoordelingscommissie

Prof. dr. H. Snieder

Prof. dr. C.A. Stegeman

Prof. dr. N.P. Juffermans

Paranimfen

Liset Pengel

Joan Doornebal

Table of contents

Chapter 1	Introduction	9
Chapter 2	Incidence, timing and outcome of AKI in critically ill patients varies with the definition used and the addition of urine output criteria	21
Chapter 3	Clinical examination findings as predictors of acute kidney injury in critically ill patients	63
Chapter 4	Associations between tricuspid annular plane systolic excursion to reflect right ventricular function and acute kidney injury in critically ill patients: a SICS-I sub-study	85
Chapter 5	Plasma neutrophil gelatinase associated lipocalin at Intensive Care Unit admission as predictor of acute kidney injury progression	109
Chapter 6	Heterogenous renal injury biomarker production reveals human sepsis-associated AKI subtypes	137
Chapter 7	Bundled care in acute kidney injury in critically ill patients, a before-after intervention study	163
Chapter 8	Summary, thesis outline and future perspectives	181
	Nederlandse samenvatting	191
	Curriculum Vitae	197
	Dankwoord	203

