



Universiteit
Leiden
The Netherlands

Control of cytomegalovirus viremia after T cell depleted allogeneic stem cell transplantation

Heiden, P.L.J. van der

Citation

Heiden, P. L. J. van der. (2019, March 20). *Control of cytomegalovirus viremia after T cell depleted allogeneic stem cell transplantation*. Retrieved from <https://hdl.handle.net/1887/70208>

Version: Not Applicable (or Unknown)

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

Downloaded from: <https://hdl.handle.net/1887/70208>

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

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/70208> holds various files of this Leiden University dissertation.

Author: Heiden, P.L.J. van der

Title: Control of cytomegalovirus viremia after T cell depleted allogeneic stem cell transplantation

Issue Date: 2019-03-20

Control of cytomegalovirus viremia after T cell depleted allogeneic stem cell transplantation

Proefschrift

P.L.J. van der Heiden

© copyright P.L.J. van der Heiden, Den Haag 2019

Printing: ProefschriftMaken || www.proefschriftmaken.nl

Cover design: Iliana Boshoven-Gkini || AgileColor.com

ISBN 978-94-6380-205-5

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, electronic, mechanical, photocopying, recording or otherwise, without prior permission of the author or the copyright-owning journals for previous published chapters.

Control of cytomegalovirus viremia after T cell depleted allogeneic stem cell transplantation

Proefschrift

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus Prof. mr. C.J.J.M. Stolker,
volgens besluit van het College voor Promoties
te verdedigen op woensdag 20 maart 2019
klokke 15:00 uur

Door

Petrus Leonardus Joseph van der Heiden
Geboren te Rijnsburg
in 1976

Promotor

Prof. Dr. J.H.F. Falkenburg

Copromotores

Dr. I. Jedema

Dr. W.A.F. Marijt

Leden promotiecommissie

Prof. Dr. A.C. Lankester

Prof. Dr. C.E. van der Schoot (Universiteit van Amsterdam)

Prof. Dr. J.H.E. Kuball (Universitair Medisch Centrum Utrecht)

Contents

Chapter 1	General introduction and aim of the thesis	7
Chapter 2	Oral valganciclovir as pre-emptive therapy has similar efficacy on cytomegalovirus DNA load reduction as intravenous ganciclovir in allogeneic stem cell transplantation recipients	21
Chapter 3	Comparable incidence and severity of cytomegalovirus infections following T cell depleted allogeneic stem cell transplantation preceded by reduced intensity or myeloablative conditioning	35
Chapter 4	CMV seronegative donors: effect on clinical severity of CMV infection and reconstitution of CMV-specific immunity	51
Chapter 5	Effective treatment of refractory CMV reactivation after allogeneic stem cell transplantation with in vitro-generated CMV pp65-specific CD8 ⁺ T cell lines	65
Chapter 6	Identification of varicella zoster virus-specific CD8 ⁺ T cells in patients after T cell depleted allogeneic stem cell transplantation	85
Chapter 7	Control of cytomegalovirus viremia after allogeneic stem cell transplantation; a review on CMV-specific T cell reconstitution	99
Chapter 8	Summary	121
Chapter 9	General discussion	127
Chapter 10	Nederlandse samenvatting	143
	Dankwoord	154
	Curriculum vitae	156
	List of publications	158