

University of Groningen

Ageing of innate immunity in health and vasculitic diseases

Wang, Qi

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:

2016

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

Citation for published version (APA):

Wang, Q. (2016). *Ageing of innate immunity in health and vasculitic diseases*. [Thesis fully internal (DIV), University of Groningen]. Rijksuniversiteit Groningen.

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.

**Ageing of innate immunity
in health
and vasculitic diseases**

Qi Wang

The research presented in this thesis was financially supported by

China Scholarship Council



Groningen University Institute for Drug Exploration (GUIDE)



Jan Kornelis de Cock Stichting



Reumafonds



The printing of this thesis was financially supported by

University of Groningen



Groningen University Institute for Drug Exploration (GUIDE)



Vasculitis Stichting



Cover design: Qi Wang

Layout and printing: Off Page, Amsterdam

ISBN: 978-94-6182-713-5

Copyright © 2016 by Qi Wang



**rijksuniversiteit
 groningen**

Ageing of innate immunity in health and vasculitic diseases

Proefschrift

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

De openbare verdediging zal plaatsvinden op

woensdag 7 september 2016 om 11.00 uur

Door

Qi Wang

geboren op 11 maart 1987
 te Shandong, China

Promotores

Prof. dr. A.M.H. Boots

Prof. dr. P. Heeringa

Copromotores

Dr. E. Brouwer

Dr. J. Westra

Beoordelingscommissie

Prof. dr. J.D. Laman

Prof. dr. G.A. Huls

Prof. dr. A.E. Voskuyl

To my family



TABLE OF CONTENTS

Chapter 1	General introduction and outline of the thesis	9
Chapter 2	Age-determined severity of anti-myeloperoxidase autoantibody mediated glomerulonephritis in mice <i>Nephrology Dialysis Transplantation, 2016, in press</i>	27
Chapter 3	Reduced levels of cytosolic DNA sensor AIM2 are associated with impaired cytokine responses in healthy elderly <i>Experimental Gerontology, 2016</i>	51
Chapter 4	Ageing is associated with increased numbers of pro-inflammatory monocytes <i>Work in progress</i>	71
Chapter 5	Altered distribution of monocyte subsets in giant cell arteritis and polymyalgia rheumatica <i>Manuscript in preparation</i>	87
Chapter 6	Low numbers of CD16+ monocytes predict shorter time to relapse in polymyalgia rheumatica <i>Submitted</i>	115
Chapter 7	Summary, discussion and future perspectives	121
Appendices	Nederlandse samenvatting	133
	Acknowledgement	137
	Curriculum Vitae	141

