

University of Groningen

Practice research in the field of gout - clinical pharmacology of antihyperuricemic drugs

Reinders, Mattheus Karsien

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:

2008

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

Citation for published version (APA):

Reinders, M. K. (2008). *Practice research in the field of gout - clinical pharmacology of antihyperuricemic drugs*. s.n.

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.

Practice research in the field of gout

Clinical pharmacology of antihyperuricemic drugs

Cover photo: Earth, moon, and stars in a patient with gouty arthritis

The patient, a 55-year-old man who was undergoing a course of anti-tuberculosis treatment, abruptly developed severe pain and swelling in the right knee and both ankles. Joint aspiration revealed thick, white material, which was confirmed by polarizing microscopy to be monosodium urate monohydrate crystals. The aggregate of crystals (right panels) resembled the painting "Starry Night" by Vincent van Gogh and the NASA photograph "Earth-Moon Conjunction" (courtesy NASA/JPL-Caltech) (left panels).

Copyright 2007, reproduced with permission from Wiley InterScience Group

[Ju JH, Kim HY, Park SH. Clinical Images: Earth, moon, and stars in a patient with gouty arthritis. *Arthritis Rheum* 2007;56:2802]

Reinders, Mattheus Karsien

Practice research in the field of gout: clinical pharmacology of antihyperuricemic drugs

ISBN 978-90-367-3614-5

© 2008 M.K. Reinders

Thesis University of Groningen - With summary in Dutch

Printed by: Ponsen & Looijen BV, Wageningen, The Netherlands

No part of this book may be reproduced in any form without written permission of the author

Publication of this thesis was financially supported by a grant from NVZA

RIJKSUNIVERSITEIT GRONINGEN

**Practice research in the field of gout:
clinical pharmacology of antihyperuricemic drugs**

Proefschrift

ter verkrijging van het doctoraat in de
Wiskunde en Natuurwetenschappen
aan de Rijksuniversiteit Groningen
op gezag van de
Rector Magnificus, dr. F. Zwarts,
in het openbaar te verdedigen op
vrijdag 28 november 2008
om 14:45 uur

door

Mattheus Karsien Reinders
geboren op 23 juni 1978
te Winschoten

Promotores: Prof.dr. J.R.B.J. Brouwers
Prof.dr. M.A.F.J. van de Laar

Copromotores: Dr. T.L.Th.A. Jansen
Dr. E.N. van Roon

Beoordelingscommissie: Prof.dr. H.-J. Guchelaar
Prof.dr. L.T.W. de Jong-van den Berg
Prof.dr. Sj. van der Linden

Contents of the thesis

Chapter 1	Scope and objectives	7
Chapter 2	Management of gout	11
2.1	Gout in clinical practice	13
2.2	Benzbromarone: an old drug with new perspectives; update of its clinical pharmacology	29
Chapter 3	Outcome research with antihyperuricemic drugs	45
3.1	Biochemical effectiveness of allopurinol and allopurinol-probenecid in previously benzbromarone-treated gout patients	47
3.2	Efficacy and tolerability of urate lowering drugs in gout: a randomised controlled trial of benzbromarone versus probenecid after failure of allopurinol	59
3.3	Prevention of recurrent gouty arthritis with urate lowering treatment; a follow-up study	75
3.4	Dose-escalation of allopurinol and benzbromarone in gout: a randomised controlled trial	83
Chapter 4	Therapeutic drug monitoring of allopurinol treatment	99
4.1	A rapid and simple method for quantification of allopurinol and oxipurinol in human serum by high-performance liquid chromatography with UV-detection	101
Chapter 5	Uricase for gout treatment	115
5.1	Rasburicase for refractory tophaceous gout - a case report and review of literature	117
5.2	Rasburicase treatment in severe tophaceous gout: a novel therapeutic option	127
Chapter 6	Summary and future perspectives	135
Chapter 7	Samenvatting	141
	List of publications related to this thesis	147
	Dankwoord	149
	About the author	151

