University of Groningen

Improving long-term morbidity and treatment outcomes in patients with rare malignancies

Stelwagen, Johannes

DOI:
[10.33612/diss.170823907](https://doi.org/10.33612/diss.170823907)

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:
2021

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

Citation for published version (APA):
Stelwagen, J. (2021). *Improving long-term morbidity and treatment outcomes in patients with rare malignancies*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen.
<https://doi.org/10.33612/diss.170823907>

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.

IMPROVING LONG-TERM MORBIDITY AND TREATMENT OUTCOMES IN PATIENTS WITH RARE MALIGNANCIES

Johannes Stelwagen

The work described in this thesis was conducted at the Department of Medical Oncology of the University Medical Center Groningen, the Netherlands.

Cover:	Eddy Wullink, made in 2001 in Groningen
Lay-out design:	Marilou Maes, persoonlijkproefschrift.nl
Inspired by:	Design of Nathalie van den Tempel and Francien Talens
Printing:	Gildeprint Enschede, gildeprint.nl

Printing of this thesis was supported by:

- UMCG Graduate School of Medical Sciences
- Stichting Werkgroep Interne Oncologie
- University of Groningen

Copyright © 2021, J. Stelwagen

All rights reserved. No part of this thesis may be reproduced, stored or transmitted in any form without permission by the author.

rijksuniversiteit
 groningen

IMPROVING LONG-TERM MORBIDITY AND TREATMENT OUTCOMES IN PATIENTS WITH RARE MALIGNANCIES

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 2 juni 2021 om 11.00 uur

door

Johannes Stelwagen

geboren op 18 maart 1990
te Harlingen

PROMOTORES

Prof. dr. E.G.E. de Vries
Prof. dr. J.A. Gietema
dr. A.M.E. Walenkamp

BEOORDELINGSCOMMISSIE

Prof. dr. W.W. de Herder
Prof. dr. T.P. Links
Prof. dr. S.J.L. Bakker

PARANIMFEN

Bart H. de Heij
Johan M. Hindriks

CONTENTS

Chapter 1	General introduction	7
Chapter 2	Long-term vascular damage in patients treated with cisplatin containing chemotherapy for testicular carcinoma <i>British Journal of Cancer. 2020;11:1599-1607.</i>	15
Chapter 3	Cognitive impairment in long-term survivors of testicular cancer more than 20 years after treatment with cisplatin-based chemotherapy <i>Submitted</i>	41
Chapter 4a	Towards optimal personalized diet and vitamin supplementation in NET patients: a feasibility study <i>Neuroendocrinology. 2017;105:233.</i>	67
Chapter 4b	Reducing fat-soluble vitamin deficiencies, vitamin B12 deficiencies and niacin deficiencies in patients with neuroendocrine tumors treated with somatostatin analogues <i>Submitted</i>	77
Chapter 5	Web-based personalised information and support for patients with a neuroendocrine tumour: randomised controlled trial <i>Orphanet journal of rare diseases. 2019;14:60.</i>	99
Chapter 6	Current treatment strategies and future directions for extrapulmonary neuroendocrine carcinomas: a review <i>JAMA oncology. Published online February 2021</i>	127
Chapter 7	Summary and future perspectives	157
Appendices	Nederlandse samenvatting	172
	Dankwoord	180