



UvA-DARE (Digital Academic Repository)

Evaluation and treatment of vitiligo

Vrijman, C.

Publication date

2015

Document Version

Final published version

[Link to publication](#)

Citation for published version (APA):

Vrijman, C. (2015). *Evaluation and treatment of vitiligo*. [Thesis, fully internal, Universiteit van Amsterdam].

General rights

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), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Evaluation and treatment of vitiligo

Charlotte Vrijman

Evaluation and treatment of vitiligo

Charlotte Vrijman

EVALUATION AND TREATMENT OF VITILIGO

Charlotte Vrijman

Layout and printing: Off Page, Amsterdam, www.offpage.nl

Cover design: Arjen Veninga

ISBN: 978-94-6182-543-8

Copyright © 2015 by Charlotte Vrijman

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

Financial support: Pigmentfonds Nederland (pigmentfonds.nl), Huidstichting Chanfleury van Ijsselsteijn, Stichting Eis, Landelijke Vereniging voor Vitiligo-Patienten, Avita Medical, Lumenis, AbbVie b.v., Leo-pharma, Eucerin/Beiersdorf, Pfizer, La Roche Posay, Fagron, Will pharma, Aurobindo pharma Ltd, Praktijkvennootschap HAA Vrijman, Meda pharma, Galderma.

EVALUATION AND TREATMENT OF VITILIGO

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor

aan de Universiteit van Amsterdam

op gezag van de Rector Magnificus

prof. dr. D.C. van den Boom

ten overstaan van een door het College voor Promoties ingestelde commissie,

in het openbaar te verdedigen in de Agnietenkapel

op donderdag 4 juni 2015, te 12.00 uur

door

Charlotte Vrijman

geboren te Alkmaar

Promotiecommissie:

Promotores:	prof. dr. R.M. Luiten	Universiteit van Amsterdam
	prof. dr. J.D. Bos	Universiteit van Amsterdam
Copromotores:	dr. A. Wolkerstorfer	Universiteit van Amsterdam
	dr. J.P.W. van der Veen	Universiteit van Amsterdam
Overige leden:	prof. dr. M.A. de Rie	Universiteit van Amsterdam
	prof. dr. H.J.C. de Vries	Universiteit van Amsterdam
	prof. dr. A.C. van der Wal	Universiteit van Amsterdam
	prof. dr. N. van Geel	Universiteit Gent
	dr. M.D. Njoo	Ziekenhuisgroep Twente

Faculteit der Geneeskunde

TABLE OF CONTENTS

Chapter 1	Introduction	7
Chapter 2	Provoking factors	25
2.1	Provoking factors including chemicals in Dutch vitiligo patients	27
2.2	T-cell responses against 4-tertiarybutylphenol-exposed pigmented cells in a patient with occupational vitiligo	47
Chapter 3	Prevalence of thyroid disease	61
3.1	The prevalence of thyroid disease in vitiligo patients: a systematic review	63
3.2	High prevalence of autoimmune thyroiditis in children and adolescents with vitiligo	93
Chapter 4	Autologous grafting techniques	109
4.1	Autologous punch grafting techniques in vitiligo and piebaldism patients: a randomized controlled trial	111
4.2	Autologous cell suspension transplantation using a cell harvesting device in segmental vitiligo and piebaldism patients: a randomized controlled pilot study	127
Chapter 5	Measurement properties of outcome measures for vitiligo: a systematic review	143
Chapter 6	Summary and conclusions Samenvatting en conclusies	169
Chapter 7	General discussion	181
Addendum	List of contributing authors	197
	Portfolio	207
	Bibliografie	211
	Dankwoord	213
	Curriculum vitae	217