UNIVERSITY OF AMSTERDAM

UvA-DARE (Digital Academic Repository)

Oral appliances in sleep apnea management

Outcomes and treatment prediction

Uniken Venema, J.A.M.

Publication date
2022

Link to publication

Citation for published version (APA):
Uniken Venema, J. A. M. (2022). *Oral appliances in sleep apnea management: Outcomes and treatment prediction*. [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).

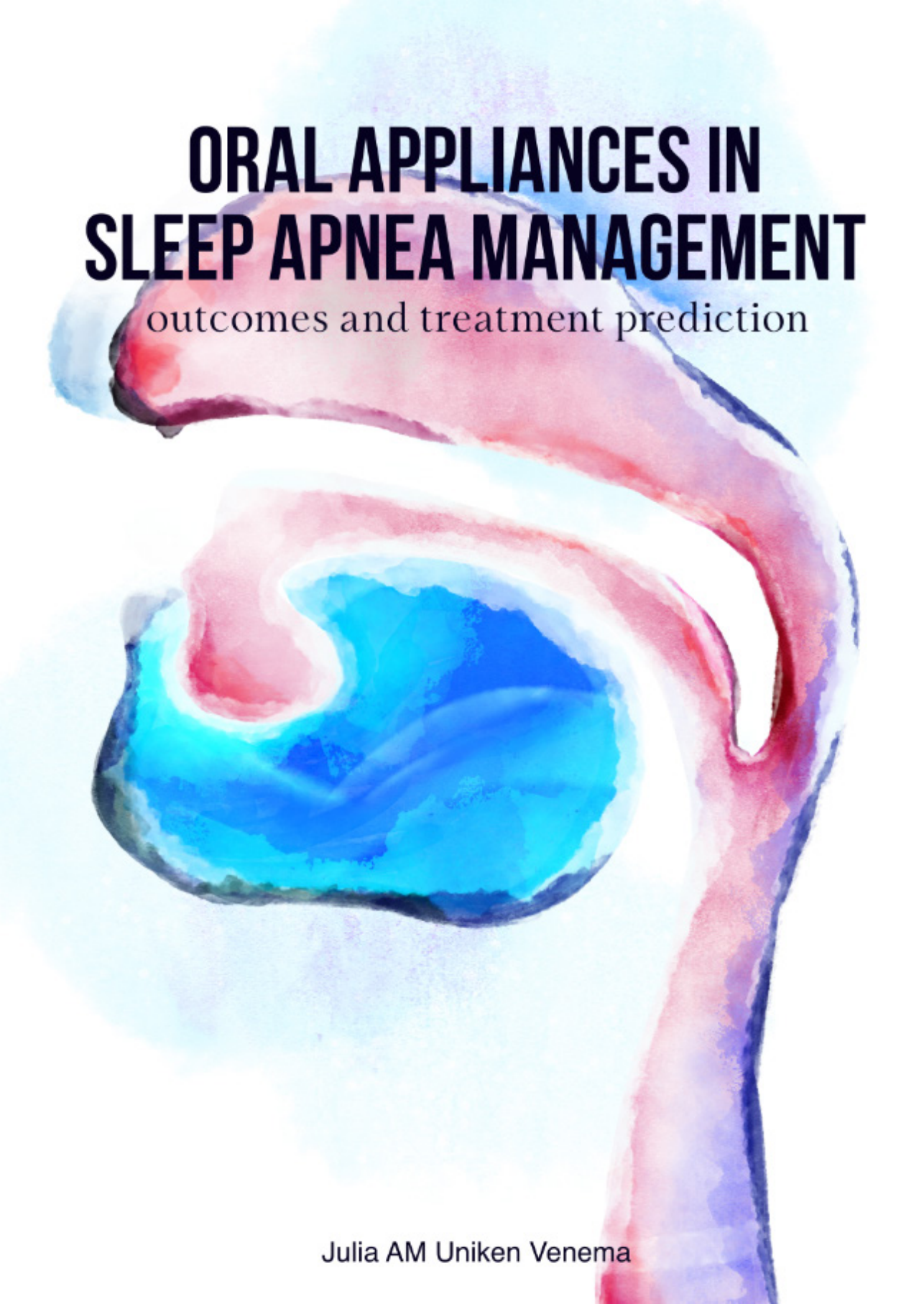
Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)

Download date:07 Oct 2026

ORAL APPLIANCES IN SLEEP APNEA MANAGEMENT

outcomes and treatment prediction



Julia AM Uniken Venema

Oral appliances in sleep apnea management

outcomes and treatment prediction

JAM Uniken Venema

Colofon
This thesis was prepared at the Department of Orofacial Pain and Dysfunction of Academic Center for Dentistry Amsterdam (ACTA), University of Amsterdam and the Vrije Universiteit Amsterdam, Amsterdam, The Netherlands. This thesis was a collaboration between the Amsterdam University Medical Center (Amsterdam UMC), the Onze Lieve Vrouwen Hosipital Amsterdam (OLVG) and the University Medical Center Groningen (UMCG).

Cover and illustrations introduction: Tiny Pixels
Illustration title page chapters: Anna Kroese, www.tanteanna.nl
Tekst and layout: JAM Uniken Venema
Print: Ipskamp

© JAM Uniken Venema, 2021

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

Oral appliances in sleep apnea management

outcomes and treatment prediction

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam
op gezag van de Rector Magnificus
prof. dr. ir. K.I.J. Maex
ten overstaan van een door het College voor Promoties ingestelde commissie,
in het openbaar te verdedigen in de Aula der Universiteit
op 5 juli 2022, te 13.00 uur

door Julia Anne Margarethe Uniken Venema
geboren te ’s-Gravenhage

PROMOTIECOMMISSIE

Promotores:	prof. dr. J. de Lange	Universiteit van Amsterdam
	prof. dr. N. de Vries	Universiteit van Amsterdam
Copromotores:	dr. A. Hoekema	Ziekenhuis Tjongerschans
	prof. dr. F. Lobbezoo	Universiteit van Amsterdam
Overige leden:	prof. dr. O.M. Vanderveken	Universitair Ziekenhuis Antwerpen
	prof. dr. G.J. Lammers	Universiteit Leiden
	prof. dr. A.J.W.P. Rosenberg	Universiteit Utrecht
	prof. dr. A.G. Becking	Universiteit van Amsterdam
	prof. dr. G. Aarab	Universiteit van Amsterdam
	prof. dr. M.L. Laine	Vrije Universiteit Amsterdam
	dr. R.E.G. Jonkman	Vrije Universiteit Amsterdam

Faculteit der Tandheelkunde

TABLE OF CONTENTS

CHAPTER 1	General introduction and outline of thesis	7
	PART 1: TREATMENT PREDICTION	
CHAPTER 2	Mandibular advancement device design: a systematic review on outcomes in obstructive sleep apnea therapy. Journal of Sleep Medicine Reviews, 2021	29
CHAPTER 3	Equal effect of a non-custom versus a custom mandibular advancement device in treatment of obstructive sleep apnea. Journal of Clinical Sleep Medicine, 2022	67
CHAPTER 4	Do dental parameters predict severity of obstructive sleep apnea and mandibular advancement device therapy outcomes? A pilot study. Submitted	91
	PART 2: LONG-TERM OUTCOMES	
CHAPTER 5	Long-term Obstructive Sleep Apnea Therapy; a 10-Year Follow-up of Mandibular Advancement Device and Continuous Positive Airway Pressure. Journal of Clinical Sleep Medicine, 2020	111
CHAPTER 6	Cardiovascular and metabolic effects of a mandibular advancement device and continuous positive airway pressure in moderate obstructive sleep apnea: a randomized controlled trial. Journal of Clinical Sleep Medicine, 2022	135
CHAPTER 7	Dental Side effects Of Long-term Obstructive Sleep Apnea Therapy; A 10-Year Follow up Study. Clinical Oral Investigations, 2019	155
CHAPTER 8	Discussion and future perspectives	173
CHAPTER 9	English summary/ Nederlandse samenvatting	187
APENDICES	1. List of cohorts used in this thesis 2. List of abbreviations 3. Curriculum Vitae 4. PhD portfolio 5. List of author contributions 6. Dankwoord	197