



Universiteit
Leiden
The Netherlands

Treating Meningioma: does the patient benefit? A paradigm shift from tumor to patient

Zamanipoor Najafabadi, A.H.

Citation

Zamanipoor Najafabadi, A. H. (2022, January 13). *Treating Meningioma: does the patient benefit?: A paradigm shift from tumor to patient*. Retrieved from <https://hdl.handle.net/1887/3249735>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3249735>

Note: To cite this publication please use the final published version (if applicable).

**Treating Meningioma: does the patient benefit?
A paradigm shift from tumor to patient**

Amir Hossein Zamanipoor Najafabadi

Treating Meningioma: does the patient benefit?

A paradigm shift from tumor to patient

PhD-thesis, Leiden University and Leiden University Medical Center, Leiden, the Netherlands

Copyright 2021, Amir Hossein Zamanipoor Najafabadi, the Netherlands

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

ISBN: 978-94-6361-623-2

Cover Design: Anna Zamanipoor Najafabadi

Lay-out and Printing: Optima Grafische Communicatie, Rotterdam, the Netherlands

Publication of this thesis was kindly supported by ChipSoft and Stöpler Medical B.V.

**Treating Meningioma: does the patient benefit?
A paradigm shift from tumor to patient**

Proefschrift

ter verkrijging van
de graad van doctor aan de Universiteit Leiden,
op gezag van rector magnificus prof.dr.ir. H. Bijl,
volgens besluit van het college voor promoties
te verdedigen op donderdag 13 januari 2022
klokke 16:15 uur

door

Amir Hossein Zamanipoor Najafabadi
geboren te Karaj (Iran)
in 1994

Promotor: Prof. W.C. Peul

Co-promotores: Dr. W.R. van Furth
Dr. L. Dirven

Commissie: Prof. M.J.B. Taphoorn
Prof. E.W. Steyerberg
Prof. F.W. Dekker
Prof. S.M. Peerdeman (*Amsterdam UMC, VUmc, Amsterdam*)
Prof. C.M.F. Dirven (*Erasmus MC, Rotterdam*)
Prof. J.M.C. van Dijk (*UMCG, Groningen*)

When nothing is sure, everything is possible.

Chapter 1	General introduction and outline of this thesis	9
<i>Part 1: The patient road: disease burden and quality of care of meningioma patients and their caregivers</i>		
Chapter 2	Impaired health-related quality of life in meningioma patients – a systematic review	35
Chapter 3	Long-term disease burden and survivorship issues after surgery and radiotherapy of intracranial meningioma patients	73
Chapter 4	The long-term caregiver burden in WHO grade I and II meningioma: it is not just the patient	103
Chapter 5	Unmet needs and recommendations to improve meningioma care through patient, partner, and health care provider input: a mixed-method study	131
Chapter 6	Health-related quality of life of cranial WHO grade I meningioma patients: are current questionnaires relevant?	155
<i>Part 2: Understanding and predicting outcomes of meningioma patients</i>		
Chapter 7	TRIPOD statement: a preliminary pre-post analysis of reporting and methods of prediction models	179
Chapter 8	Determinants and predictors of the long-term disease burden in meningioma	215
Chapter 9	Visual outcomes endorse surgery of patients with spheno-orbital meningioma with minimal visual impairment or hyperostosis	235
Chapter 10	Trends in cerebrospinal fluid leak rates following the extended endoscopic endonasal approach for anterior skull base meningioma: a meta-analysis over the last 20 years	257
Chapter 11.1	General Discussion: paradigm shifts in the road to optimize meningioma care and research	281
Chapter 11.2	Practical implications and future directions	299
Chapter 11.3	Summary: treating meningioma: does the patient benefit?	319
Chapter 11.4	Samenvatting: Heeft de patiënt baat bij de behandeling van een meningeoom?	335
	List of publications	345
	Curriculum Vitae	349
	Dankwoord	351

