



Universiteit  
Leiden  
The Netherlands

## Dendritic cells in Melanoma

Polak, M.E.

### Citation

Polak, M. E. (2008, September 16). *Dendritic cells in Melanoma*. Retrieved from <https://hdl.handle.net/1887/13100>

Version: Corrected 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/1887/13100>

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

**DENDRITIC CELLS  
IN MELANOMA**



**The studies described in this thesis were performed at the Translational Oncology Research Centre, Queen Alexandra Hospital, University of Portsmouth, Portsmouth, UK in collaboration with the Department of Ophthalmology, Leiden University Medical Center, The Netherlands.**

**Cover: "Dendritic cell" Dr. Wojciech M. Polak**

**Printed by: Drukarnia Cyfraprint, ul. Turonia 4, Krakow, Poland**

**Copyright: M.E. Polak, Portsmouth, United Kingdom. All rights reserved. No part of this thesis may be reproduced or copied, in any form or by any means, without prior permission of the author.**

**Financial support of the costs associated with the publication of this thesis from Wessex Cancer Trust, UK and Cancer Research, UK is gratefully acknowledged.**



# **DENDRITIC CELLS IN MELANOMA**

Proefschrift

ter verkrijging van

de graad van Doctor aan de Universiteit Leiden,

op gezag van Rector Magnificus prof. Mr. P.F. van der Heijden

volgens besluit van het College voor Promoties

te verdedigen op dinsdag 16 september 2008

klokke 15.00 uur

door

Marta E. Polak

geboren te Tarnow, Polen

## **Promotiecommissie**

Promotores: Professor Dr. G.P.M. Luyten  
Professor Dr. I.A. Cree, University of Portsmouth

Co-promotor: Dr. M.J. Jager

Referent: Professor Dr. T. Kivelä, University of Helsinki

Overige leden: Professor Dr. F.H.J. Claas  
Professor Dr. C.J.M. Melief  
Dr. R.E.M. Toes

**Nothing in life is to be feared,  
it is only to be understood.  
Maria Skłodowska - Curie**

**To my beloved ones.**



## Contents

Chapter I	General introduction.....	11
Chapter II	Dendritic cell-mediated immunosuppression in malignant melanoma. Marta E Polak, Nicola J Borthwick, Martine J Jager, Ian A Cree. Cancer Therapy 1, 393-405, 2003 .....	43
Chapter III	Presence and maturity of dendritic cells in melanoma lymph node metastases. Marta E Polak, Penny Johnson, Silvana Di Palma, Bernie Higgins, Jeremy Hurren, Nicola J Borthwick, Martine J Jager, Deirdre McCormick and Ian A Cree. Journal of Pathology 207, 83-90, 2005.....	59
Chapter IV	Mechanisms of local immunosuppression in cutaneous melanoma. ME Polak, NJ Borthwick, FG Gabriel, P Johnson, B Higgins, J Hurren, D McCormick, MJ Jager and IA Cree. British Journal of Cancer 96, 1879-1887, 2007 .....	69
Chapter V	Presence and phenotype of dendritic cells in uveal melanoma. Marta E Polak, Nicola J Borthwick, Penny Johnson, Bernie Higgins John L Hungerford, , Silvana Di Palma, Martine J Jager, Ian A Cree. Br J Ophthalmol 2007.....	81
Chapter VI	Activation of tonsil dendritic cells with immuno-adjuvants. Marta E Polak, Nicola J Borthwick , Francis G. Gabriel, Martine J Jager, Ian A Cree, BMC Immunology 2008.....	89
Chapter VII	Melanoma Vaccines – the problem of local immunosuppression. Marta E Polak, Nicola J Borthwick , Francis G. Gabriel, Martine J Jager, Ian A Cree. Submitted.....	103
Chapter VIII	Summary and conclusions.....	125
List of publications	.....	135
Curriculum vitae.....		137

