

Board of examiners

Prof. Dr. Olivier Michielin

Department of Oncology
University of Lausanne

Prof. Dr. Jan Gutermuth

Department of Dermatology
UZ Brussel

Prof. Dr. Lieve Brochez

Department of Dermatology
UZ Gent

Prof. Dr. Céleste Lebbé

Department of Dermatology
Hôpital Saint-Louis

Prof. Dr. Mark De Ridder, Chair

Department of Radiotherapy
UZ Brussel

Prof. Dr. Bart Neyns, Promotor VUB

Department of Oncology
UZ Brussel

Prof. Dr. Véronique Cocquyt, Promotor UGent

Department of Oncology
UZ Gent

Dr. Vibeke Kruse, Promotor UGent

Department of Oncology
UZ Gent



Joint PhD VUB & UGent
2017-2018

INVITATION to the Public defence of

Max SCHREUER

To obtain the academic degree of

'DOCTOR IN MEDICAL SCIENCES'

'DOCTOR IN HEALTH SCIENCES'

Sequential treatment strategies and cell-free tumour DNA monitoring in BRAF^{V600}mutant metastatic melanoma.

Monday 6 November 2017

Auditorium **Piet Brouwer**, 17:00

Faculty of Medicine and Pharmacy, Laarbeeklaan 103, 1090 Brussel

How to reach the campus Jette:

<http://www.vub.ac.be/english/infoabout/campuses>

Summary of the dissertation

The scientific work presented in this thesis aims to improve outcome for patients with advanced BRAFV600-mutant melanoma by addressing several unsolved problems regarding the optimal sequential treatment with existing therapeutic options.

In the first part of this thesis we assessed if immune checkpoint inhibitors can still be effective after disease progression has occurred during treatment with BRAF inhibitors. We retrospectively analyzed the clinical outcome of patients who were sequentially treated with BRAF inhibitors and the CTLA-4 immune-checkpoint inhibitor ipilimumab.

In the second part of this thesis we investigated the value of BRAFV600-mutant cell-free tumour DNA (ctDNA) as a monitoring tool in patients with advanced BRAFV600-mutant melanoma.

In the third part we assess the anti-tumour activity of rechallenge with BRAF plus MEK inhibition in a prospective phase 2 clinical trial. Rechallenge with dabrafenib and trametinib had objective anti-tumour activity and could be considered an effective palliative treatment for patients who have no alternative therapeutic options.

Curriculum Vitae

2004-2011: Medical doctor, magna cum laude (Ghent University)

2011-2015: Residency Internal Medicine (Dept. of internal medicine, Ghent University Hospital)

2013-2016: PhD fellow (Dept. of medical oncology, Brussels University Hospital)

2016-2017: Residency Medical Oncology (Dept. of medical oncology, Ghent University Hospital)

Significant Publications

- Schreuer M et al. Combination of dabrafenib plus trametinib for BRAF and MEK inhibitor pretreated patients with advanced BRAFV600-mutant melanoma: an open-label, single arm, dual-centre, phase 2 trial. *Lancet Oncol.* 2017 Mar 03.
- Schreuer M et al. Quantitative assessment of BRAF V600 mutant circulating cell-free tumor DNA as a tool for therapeutic monitoring in metastatic melanoma patients treated with BRAF/MEK inhibitors. *J Transl Med.* 2016 Apr 19.
- Schreuer M et al. Applications for quantitative measurement of BRAF V600 mutant cell-free tumor DNA in the plasma of patients with metastatic melanoma. *Melanoma Res.* 2015 Dec 3.
- Schreuer M et al. Objective responses can be obtained by CTLA-4 inhibition in metastatic melanoma after BRAF inhibitor failure. *Melanoma Research* 2015; 25(1):68-74.

Significant Presentation

- ASCO 2015 annual meeting: Quantitative assessment of BRAF V600 mutant cell-free tumor DNA from plasma as a diagnostic and therapeutic biomarker in pts with BRAF V600 mutant melanoma (Chicago, Illinois)