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PhD in Medical Sciences
2020-2021

INVITATION to the Public defence of

Jeroen M.K. de FILETTE

To obtain the academic degree of '**DOCTOR OF MEDICAL SCIENCES**'

Endocrine Adverse Events of Immune Checkpoint Therapy.

The defence will take place on **Wednesday, 3rd February 2021 at 5 p.m.**

and will be organised **online** accessible through the following link:

[Click here to join the meeting](#)

Please register by sending an e-mail to
willem.verpoest@uzbrussel.be or Jeroen.DeFilette@uzbrussel.be

Summary of the dissertation

In the field of immuno-oncology, tremendous progress has been made in recent years with the development of immune checkpoint inhibitors (ICI) that block CTLA-4 and PD-1/PD-L1. These immune receptors are crucial for maintaining self-tolerance and preventing collateral damage due to autoimmunity. This new therapeutic strategy has been a breakthrough that brings about a paradigm shift in the treatment of many types of advanced/unresectable malignancy. Unfortunately, the ICI-induced immune response is non-specific and is associated with immune-related adverse events.

In this thesis, Dr. Jeroen M.K. de Filette contributes to the knowledge about the endocrinological side effects of ICI: by providing insight into the incidence of different endocrinopathies and association with various classes of checkpoint inhibitors through a meta-analysis; by a prospective study of thyroid dysfunction in melanoma patients treated with pembrolizumab (anti-PD-1); by a systematic review of autoimmune diabetes mellitus, and by the case report of a patient with a rare ACTH-secreting pituitary carcinoma treated with ICI. The experiences gained resulted in the development of guidelines for the management of the endocrine adverse events related to checkpoint blockade therapy (in collaboration with the Belgian Society of Medical Oncology).

Curriculum Vitae

Jeroen M.K. de Filette obtained his degree in medicine with the highest distinction at the Vrije Universiteit Brussel in 2016. The following years, he trained as an Internist and Endocrinologist at the Sint-Pieter -, Brugmann - and University Hospital of Brussels. In 2020-2021, he aims to complete and defend his PhD thesis entitled "Endocrine Adverse Events of Immune Checkpoint Therapy". He has given lectures on this subject at various national and international congresses. Also, in 2020, his abstract on checkpoint blockade therapy in pituitary carcinoma (shared co-first authorship with Dr. Bastiaan Sol) received the 'outstanding abstract award' from the Endocrine Society. Jeroen de Filette was one of the initiators of the Belgian guidelines on the management of endocrine adverse events associated with immune checkpoint inhibitors, in collaboration with the Belgian Society of Medical Oncology. He has several scientific publications in international journals and is a member of national and international endocrine organisations. In 2018, he has reviewed for the New England Journal of Medicine.