

Board of examiners

Prof. Dr. A.R.M.M. Hermus

Department of Internal Medicine-Endocrinology, UMC St Radboud
Radboud Universiteit
Nijmegen, Netherlands

Prof. Dr. Bernard Corvilain

Department of Endocrinology
Hôpital Érasme,
Université libre de Bruxelles (ULB), Brussels, Belgium

Prof. Dr. Nico De Leu

Department of Endocrinology
Universitair Ziekenhuis Brussel
Vrije Universiteit Brussel, Belgium

Prof. Dr. Inge Gies

Department of Pediatric Endocrinology
Universitair Ziekenhuis Brussel
Vrije Universiteit Brussel, Belgium

Prof. Dr. Willem Verpoest, Chair

Department of Gynecology and Fertility
Universitair Ziekenhuis Brussel
Vrije Universiteit Brussel, Belgium

Prof. Dr. Brigitte Velkeniers, Promotor

Department of Internal medicine and Endocrinology
Universitair Ziekenhuis Brussel
Vrije Universiteit Brussel, Belgium

Prof. Dr. Michael De Brucker, Promotor

Department of Gynaecology and Fertility
Universitair Ziekenhuis Brussel
Vrije Universiteit Brussel, Belgium



PhD in Medical Sciences
2016-2017

INVITATION to the Public defence of

David UNUANE

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

Female infertility – the role of thyroid autoimmunity in assisted reproductive technology.

Thursday 15 June 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

Thyroid auto-immunity (TAI) and/or thyroid dysfunction are prevalent in women of reproductive age, and have independently been associated with adverse fertility and pregnancy outcomes. However, data regarding the outcome of fertility treatment in the presence of thyroid autoimmunity are conflicting and the optimal upper value of TSH in the presence or the absence of thyroid autoimmunity (TAI) remains controversial. Moreover, data on the prevalence of TAI as defined by the presence of Tg-abs are scarce, as well as data of the effect of these antibodies on thyroid function in the case of spontaneous pregnancy as in the case of ART.

The present thesis shows that TAI is more frequent in infertile women compared to fertile controls. Five percent of women consulting at our Centre for Reproductive Medicine (CRG) had isolated positive Tg-abs and a higher serum TSH compared to women without TAI. These TAI-positive patients would have been missed by the measurement of TPO-abs only. Furthermore, our findings indicate comparable live birth delivery -, pregnancy and abortion rates in women with and without thyroid autoimmunity undergoing ART. We were unable to confirm a negative effect of TSH level above 2.5 mIU/L on live birth delivery rate. Therefore, our data suggest that women with TSH levels within the normal non- pregnant range may not need treatment with levothyroxine.

Curriculum Vitae

- University: 2002 Diploma in medicine with great distinction (grote onderscheiding, Vrije Universiteit Brussel, Belgium, VUB)
- Medical training and professional career:
 - 2007: Recognition as general physician (internal medicine, VUB)
 - 2008: Recognition Endocrinology-Diabetology
 - 2008: Member of staff internal medicine, endocrinology, diabetology at the University Hospital Brussels (VUB)
 - 2012: Appointment Clinical tutor
 - 2014: Appointed head of clinic diabetes and endocrinology