Board of examiners

Prof. dr. Maria Generosa Crespo Leiro – CHU A Coruña Universidade de A Coruña

Prof. dr. Andrea Sarkozy UZ Anterwepen Universteit Antwerpen

Prof. dr. Bernard Cosijns UZ Brussel Vrije Universiteit Brussel

Prof. dr. Steven Droogmans UZ Brussel Vrije Universiteit Brussel

Prof. dr. Jan Poelaert UZ Brussel Vrije Universiteit Brussel

Prof. dr. Jacques De Keyser, Chair UZ Brussel Vrije Universiteit Brussel

Promotors:

Prof. Em. dr. Pedro Brugada Terradellas UZ Brussel Vrije Universiteit Brussel

Prof. dr. Carlo de Asmundis UZ Brussel Vrije Universiteit Brussel

Prof. dr. Gian-Battista Chierchia UZ Brussel Vrije Universiteit Brussel



INVITATION to the Public defence of

Juan Antonio Sieira Rodriguez-Moret

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

Risk stratification and management of Brugada Syndrome: Emphasis in low risk populations

Tuesday 19 December 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

Identifying Brugada Syndrome patients at risk of sudden cardiac death and ventricular arrhythmias is of utmost importance. However, is a challenging and complicated task. Patients at high risk of events are easily identified. They are those with previous aborted sudden cardiac arrest or syncope and consensus is that they should receive an implantable cardioverter defibrillator. Great controversy exists still around the most appropriate management of those at lower risk. Current clinical guidelines and consensus documents do not offer clear recommendations.

We have developed a risk score model to predict events that might help in the decision process of these patients. It has a high predictive performance, in both the overall Brugada Syndrome population but, interestingly, in asymptomatic patients. It includes novel risk factors such as sinus node dysfunction or early familial antecedents of sudden cardiac death.

Value of inducible ventricular arrhythmias is still not fully elucidated. Inducible arrhytmias identify patients at higher risk. Non-inducible patients, especially if asymptomatic have a good prognosis.

Asymptomatic, drug induced and women are specific subgroups with a better prognosis, however arrhythmic events might happen in the long term. Implantable cardioverter defibrillator remains the only strategy to prevent sudden cardiac death in high risk Brugada Syndrome patients. After a mean of 7 years, around 16% of patients will receive an appropriate therapy and 18% will have inappropriate shocks.

Curriculum Vitae

Juan Sieira was born on the 23 October 1980 in La Coruña, Spain. He followed his medical studies in the University of Navarra, where he obtained his degree in 2004. That year he started preparing the Spanish national examination board where he obtained the position 81 out of around 8000 candidates. In 2005 he started his Cardiology training in the University Hospital of La Coruña, finishing this training in 2010. During these years he obtained a master degree in Statistics at the Autonomous University of Barcelona (Spain). He worked as a Cardiology staff member in the University Hospital of Lugo (Spain) and La Coruña 2012. In September 2012 he started his training in until electrophysiology at the Heart Rhythm Management Centre, UZ Brussel, completing it in 2014. He worked as electrophysiologist in Erasmus Ziekenhuis (Brussels) between 2014 and 2017. In 2017 he joined the electrophysiology team at UZ Brussel as a staff member. His scientific interest focuses in sudden cardiac death and primary arrhythmic diseases. He has published more than 50 scientific articles in international peer reviewed journals.