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PhD in Medical Sciences 2020-2021

INVITATION to the Public defence of

Mats DE JAEGER

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

The clinical impact of High Dose Spinal Cord Stimulation in patients with Failed Back Surgery Syndrome

The defence will take place on Tuesday, 25th May 2021 at 5 p.m.

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

Join Zoom Meeting https://vub-gf.zoom.us/j/95782358235?pwd=Wm1zNXpJSGtwNIBKUWxoME9xUVZzdz09

Meeting ID: 957 8235 8235 Password: 735933

Summary of the dissertation

Failed back surgery syndrome (FBSS) is characterized by refractory back and/or leg pain, despite anatomical successful surgery. This neuropathic pain syndrome has an immense negative impact on the quality of life of the patient and poses a high burden on our society. Spinal cord stimulation (SCS) is an effective, safe and reversible treatment option for FBSS patients. SCS masks pain signals by offering electrical stimulation to the spinal cord. Despite the clinical success of this technique, the evoked paresthesia remains a limiting factor for some patients. Through technological advancements and new clinical insights, waveforms below the sensory threshold have been developed. One of those emerging, subthreshold wave forms is titled High Dose Spinal Cord Stimulation. Because HD-SCS does not evoke these uncomfortable paresthesia it can offer more electrical energy per time to the spinal cord.

This dissertation describes a national observational study, DISCOVER, which evaluates the effectiveness of HD-SCS in FBSS patients.

Curriculum Vitae

Mats De Jaeger was born on July 27th 1992 in Vilvoorde, Belgium. He followed his secondary education at Virgo Sapiens Instituut, Londerzeel and graduated in 2010. Subsequently he started studying "physiotherapy and rehabilitation sciences" at the Catholic University of Leuven for the following 5 years. In 2015, he graduated as a musculoskeletal physiotherapist and started working in clinical practice. From 2016 to 2020, he could work on his doctoral thesis under the supervision of prof. Moens at the Vrije Universiteit Brussel. In 2018, he started working at UZ Leuven as a clinical support manager at the department of physical medicine and rehabilitation.