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Biodegradable implants for the biphasic pulsatile delivery of antigens

Beugeling, Max

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Biodegradable implants for the biphasic pulsatile delivery of antigens

Toward single-injection vaccines

Max Beugeling

Paranymphs

Bahez Gareb

Wouter F. Tonnis

The majority of the research presented in this PhD thesis was performed at the department of Pharmaceutical Technology and Biopharmacy of the University of Groningen. The animal studies described in chapter 3 & 5 were performed at Janssen Pharmaceutica (Beerse, Belgium). The OVA-specific IgG1 antibody titers (chapter 3) and the RSV VNA titers (chapter 5) were determined at Janssen Pharmaceutica and Janssen Infectious Diseases and Vaccines (Leiden, The Netherlands), respectively. A part of the research was funded by Janssen Sciences Ireland UC (Dublin, Ireland). Financial support for printing this thesis was received from the University Library and the Graduate School of Science and Engineering.

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Biodegradable implants for the biphasic pulsatile delivery of antigens

Toward single-injection vaccines

PhD thesis

to obtain the degree of PhD at the
University of Groningen
on the authority of the
Rector Magnificus Prof. C. Wijmenga
and in accordance with
the decision by the College of Deans.

This thesis will be defended in public on

Friday 16 October 2020 at 14.30 hours

by

Max Beugeling

born on 3 April 1991
in Groningen

Supervisor

Prof. H.W. Frijlink

Co-supervisor

Dr. W.L.J. Hinrichs

Assessment Committee

Prof. W.E. Hennink

Prof. A.L.W. Huckriede

Prof. G.F.A. Kersten

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