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## Improving response and reducing toxicity to immune checkpoint blockade therapy in melanoma

Hoefsmit, E.P.

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Esmée Pauline Hoefsmit

#### About the cover:

Unprecedented success has been made by the introduction of immune checkpoint blockade therapy for the treatment of advanced melanoma. This therapy blocks the interaction between tumor cells and immune cells by the use of monoclonal antibodies, thereby preventing immune inhibition, and releasing an anti-tumor immune response. These therapies that block these immune checkpoints have shown efficacy in a proportion of patients, but not all patients achieve benefit from these therapies and a substantial group of patients experiences immune related adverse events. In this thesis, my research focuses on novel insight into therapy efficacy, with the aim to improve response and reduce toxicity to immune checkpoint blockade therapy. The circles on the cover show an abstract illustration of the cells expressing these checkpoints. The colors, red and blue, represent the difference in response (by various patient groups) to immune checkpoint blockade therapy. The different shades of blue and red illustrate the different research approaches and techniques to get more insight into response and immune related adverse events.

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# Improving response and reducing toxicity to immune checkpoint blockade therapy in melanoma

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**Promotores:**

Prof. dr. C. U. Blank

Prof. dr. D. S. Peeper      Vrije Universiteit Amsterdam, The Nederlands Cancer Institute

**Leden promotiecommissie:**

Prof. dr. K. E. de Visser

Prof. dr. J. B. A. G. Haanen

Prof. dr. C. L. Zuur

Prof. dr. T. D. de Gruijl      Vrije Universiteit Amsterdam

Dr. M. Kok                      The Netherlands Cancer Institute

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