

University of Groningen

## Optimizing systemic therapy in metastatic breast cancer

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DOI:  
[10.33612/diss.112105633](https://doi.org/10.33612/diss.112105633)

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*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2020

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*  
van Rooijen, J. (2020). *Optimizing systemic therapy in metastatic breast cancer: implementation in daily practice and exploration of new drug targets*. Rijksuniversiteit Groningen.  
<https://doi.org/10.33612/diss.112105633>

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# **Optimizing systemic therapy in metastatic breast cancer**

Implementation in daily practice and exploration  
of new drug targets

Johan van Rooijen

Cover: Crystal structure of extracellular domain of the tyrosine-protein kinase HER2 receptor (brown) complexed with trastuzumab (light chain: pink; heavy chain: blue) – Cho et al., Nature, 2003.

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# **Optimizing systemic therapy in metastatic breast cancer**

**Implementation in daily practice and  
exploration of new drug targets**

**Proefschrift**

ter verkrijging van de graad van doctor aan de  
Rijksuniversiteit Groningen  
op gezag van de  
rector magnificus prof. dr. C. Wijmenga  
en volgens besluit van het College voor Promoties.

De openbare verdediging zal plaatsvinden op

woensdag 19 februari 2020 om 14.30 uur

door

**Johan Marinus van Rooijen**

geboren op 4 november 1980  
te Warnsveld

**Promotores**

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**Paranimfen**

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