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## Mechanism-based pharmacokinetic-pharmacodynamic modelling of opioids : role of biophase distribution and target interaction kinetics

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**MECHANISM-BASED PHARMACOKINETIC-  
PHARMACODYNAMIC MODELLING OF OPIOIDS:  
ROLE OF BIOPHASE DISTRIBUTION AND TARGET  
INTERACTION KINETICS**



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PHARMACODYNAMIC MODELLING OF OPIOIDS:  
ROLE OF BIOPHASE DISTRIBUTION AND TARGET  
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**Proefschrift**

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klokke 15.00 uur

*door*

**Dorien Groenendaal**  
geboren te Velsen  
in 1978

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Prof. Dr. J. van der Greef  
Prof. Dr. J. Bouwstra

ἄρη μὲν πολέων μύθων, ἄρη δὲ καὶ ὑπνου  
There is a time for many words, and there is also a time for sleep

*The Odyssey, book XI, l. 379*

*Aan allen die mij dierbaar zijn*

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