

University of Groningen

Serotonergic augmentation strategies; possibilities and limitations

Jongsma, Minke Elizabeth

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:
2006

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

Citation for published version (APA):

Jongsma, M. E. (2006). Serotonergic augmentation strategies; possibilities and limitations Groningen: s.n.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Serotonergic augmentation strategies; Possibilities and limitations

Minke Jongsma

Financial support for the publication of this thesis was kindly provided by:

Groningen University Institute for Drug Exploration (GUIDE)
The Graduate School of Behavioral and Cognitive Neurosciences (BCN)
The University of Groningen

Paranimfen:

Marieke van der Hart
Aafke Jongsma

Printed by Ipkamp BV

© 2006 Minke E. Jongsma

ISBN number: 90-367-2530-5

ISBN electronic: 90-367-2531-3

Serotonergic augmentation strategies; Possibilities and limitations

Proefschrift

ter verkrijging van het doctoraat in de
Medische Wetenschappen
aan de Rijksuniversiteit Groningen
op gezag van de
Rector Magnificus, dr. F. Zwarts,
in het openbaar te verdedigen op
woensdag 29 maart 2006
om 16.15 uur

door

Minke Elizabeth Jongsma
geboren op 20 december 1976
te Nijmegen

Promotores:

Prof. Dr. J.A. den Boer

Prof. Dr. B.H.C. Westerink

Copromotores:

Dr. F.J. Bosker

Dr. T.I.F.H. Cremers

Beoordelingscommissie:

Prof. Dr. J. Korf

Prof. Dr. P.G.M. Luiten

Prof. Dr. B. Olivier

Voor mijn vader
Harm Jongsma

die mij geleerd heeft
om vol vertrouwen
de uitdagingen die het leven
te bieden heeft
aan te gaan

CONTENTS

Chapter 1 <i>General introduction</i>	1
Chapter 2 <i>Effect of 5-HT augmentation on Fos immunoreactivity</i>	29
Chapter 3 <i>The effect of chronic selective serotonin reuptake inhibitor treatment on serotonin_{1B} receptor sensitivity and HPA-axis activity</i>	45
Chapter 4 <i>Acute and chronic effects of citalopram on postsynaptic 5-HT_{1A} receptor mediated long loop type of feedback in medial prefrontal cortex</i>	63
Chapter 5 <i>Is tryptophan a critical factor in SSRI treatment?</i>	83
Chapter 6 <i>Effect of chronic and acute administration of citalopram on serotonin synthesis, storage and metabolism in the rat brain</i>	103
Chapter 7 <i>Summary and general discussion</i>	117
Samenvatting	125
Dankwoord	133

