Enhancement of Ropinirole brain delivery

A thesis submitted

by

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For partial fulfillment of the requirements for the Master Degree in Pharmaceutical Sciences (Drug technology)

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2014

تحسين توصيل عقار الروبينيرول إلى المخ

رسالة مقدمة من

ياسمين محمود نجيب عوض جبل

المعيدة بقسم الصيدلانيات والصيدلة الصناعية – كلية الصيدلة – جامعة عين شمس

بكالوريوس العلوم الصيدلية - 2006- جامعة عين شمس

وذلك لاستكمال متطلبات الحصول على درجة الماجيستير في العلوم الصيدلية (تخصص تكنولوجيا الأدوية)

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2014

Acknowledgement

First and foremost thanks to Allah by the grace of whom the present work was realized.

I would like to express my deepest appreciation and sincere gratitude to ***Professor Dr. Omaima Ahmed Sammour***, Professor of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Ain Shams University, for her constructive supervision, continuous advice and supportive encouragement throughout the development of this work.

I offer my sincerest gratitude to my supervisor, ***Dr Amany Osama Kamel,*** Associate Professor of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Ain Shams University, who was always beside me throughout my thesis with her knowledge, planning, extensive guidance and constructive criticism . No words can express how much she taught , encouraged and supported me.

I would especially like to thank, ***Dr. Ahmed Hassan El shafeey ,*** Associate Professor of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Cairo University, for his valuable advice and sincere work in completing the biological studies.

Grateful thanks are extended to my colleagues in the Department of Pharmaceutics and Industrial Pharmacy for their valuable help, support and encouragement.

Last but not least, I would like to offer the fruit of this work to the soul of **my father** who planted the seeds of loving science and hard work deep inside me (May Allah bless his soul). I would especially like to thank **my beloved mother, sister** and **brother** for their patience and support throughout the whole work in this thesis.

I would for no sure forget **my husband and two little children (Maryam and Yassin)** who were beside me in every step till the end of my thesis. A special debt of gratitude is gladly acknowledged to them for their help in enduring all the hardships throughout this work.

List of Contents

Chapter II:
Preparation and characterization of ropinirole hydrochloride loaded anionic and cationic nanostructured lipid carriers thermosensitive in situ gels.

Chapter III:
Biological studies on ropinirole hydrochloride loaded anionic and cationic formulations.

List of Abbreviations

AB	Absolute bioavailability
ANOVA	Analysis of variance
ANS	Autonomic nervous system
AUC	Area under the curve
BBB	Blood brain barrier
BCSF	Blood–cerebrospinal fluid barrier
CI	Crystallinity index
CGC	Critical gel concentration
CMC	Critical micelle concentration
CNS	Central nervous system
CV	Coefficient of variation
DLS	Dynamic light scattering
DSC	Differential scanning calorimetry
DTE	Drug targeting efficiency
DTP	Nose to brain direct transport
DW	Distilled water
ECF	Extracellular fluid
EE%	Entrapment efficiency percentages
FTIR	Fourier transform infrared
Gp	Group
GRAS	Generally regarded as safe
HLB	Hydrophile lipophile balance
HPMC	Hydroxypropyl methyl cellulose
i.n.	Intranasal
IS	Internal standard
i.v.	Intravenous
LC-MS	Liquid chromatography–mass spectrometry
mABs	Monoclonal antibodies
MRT	Mean residence time
mV	millivolt
Mwt	Molecular weight
nm	Nanometer
NLCs	Nanostructured lipid carriers
NVU	Neurovascular unit
PAR	Peak area ratio
PBS	Phosphate buffered saline

PC	Phosphatidyl choline
PDI	Polydispersity index
PEO	Polyoxyethylene
PPO	Poloxypropylene
PS	Particle size
P407	Poloxamer 407
P188	Poloxamer 188
RES	Reticuloendothelial system
RLS	Restless leg syndrome
RP HCl	Ropinirole Hydrochloride
rpm	Revolution per minute
SEDDs	Self-emulsifying drug delivery systems
SELF	Self Emulsifying Lipidic Formulations
SD	Standard deviation
SDC	Sodium deoxycholate
SMEDDs	Self-microemulsifying drug delivery systems
$\mathbf{T_{sol-gel}}$	Sol gel transition temperature
TEM	Transmission electron microscope
$\mathbf{t_{1/2}}$	Half life time
SA	Stearylamine
SLNs	Solid lipid nanoparticles
UV	ultraviolet
ZP	Zeta potential

List of Tables

List of Figures