Potential neuroprotective effect of Androst-5-ene-3β, 17β-diol (ADIOL) against experimentally-induced Parkinson's disease in rats

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(Pharmacology and Toxicology)

By

Rania Mohamed Kamel Hassan Mohamed Salama

M.SC. in Pharmaceutical Sciences,
Ain Shams University, Egypt, 2012
Assistant Lecturer of Pharmacology and Toxicology
Faculty of Pharmacy, Misr International University

Under the supervision of

Prof. Dr. Ahmed M. Abdel-tawab

Professor of Pharmacology
Faculty of Medicine, Ain Shams University

Dr. Mona F. Schaalan

Acting Head of Clinical Pharmacy Department
Assistant Professor of Biochemistry
Faculty of Pharmacy, Misr International University

Dr. Nevine B. Soliman

Assistant Professor of Histology
Faculty of Medicine, Ain Shams University

Dr. Mariane G. Tadros

Assistant Professor of Pharmacology and Toxicology
Faculty of Pharmacy, Ain Shams University

Faculty of Pharmacy - Ain Shams University
2016

Examination Board Approval Sheet

Name of Candidate

Rania Mohamed Kamel Hassan Mohamed Salama

Title of Thesis

Potential neuroprotective effect of Androst-5-ene-3β, 17β-diol (ADIOL) against experimentally-induced Parkinson's disease in rats

Submitted to Faculty of Pharmacy
Ain Shams University
Department of Pharmacology and Toxicology

Approved by the committee in charge:

- **Prof. Ahmed Mohey-eldin Abdel-tawab** ----------
  Professor of Pharmacology
  Faculty of Medicine
  Ain Shams University

- **Prof. Gouda Kamel Abdel Bary** ----------
  Dean of Faculty of Pharmacy
  Professor of Pharmacology and Toxicology
  Azhar University "Boys"

- **Prof. Sawsan Aboul-Fotouh El-Said** ----------
  Professor of Pharmacology
  Faculty of Medicine
  Ain Shams University

- **Assistant Prof. Mariane George Tadros** ----------
  Assistant Professor of Pharmacology and Toxicology
  Faculty of Pharmacy
  Ain Shams University

Acting Head of Pharmacology and Toxicology Department
Assistant Prof. Samar Saad-eldin Azab

Date: 12 / 6 / 2016

Pre-requisite Postgraduate Courses

Besides the work presented in the thesis, the candidate has attended pre-requisite postgraduate courses including the following topics:

Special Courses:

- Clinical Pharmacology
- Pharmacology
- Selected topics
- Clinical Toxicology

The candidate has successfully passed the examination in these courses and the comprehensive exam with general grade *"**Excellent**"*.

Acting Head of Pharmacology and Toxicology Department
Faculty of Pharmacy, Ain Shams University
Assistant Prof. Samar Saad-eldin Azab

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مقدمة من

رانيا محمد كامل حسن محمد سلامة

ماجستير العلوم الصيدلية، جامعة عين شمس، مصر، ٢٠١٢
مدرس مساعد بقسم الأدوية والسموم
كلية الصيدلة، جامعة مصر الدولية

تحت إشراف

أ.د/ أحمد محي الدين عبد التواب
أستاذ الأدوية، كلية الطب، جامعة عين شمس

أ.م/ منى فرج شعلان
القائم بأعمال رئيس قسم الصيدلة الإكلينيكية
أستاذ مساعد الكيمياء الحيوية، كلية الصيدلة،
جامعة مصر الدولية

أ.م/ نيفين بهاء الدين سليمان
أستاذ مساعد الأنسجة، كلية الطب،
جامعة عين شمس

أ.م/ ماريان جورج تادرس
أستاذ مساعد الأدوية و السموم، كلية الصيدلة، جامعة عين شمس

كلية الصيدلة، جامعة عين شمس
(٢٠١٦)

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List of Abbreviations

AD	Alzheimer's disease
ADIOL	Androst-5-ene-3β, 17β-diol
ANOVA	Analysis of variance
ATP	Adenosine triphosphate
BAFF	B-cell activating factor
Bax	Bcl2-associated X protein
BBB	Blood–brain barrier
Bcl-2	B-cell lymphoma 2
BID	BH3 interacting-domain death agonist
BSA	Bovine serum albumin
CCD	Charge-coupled device
cDNA	Complementary deoxyribonucleic acid
C_{max}	Maximum plasma concentration
CMC	Carboxymethyl cellulose
CNS	Central nervous system
COMT	Catechol-O-methyltransferase
COMTI	Catechol-O-methyltransferase inhibitor
ΔCT	Mean cycle threshold
ΔΔCT	Comparative cycle threshold
CtBP	C-terminal binding protein
C.V.	Coefficient of variation
DA	Dopamine
DAT	Dopamine transporter
DDC	Dopa decarboxylase
DDCI	Dopa decarboxylase inhibitor
DHBA	3,4-Dihydroxybenzylamine hydrobromide
DHEA	Dehydroepiandrosterone
DNA	Deoxyribonucleic acid
DOPAC	Dihydroxyphenylacetic acid
EAE	Experimental auto-immune encephalomyelitis
ECD	Electrochemical detection
EDTA	Ethylenediaminetetraacetic acid
ELISA	Enzyme-linked immunosorbent assay
EM	Electron microscopy
ER	Estrogen receptor
ESC	Embryonic stem cells
GADPH	Glyceraldehyde-3-phosphate dehydrogenase
GSH	Reduced glutathione
H&E	Hematoxylin and eosin
H_2O_2	Hydrogen peroxide
HPLC	High performance liquid chromatography
HRP	Horseradish peroxidase
HSD	Hydroxysteroid dehydrogenase
HVA	Homovanillic acid
ICH	International Conference on Harmonisation
IL	Interleukin
IMP	Inosine 5′-monophosphate
iNOS	Inducible nitric oxide synthase

i.p.	Intraperitoneal
IQR	Interquartile ranges
IS	Internal standard
i.v.	Intravenous
KCl	Potassium chloride
KH_2PO_4	Monobasic potassium phosphate
KO	knockout
LB	Lewy body
L-DOPA	L-3,4-dihydroxyphenylalanine
LM	Light microscopy
LN	Lewy neurite
LOD	Limit of detection
LOQ	Limit of quantification
LPS	lipopolysaccharide
LRRK 2	Leucine-rich repeat kinase-2
Maneb	Manganese ethylene-1,2-bisdithiocarbamate
MAO	Monoamine oxidase
MAOBI	Monoamine oxidase-B inhibitor
MPP+	1-methyl-4-phenylpyridinium
mPTP	mitochondrial permeability transition pore
MPTP	1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine
MS	Multiple sclerosis
NADPH	Nicotinamide adenine dinucleotide phosphate
NaOH	Sodium hydroxide
NE	Norepinephrine
NF-κB	Nuclear factor-kappa B
NINDS	National Institute of Neurological Disorders and Stroke
NO	Nitric oxide
Nrf2	Nuclear factor erythroid 2-related factor 2
O_2^-	Superoxide
OD	Optical density
6-OHDA	6-Hydroxydopamine
PBS	Phosphate buffered saline
PD	Parkinson's disease
PINK1	PTEN-induced putative kinase 1
rER	Rough endoplasmic reticulum
RNA	Ribonucleic acid
ROS	Reactive oxygen species
RT-PCR	Reverse transcription polymerase chain reaction
s.c.	Subcutaneous
S.D.	Standard deviation
SEO	Sumy Electron Optics
SN	Substantia nigra
SNpc	Substantia nigra pars compacta
SNpr	Substantia nigra pars reticulata
TEM	Transmission electron microscope
TH	Tyrosine hydroxylase
TLR	Toll-like receptor
TMB	Tetramethylbenzidine
TNF-α	Tumor necoris factor-alpha

UCH-L1	Ubiquitin C-terminal hydrolase L1
UKPDSBB	United Kingdom Parkinson Disease Society Brain Bank
UPS	Ubiquitin-proteasome system
USP 30-NF 25	United States Pharmacopeia and National Formulary
UV	Ultra-violet

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