

LIST OF ABBREVIATIONS

ABS	Acyl binding site
ACh	Acetylcholine
AChE	Acetylcholinesterase
AChEI	AChE inhibitors
ACTI	Acetylthiocholine iodide
AD	Alzheimer's disease
ADMET	Absorption, Distribution, Metabolism, Excretion, Toxicity
ADT	AutoDock Tools
ALP	Alkaline phosphatase
ANOVA	Analysis of Variance
APP	Amyloid precursor protein
AS	Anionic subsite/anionic substrate binding site/choline-binding subsite or hydrophobic subsite
A β	Amyloid- β or beta-amyloid
BBB	Blood brain barrier
BTA	2-Amino-6-nitrobenzothiazole
BuChE	Butyrylcholinesterase
CAS	Catalytic anionic site
cDNA	Complementary DNA
CIT	Citalopram
CLG	Clorgyline
cm ⁻¹	per centimetre
CNS	Central nervous system
d	Doublet
D ₂ O	Deuterated water
D ₆ [DMSO]	Deuterated dimethyl sulfoxide
DA	Dopamine
DALYs	Disability adjusted life years
dd	Doublet of doublet
DMF	N,N'-Dimethyl formamide
DMSO	Dimethyl sulfoxide

DNP	Donepezil
DOPAC	Dihydroxyphenylacetic acid
DPPH	1,1-Diphenyl-2-picrylhydrazyl
DTNB	5,5'-dithio-bis(2-nitrobenzoic acid)
DZM	Diazepam
EC	Enzyme commission
EPM	Elevated plus maze
ES	Catalytic/esteratic/ecstatic site
ESI	Electrospray ionization
FAD	Flavin adenine dinucleotide
FDA	Food and Drug Administration
FST	Forced swim test
FT-IR	Fourier Transform Infrared
GAA	Glacial acetic acid
GAL	Galantamine
5-HT	5-Hydroxytryptamine
h	hour
hAChE	Human AChE
HBA	Hydrogen bond acceptor
HBD	Hydrogen bond donor
HD	Huntington's disease
HIA	Human intestinal absorption
hMAO-A	Human MAO-A
hMAO-B	Human MAO-B
HPO	3-Hydroxy-3-substituted oxindole
HRM	Harmine
i.p.	Intraperitoneal
IC ₅₀	Half maximal inhibitory concentration
IR	Infrared
KDa	Kilo Dalton
K _i	Dissociation constant/inhibition constant
LBDD	Ligand based drug design
LGA	Lamarckian genetic algorithm

LogP	Partition coefficient
μM	micromolar
m	Multiplet
MAO	Monoamine oxidase
MAO-A	Monoamine oxidase A
MAO-B	Monoamine oxidase B
MAOI	Monoamine oxidase inhibitor
MDCK	Maden Darby Canine Kidney
mg	milligram
MHz	MegaHertz
MiLog P	Partition coefficient
min	minutes
mL	milliLitre
mM	millimolar
mol	Mole
MDA	3,4-(Methylenedioxy)aniline
Mol Wt.	Molecular weight
MP	Melting point
MPP ⁺	1-Methyl-4-phenylpyridinium
MPTP	N-methyl-4-phenyl-1,2,3,6-tetrahydropyridine
MTDL	Multi-target-directed ligand
NDDs	Neurodegenerative diseases
NE	Norepinephrine
NMDA	N-methyl-D-aspartate
NMDAR	NMDA receptor
nmol	nanomolar
NMR	Nuclear Magnetic Resonance
NTA	2-Amino-5-nitrothiazole
OH	Oxyanion hole
PAS	Peripheral anionic site
PB	Pentobarbitone
PCP	Pharmacophore
PD	Parkinson's disease

PDB	Protein Data Bank
PEA	β -Phenylethylamine
PNS	Peripheral nervous system
PPB	Plasma protein binding
ppm	Parts per million
RAS	Rasagiline
R _f	Retardation factor
RIV	Rivastigmine
ROS	Reactive oxygen species
RSCB	Research Collaboratory For Structural Bioinformatics
RT	Room temperature
s	Singlet
SAF	Safinamide
SAR	Structure-activity relationship
SBDD	Structure based drug design
SCZ	Semicarbazones
SEL	Selegiline
SEM	Standard error mean
SGOT	Serum glutamate oxaloacetate transaminase
SGPT	Serum glutamate pyruvate transaminase
t	Triplet
<i>Tc</i>	<i>Torpedo californica</i>
THA	1,2,3,4-Tetrahydroacridin-9-amine
TLC	Thin layer chromatography
TMS	Tetramethylsilane
TPSA	Topological polar surface area
UV-VIS	Ultraviolet-Visible
WHO	World Health Organization
XR-PD	X-Ray powder diffraction
ΔG	Binding free energy
°C	Degree Centigrade