
Abbreviations

CNS	Central Nervous System
AD	Alzheimer's disease
PD	Parkinson's disease
FDA	Food and Drug Administration
NMDA	N-methyl-D-aspartate
BBB	Blood-brain-barrier
BCB	Blood-cerebrospinal fluid barrier
CSF	Cerebrospinal fluid
P _{gp}	P-glycoprotein
MOAT	Multi-specific organic anion transporter
MRP	Multi-drug resistance protein
NCE	New Chemical Entity
Ω	Mho
cm ²	Square centimeter
PS	Permeability surface area product
PC or log <i>P</i>	Partition coefficient or logarithm of partition coefficient
Da	Dalton
CDDS	Chemical drug delivery systems
HIV	Human Immunodeficiency Virus
i.v.	Intravenous
i.n.	Intranasal
USFDA	Food and Drug Administration of United States of America
®	Registered Trademark
™	Trademark
AIDS	Acquired immunodeficiency syndrome
mL	Milliliter
cm	Centimeter
mm	Millimeter
min	Minute
CYP	Cytochrome P450
Log	Logarithm
pKa	Dissociation constant

mg	Milligram
μL	Microliters
β	Beta
EDTA	Ethylene diamine tetra acetate
~	Approximately
%	Percent
Igs	Immunoglobulin
μm	Micron or micrometer
nm	Nanometer
>	Greater than
<	Less than
CRH	Corticotropin-releasing hormone
GHRH	Growth hormone-releasing hormone
DNA	Deoxyribose Nucleic Acid
rADV	Recombinant adenovirus
IGF-I	Insulin like growth factor-I
5-FU	5-fluorouracil
DM	Dextromethorphan hydrochloride
FD3	Fluorescein-dextran
kDa	Kilo Dalton
FITC-dextran	Fluorescein isothiocyanate-labeled dextrans
nM	Nano moles
NGF	nerve growth factor
PA	Picolinic acid
L-dopa	Levodopa
NM	Nimodipine
AUC	Area under the curve
kg	Kilogram
ADNP	Activity dependent neuroprotective protein
°C	Degree Celsius
ME	Microemulsion(s)
o/w	Oil-in-water

w/o	Water-in-oil
mN	Milli Newton
PIT	Phase inversion temperature
HLB	Hydrophile-lipophile balance
NMR	Nuclear magnetic resonance
SANS	Small-angle neutron scattering
SAXS	Small-angle X-ray scattering
Ca ⁺²	Calcium
HA	Hyaluronan
Mol.	Molecular
GRAS	Generally Regarded As Safe
DDWM	Drum-dried waxy maize starch
DE	Dextrose equivalent
^{99m} Tc	Technetium-99m
SPECT	Single-photon Emission Computed Tomography
CT	Computed Tomography
EEG	Electro encephalogram
DTPA	Diethylene triamine penta acetic acid
HSA	Human serum albumin
IgG	Immunoglobulin G
EGF	Epidermal growth factor
API	Active pharmaceutical ingredient
DMSO	Dimethylsulfoxide
PEG	Poly ethylene glycol
HPLC	High performance liquid chromatography
ng	Nanogram
λ	Wavelength
kV	Kilo volt
mM	Milli moles
ppb	Parts per billion
ppm	Parts per million
LC	Liquid chromatography
MS	Mass spectroscopy

ICH	International conference on harmonization
NaOH	Sodium hydroxide
v/v	Volume-by-volume
w/w	Weight-by-weight
w/v	Weight-by-volume
mg	Micrograms
r	Regression co-efficient
TLC	Thin layer chromatography
UV	Ultraviolet
λ_{max}	Absorbance maxima
SD	Standard deviation
RSD	Relative standard deviation
r^2/R^2	Linear least square regression
QC	Quality control
LQC	Low quality control
MQC	Medium quality control
HQC	High quality control
pg	Picogram
LoD	Limit of detection
LoQ	Limit of quantification
AR grade	Analytical reagent grade
AQ	Aqueous
O	Oil
S	Surfactant
CoS	Co-surfactant
S:CoS	Surfactant to co-surfactant ratio
mV	Milli volt
TS	Tacrine solution
TME	Tacrine microemulsion
TMME	Tacrine mucoadhesive microemulsion
DS	Donepezil solution
DME	Donepezil microemulsion
DMME	Donepezil mucoadhesive microemulsion

PCS	Photon correlation spectroscopy
"	Inches
RH	Relative humidity
RPM/rpm	Rotation per minute
PG	Propylene glycol
sec	Seconds
h	Hour(s)
TCH	Chitosan containing tacrine mucoadhesive microemulsion
TCP	Carbopol 934P containing tacrine mucoadhesive microemulsion
DCH	Chitosan containing donepezil mucoadhesive microemulsion
DCP	Carbopol 934P containing donepezil mucoadhesive microemulsion
SnCl ₂	Stannous chloride
H ₂ O	Water
M	Molar (molarity of solution)
Bq	Becquerel
MBq	Mega Becquerel
ITLC	Instant Thin Layer Chromatography
SG	Silica Gel
R/H	Reduced/Hydrolyzed
R _f	Relative migration factor
g	Grams
μCi	Micro Curie
B.W.	Body weight
C _{max}	Maximum concentration
T _{max}	Time to achieve maximum concentration
K _{el}	Elimination rate constant
L	Liter
T _{1/2}	Half-life (Time)
DTE	Drug targeting efficiency
DTP	Direct nose-to-brain drug transport percentage
AChE	Acetylcholinesterase
i.p.	Intraperitoneal
