

LIST OF ABBREVIATIONS

FDA	Food and Drug Administration
CNS	Central Nervous System
HIV	Human Immunodeficiency Virus
CEP	Commission on Epidemiology and Prognosis
SUDEP	Sudden Unexpected Death in Epilepsy
GABA	Gamma Amino Butyric Acid
ADP	Adenosine Di Phosphate
CSF	Cerebro Spinal Fluid
BBB	Blood Brain Barrier
IGF-1	Insulin like growth factor-1
WHO	World Health Organisation
EEG	Electro Encephalo Gram
ACTH	Adreno CorticoTropic Hormone
FCI	Focal cerebral ischemia
GCI	Global cerebral ischemia
DCH	Diffuse cerebral hypoxia
CI	Cerebral infarction
NMDA	N-methyl D-Aspartate
PON	Peroxynitrate production
ROS	Reactive Oxygen Species
NOS	Nitrative Oxygen Species
NO	Nitric Oxide
rtPA	recombinant Tissue Plasminogen Activator
CVOs	CircumVentricular Organs
ECF	ExtraCellular Fluid
Pgp	P-glycoprotein
Igs	Immunoglobulin
BCB	Blood-Cerebrospinal fluid Barrier
TRH	Thyrotropin-Releasing Hormone
PNAs	Peptide Nucleic Acids
EDTA	EthylenDiamine Tetra-Acetic Acid
CRH	Corticotrophin-Releasing Hormone

GHRP	Growth Hormone-Releasing Peptide
ADNF	Activity-Dependent Neurotrophic Factor
DNA	Deoxyribo Nucleic Acid
DSIP	Delta Sleep-Inducing Peptide
TGF-1	Transforming Growth Factor-1
BDNF	Brain Derived Neurotrophic Factor
VIP	Vasoactive Intestinal Peptide
uPAR	urokinase Plasminogen Activator Receptor
SSM	Sterically Stabilized phospholipid Micelles
O/W	Oil in Water
W/O	Water in Oil
CMC	Critical Micelle Concentration
SDS	Sodium Dodecyl Sulphate
HLB	Hydrophilic Lipophilic Balance
SAA	Surface Active Agent
CoS	Cosurfactant
SAXS	Small Angle X-ray scattering
SANS	Small Angle Neutron Scattering
PCS	Photon Correlation Spectroscopy
FT-PGSE	Fourier Transform Pulsed-Gradient Spin-Echo
TEM	Transmission Electron microscopy
AUC	Area Under the Curve
$T_{\max}$	Time at which $C_{\max}$ attains
$C_{\max}$	Maximum Concentration
HA	Hyaluronic Acid
DDWM	Drum-Dried Waxy Maize starch
PEG	Poly(Ethylene Glycol)
β -GP	β -glycerophosphate
FITC	Fluorescein Isothiocyanate
HPMC	Hydroxy Propyl Methyl Cellulose
mCi	millicurie
^{99m}Tc	Technetium
SnCl_2	Stannous chloride
MDA	Malondialdehyde

GSH	Glutathione
SOD	Superoxide Dismutase
MCAO	Middle Cerebral Artery Occlusion
MRI	Magnetic Resonance Imaging
UCPs	uncoupling proteins
MMP	Mitochondrial inner Membrane Potential
GSSH	Disulfide glutathione
GPX	Glutathione peroxidase
HPLC	High performance liquid chromatography
SD	Standard Deviation
RSD	Relative Standard Deviation
LOD	Limit of detection
LOQ	Limit of quantification
HPTLC	High Pressure Thin Layer Chromatography
HETP	High Efficiency Theoretical Plates
μg	microgram
$\lambda_{\max}$	Absorbance maxima
ME	Microemulsion
S _{mix}	Surfactant mixture
MME	Mucoadhesive microemulsion
CZ	Clobazam
CZME	Clobazam microemulsion
CZMME	Clobazam mucoadhesive microemulsion
CS	Clopidogrel bisulphate
CZS	Clobazam solution
CSS	Clopidogrel bisulphate solution
CSME	Clopidogrel bisulphate microemulsion
CSMME	Clopidogrel bisulphate mucoadhesive microemulsion
DLS	Dynamic Light Scattering
PBS	Phosphate Buffer Saline
TMB	3,3',5,5'-tetramethylbenzidine
RSM	Response Surface Method
ZP	Zeta Potential
GS	Globule Size

%T	% Transmittance
AP	Aqueous Phase
MA	Mucoadhesive Agent
%v/v	% volume by volume
%w/w	% weight by weight
TLC	Thin Layer Chromatography
R _f	Relative solvent Front
DTPA	Diethylene Triamine Penta acetic acid
LDPE	low-density polyethylene
DTE	Drug targeting efficiency
DTP	Direct nose-to-brain transport
T _{1/2}	Half life
β	terminal elimination rate constant
PTZ	Pentylene-tetrazole
BW	Body weight
ELISA	Enzyme Linked ImmunoSorbant Assay
IGF-BP-1	Insulin like growth factor Binding Protein-1
HRP	Horseradish Peptidase
DTNB	5,5'-dithiobis(2-nitrobenzoic acid)
ANOVA	Analysis of Variance
Log <i>P</i>	logarithm of partition coefficient
Da	Dalton
cm ²	Square centimeter
i.v./ IV	Intravenous
i.n. / IN	Intranasal
i.p.	Intrapertoneal
CYP	Cytochrome P450
pKa	Dissociation constant
ng	nano gram
nm	nano meter
μL	micro liter
°C	degree celsius
GRAS	Generally Regarded As Safe
SPECT	Single Photon Emission Computed Tomography

LC	Liquid Chromatography
MS	Mass Spectroscopy
UV	Ultra Violet
AR grade	Analytical reagent grade
rpm	Rotations per minute
PG	Propylene glycol
sec	Seconds
h	Hours
ITLC	Instant Thin Layer chromatography
mV	milli volt
s.c.	Subcutaneous