

ABBREVIATIONS

5-FCPhy	5'-deoxy-5-fluoro-N4-(phytanyloxycarbonyl) cytidine
5-FU	5-fluorouracil
ABC	ATP-binding cassette
AFM	Atomic force microscopy
AIF	Apoptosis-inducing factor
AP-1	Activator protein 1
Apaf-1	Apoptotic peptidase activating factor 1
BCS	Biopharmaceutic Classification System
CEHC	Carboxyethyl hydroxymethoxychroman metabolites
CMBHC	Carboxymethylbutylhydroxymethoxychroman
CMC	Critical micelle concentration
ConA	Concanavalin A
CPT	Camptothecin
Cry-TEM	Cryo-transmission electron microscopy
CS	Chitosan
CS-PCL	Chitosan-polycaprolactone
CSO	Chitosan oligosaccharide
CSO-SA	Stearic acid grafted chitosan oligosaccharides
CYP	Cytochrome P
DAPI	4'-6-diamidino-2-phenylindole
DCC	N,N'-Dicyclocarbodiimide
DCM	Dichloromethane
ddC	2'-3'-dideoxycytidine
DLS	Dynamic Light Scattering
DMAP	4-Dimethylaminopyridine
DMEM	Dulbecco's Modified Eagle Medium
DMF	Dimethylformamide
DOC	Docetaxel
DOX	Doxorubicin
EDC	N-(3-Dimethylaminopropyl)-N'-ethylcarbodiimide
EE	Encapsulation efficiency
EPR	Enhanced permeability and retention
DMSO	Dimethylsulfoxide
DS	Degree of substitution
FBS	Fetal bovine serum
FDA	Food and Drug Administration
FGF	Fibroblast growth factor
FOL	Folic acid
GC	Glycol chitosan
GI	Gastrointestinal
GSH	Glutathione
HBSS	Hank's balanced salt solution
HDL	High density lipoproteins

HER2	Human Epidermal Growth Factor Receptor 2
HGC	Hydrophobically modified glycol chitosan
HOBt	Hydroxybenzotriazole
HPLC	High-performance liquid chromatography
IAPs	Inhibitory apoptotic protein
IC50	Half maximal inhibitory concentration
IFN- α_{2b}	Interferon alpha-2b
IL-2	Interleukin-2
IP	Intraperitoneal
IV	Intravenous
JNK	c-Jun N-terminal kinases
LDL	Low-density lipoproteins
LDH	Lactate dehydrogenase
LPL	Lipoprotein lipase
LE	Loading efficiency
MAPK	Mitogen-activate protein kinase
MDR	Multidrug Resistance
MeOH	Methanol
mPEGOSC	N-m-PEG-N-octyl-O-sulfate chitosan
MPEG-SS-PLA	Poly(ethylene glycol)-b-poly(lactic acid)
MMP-9	Metalloproteinases-9
MTT	3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide
MW	Molecular weight
N-DOX-TOS	N-doxorubicin- α -D-tocopherol succinate
NF- κ B	Nuclear factor-kappa B
NHS	N-hydrosuccinimide
NMM	N-methylmorpholine
NSCLC	Non-small cell lung cancer
Papp	Apparent permeability coefficient
PBS	Phosphate buffered saline
PCA	Poly(cyano)acrylates
PCL	Polycaprolactone
PEG	Polyethylene glycol
PEG-DSPE	1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-[amino(polyethylene glycol)]
PEG-PE	Poly(ethylene glycol)-phosphatidyl ethanolamine
PEI	Polyethyleinimine
PEO ₄₅ -OH	Poly(ethylene oxide) mono methyl ether
PFA	Paraformaldehyde
PF-TOS	Vitamin E succinate modified pluronic P123
PGA	Poly(glycolide)
P-gp	P-glycoprotein
PKC	Protein kinase C
PLA	Poly(lactide)
PLC-g-mPEG	N-phthaloylchitosan-grafted poly(ethylene glycol) methyl ether
PLGA	Poly(lactide-co-glycolide)
PLMA-COONa	Poly(lactic acid-co-mandelic acid)

PLTP	Phospholipid transfer protein
PLV(2k)	Lysine-linked di-tocopherol polyethylene glycol 2000 succinate
PTX	Paclitaxel
PUFA	Polyunsaturated fatty acids
PVA	Polyvinyl alcohol
QDs	Quantum Dots
RES	Reticulo-endothelial system
Rh	Hydrodynamic radius
ROS	Reactive oxygen species
SPIOs	Superparamagnetic iron oxides
SULTs	Sulfotransferases
SVE	Solubility in vitamin E
TEA	Triethylamine
TEER	Transepithelial electrical resistance
TEM	Transmission electron microscopy
TGF	Transforming growth factor
TPGS	D- α -tocopherol polyethylene glycol succinate
TOS	Vitamin E succinate/ D- α tocopherol succinate
α -TTP	α -tocopherol transfer protein
T ω H	Tocopherol- ω -hydroxylase
UDP	Uridine diphosphate
UGTs	Glucosyl transferases
VEGF	Vascular endothelial growth factor
VLDL	Very low density lipoproteins
ZPDD	Zidovudine-phosphoryl-deoxycholyl didanosine