List of Abbreviations

% CDR	Percentage cumulative drug release
%	Percentage
% RSD	Percentage relative standard deviation
% EE	Percent entrapment efficiency
% w/w	Percentage weight by weight
% v/v	Percentage volume by volume
% w/v	Percentage weight by volume
<	Less than
≤	Less than equal to
>	More than
≥	More than equal to
~	Approximately equal to
±	Plus or minus
=	Equal to
λ_{max}	Wavelength of maximum absorbance
g	Gram
mg	Milligram
°C	Degree centigrade
µm	Micrometer
µL	Microliter
cm	Centimeter
mL	Milliliter
nm	Nanometer
ng/mL	Nanogram per milliliter
µg/mL	Micrometer per milliliter
mg/mL	Milligram per milliliter
G′	Storage modulus
G′′	Loss modulus
ANOVA	Analysis of variance
ACN	Acetonitrile
FTIR	Fourier transform infrared spectrometer
API	Active pharmaceutical ingredient
DMSO	Dimethyl sulfoxide
Cmax	Maximum concentration
AUC	Area under curve
BSA	Bovine serum albumin
CPCSEA	Committee for the purpose of control and supervision of experiments on animals
Conc.	Concentration
CP	Clobetasol propionate
VD3	Vitamin D3
CoQ10	Coenzyme Q10
DSC	Differential scanning calorimetry
FESEM	Field emission scanning electron microscopy
DLS	Dynamic light scattering

h	Hour
EDTA	Ethylene diamine tetra acetic acid
GC-HS	Gas chromatography - Headspace
RP-HPLC	Reverse phase - High performance liquid chromatography
IPA	Isopropyl alcohol
HETP	Height equivalent to theoretical plates
HQC	Higher quality control sample
ICH	International council for harmonization
IAEC	Institutional animal ethical committee
IL	Interleukin
IS	Internal standard
LOQ	Limit of quantification
LLOQ	Lower limit of quantification
LOD	Limit of detection
MeOH	Methanol
MDA	Malondialdehyde
LQC	Lower quality control
MRI	Magnetic resonance imaging
min	Minute
mPEG	Methoxy (polyethylene glycol)
MQC	Medium quality control
mPEG-PLA	Methoxy (polyethylene glycol)-(polylactide)
NMR	Nuclear magnetic resonance
MWCO	Molecular weight cut off
p value	Significance level in statistical tests
n	Diffusional exponent indicating the drug release mechanism in Korsmeyer-peppas model
LPNs	Lipid-polymer hybrid nanoparticles
pH	Negative log to the base 10 of hydrogen ion concentration
PLA	Poly (D,L-lactide)
PDI	Polydispersity index
R_t	Retention time
QC	Quality control
R_s	Resolution
R^2	Regression coefficient
SD	Standard deviation
rpm	Rotations per minute
SLNs	Solid-lipid nanoparticles
RT	Room temperature
sec	Second
PDC	Polymer drug conjugate
LPs	Liposomes
NLCs	Nanostructure lipid carriers
$t_{1/2}$	Half-life
SOD	Superoxide dismutase
HR-TEM	High resolution – Transmission electron microscopy

USFDA	United States Food and Drug Administration
TNF-α	Tumor necrosis factor - α
IMQ	Imiquimod
ZP	Zeta potential

LIST OF TABLES

LIST OF FIGURES