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List of abbreviations and symbols

%	Percentage
µg	Microgram
AUC	Area under concentration
DLS	Dynamic light scattering
SC	Stratum corneum
KDa	KiloDaltons
CD	Cluster of differentiation
HLA	Human leukocyte antigen
Th	T-helper
TNF	Tumor necrosis factor
IL	Interleukin
CXCL	chemokine ligand
NK	Natural killer cells
JAK-STAT	Janus kinase - Signal Transducers and Activators of Transcription
ACT1	Activator1
VEGF	Vascular endothelial growth factor
IFN	Interferon
NF-kB1	Nuclear factor signal pathway
PDE4	phosphodiesterase type 4

cAMP	cyclic adenosine monophosphate
PKA	protein kinase A
USFDA	United States Food and Drug Administration
TYK2	tyrosine kinase2
PLGA	Poly (D, L-lactide-coglycolide)
SLNs	Solid lipid nanoparticles
NLCs	Nanostructured lipid particles
LCNPs	Lyotropic liquid crystalline nanoparticles
PASI	Psoriatic Area Severity Index
cm	Centimeter
mg	milligram
g	Gram
h	Hour
min	Minutes
g/mol	Gram per mole
mL	Milliliter
°C	Degree Celsius
V_d	Volume of distribution
C_{max}	Maximum concentration
T_{max}	Time taken to reach maximum concentration
$t_{1/2}$	Half-life

CYP	Cytochrome
L	Liter
mV	Milli volts
Nm	Nanometer
TEWL	Transepidermal water loss
ICH	The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use
HPLC	High-pressure liquid chromatography
μm	Micrometer
mm	Millimetre
cm	Centimeter
μL	Microliter
ng	Nanogram
LOD	Limit of detection
LOQ	Limit of quantification
MQC	Middle-quality control
M	Molar
mM	millimolar
μM	micromolar
nM	Nanomolar
λ _{max}	Lambda max

RSD	Relative standard deviation
SD	Standard deviation
mRNA	Messenger Ribonucleic acid
miRNA	Micro Ribonucleic acid
RHLB	required hydrophilic-lipophilic balance
QbD	Quality by design
QTPP	Quality target product profile
CMA	Critical material attributes
CPP	Critical process parameters
CQA	Critical quality attributes
FMEA	Failure mode evaluation and analysis
RPN	Risk Priority Number
BBD	Box–Behnken design
RSM	Response surface methodology
ATR-FTIR	Attenuated total reflectance Fourier transform infrared
PDI	Poly dispersibility index
FESEM	Field Emission Scanning Electron Microscopy
rpm	revolutions per minute
MTT	3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide
HaCaT	Cultured Human Keratinocyte
DMSO	Dimethyl sulfoxide

DMEM	Dulbecco's modified Eagle's medium
FBS	Fetal bovine serum
DAPI	4',6-diamidino-2-phenylindole
FITC	fluorescein isothiocyanate
CaCl ₂	Calcium chloride
IC ₅₀	inhibitory concentration
cDNA	Complementary Deoxyribonucleic acid
RT-PCR	Real time-quantitative polymerase chain reaction
GAPDH	Glyceraldehyde 3-phosphate dehydrogenase
IMQ	Imiquimod
s	Seconds
J _{ss}	Steady-state flux
K _p	permeability coefficient
K _e ,	Elimination rate constant
REM	Risk Estimation Matrix
w/v	Weight per volume
w/w	Weight per weight
S/N	Signal to noise
AIC	Akaike Information Criteria
TLR	Toll-like receptors
mPa.s	millipascal-second

ANOVA	Analysis of variance
DOE	Design of experiments
<	Less than
>	More than
\leq	Less than equal to
\geq	More than equal to
=	Equal to
α	Alpha
β	Beta
γ	Gamma