

LIST OF ABBREVIATIONS

Abbreviation	Description
ACAT	Advanced compartmental absorption and transit
AAFE	Absolute average-fold error
Ka	Absorption rate constant
ADME	Absorption, distribution, metabolism and excretion
ACC	Accelerated method
API	Active pharmaceutical ingredient
AIC	Akaike Information Criterion
ACS	American Cancer Society
ASCO	American Society of Clinical Oncology
AUC	Area under the curve
ANN	Artificial neural network
AFE	Average-fold error
BP	Blood to plasma ratio
BW	Body weight
BrW	Brain weight
CAP	Cellulose acetate phthalate
CTZ	Chemoreceptor trigger zone
CINV	Chemotherapy-induced nausea and vomiting
CL	Clearance
CR	Complete response
R2	Correlation coefficient
CMA	Critical material attributes
CPP	Critical process parameters
CQAs	Critical quality attributes
DSD	Definitive screening design
DOE	Design of experiments
DCM	Dichloromethane
DSC	Differential Scanning Calorimetry
DMSO	Dimethyl sulfoxide
D2/D3	Dopamine

Abbreviation	Description
DL	Drug loading
DR	Drug release
ERDA	Electrical Research and Development Association
EE	Entrapment efficiency
EC	Ethyl cellulose
EDTA	Ethylene diamine tetracetic acid
ESMO	European Society for Medical Oncology
FIH	First-in-human
FEi	Fold error of each time point
FTIR	Fourier transform infrared
FLIE	Functional Living Index-Emesis
Precirol ATO5	Glyceryl palmitostearate
HPLC	High performance liquid chromatography
HEC	Highly emetogenic chemotherapy
H1	Histaminergic
F	Human oral bioavailability
HCl	Hydrochloric acid
HT3	Hydroxytryptamine
IR	Immediate Release
IVIVE	<i>in vitro</i> – <i>in vivo</i> extrapolation
ICH	International council for harmonization of technical requirements for pharmaceuticals for human use
IV	Intravenous
IVIVC	In-vitro in -vivo correlation
IVIVR	in-vitro in -vivo relationship
IVRT	In-vitro release testing
kDa	Kilo Dalton
kNN	k-nearest neighbours approach
LTBI	Latent tuberculosis
LOD	Limit of detection
LOQ	Limit of quantitation

Abbreviation	Description
LBF	Liver blood flow
LAF's	Long-acting formulations
λ_{max}	Maximum absorption wavelength
C _{maxss}	Maximum concentration at steady state
MLP	Maximum life-span potential
C _{max}	Maximum plasma concentration
MAE	Mean Absolute Error
MRT	Mean residence time
MC	Methyl cellulose
C _{minss}	Minimum concentration at steady state
MIDD	Model-Informed Drug Development
MEC	Moderately emetogenic chemotherapy
MR	Modified Release
MW	Molecular weight
MWCO	Molecular weight cut-off
MA	Multiexponential allometry
MASCC	Multinational Association of Supportive Care in Cancer
MLR	Multiple linear regression
M1	Muscarinic
NCCN	National Comprehensive Cancer Network
NLM	National Library of Medicine
NK-1	Neurokinin
NLT	Not less than
NMT	Not more than
O/W	oil/water
p.o.	Oral administration
PSA	Parameter sensitivity analysis
PLS	Partial least squares
PSD	Particle size distribution
P _{eff}	Permeability
PD	Pharmacodynamics

Abbreviation	Description
PK	Pharmacokinetic
PBS	Phosphate buffer saline
PBBM	Physiologically-based biopharmaceutics modelling
PBPK	Physiologically-based pharmacokinetic modelling
Fup	Plasma protein binding
PDLLA	Poly (DL Lactic acid)
PCGA	Poly (lactic- co-glycolic acid)
PCL	Polycaprolactone
PEG	Polyethylene glycol
PEO	Polyethylene oxide
PLA	Polylactic acid
PPO	Polypropylene oxide
PVA	Polyvinyl alcohol
PVP	Polyvinyl pyrrolidone
PEAR	Population Estimates for Age Related
PONV	Postoperative nausea and vomiting
QC	Quality control
QbD	Quality of design
QTPP	Quality target product profile
RT	Real time
RBC	Red blood cell
RSD	Relative standard deviation
RSM	Response surface methodology
ROE	Rule of exponents
SEM	Scanning electron microscopy
SA	Simple allometry
SEP	Standard Error of Prediction
C _{ss}	Steady-state concentration
SS	Stirring speed
ST	Stirring time
SC	Subcutaneous

Abbreviation	Description
SR	Sustained release
T _{max}	Time to reach maximum concentration
UV	Ultra violet
USP	United State Pharmacopoeia
USFDA	United States Food and drug administration
VBE	Virtual Bioequivalence
V _{dss}	Volume of distribution at steady state
W/O/W	water/oil/water