

LIST OF ABBREVIATIONS

Symbol	Description
ADH	Alcohol Dehydrogenase
ADME	Absorption, Distribution, Metabolism and Excretion
APL	Acute Promyelocytic Leukemia
ATRA	All-trans-retinoic acid
BLAST	Basic Local Alignment Search Tool
CRABP	Cellular Retinoic Acid Binding Protein
CYP or P450	Cytochrome P450
ER	Endoplasmic Reticulum
EXPASY	Expert Protein Analysis System
GROMACS	GRONingen Machine for Chemical Simulations
LBD	Ligand Binding Domain
MD	Molecular Dynamics
MDS	Molecular Dynamics Simulation
MSA	Multiple Sequence Alignment
NAD	Nicotinamide adenine dinucleotide
NADP	Nicotinamide adenine dinucleotide phosphate
NCBI	National Centre for Biotechnology Information
NIH	National Institute of Health
NRs	Nuclear Receptors
PDB	Protein Data Bank
PPAR	Peroxisome – Proliferator Activated Receptor
PYMOL	Python Script for Molecular Visualization
OH	Hydroxylated (alcohol) metabolite
Oxo	Ketone metabolite
RA	Retinoic acid
RALDH	Retinal dehydrogenase
RAMBA	Retinoic acid Metabolism Blocking Agent
RARE	Retinoic Acid Receptor Elements
RDH	Retinol Dehydrogenase
REH	Retinyl Ester Hydrolase
RMSD	Root Mean Square Deviation
RMSF	Root Mean Square Fluctuation
RXR	Retinoid X receptor
SDF	Structure Data File
SNP	Single Nucleotide Polymorphism
VS	Virtual Screening
WHO	World Health Organisation