List of Acronyms/Abbreviations

A549	Human alveola Type II epithelia – lung carcinoma
ADAPT	A commercially available system for the evaluation of LD50s and MTDs
ADME	Absorption, distribution, metabolism, elimination
ANOVA	Analysis of Variance
ATC	Acute Toxic Class
ATP	Adenosine triphosphate
ATSDR	Agency for Toxic Substances and Disease Registry/DHHS
BALB/c	Inbred strain of mouse
BBB	Blood-Brain Barrier
BEAS-2B	Human Bronchial-tracheal epithelia/transformed
BgVV	Federal Institute for Health Protection of Consumers and Veterinary Medicine (Germany)
BG1	Breakout Group 1: *In Vitro* Screening Methods for Assessing Acute Toxicity
BG2	Breakout Group 2: *In Vitro* Methods for Assessing Acute Toxicity Biokinetic Determinations
BG3	Breakout Group 3: *In Vitro* Methods for Organ-Specific Toxicity
BG4	Breakout Group 4: Chemical Data Sets for Validation of *In Vitro* Toxicity Tests
BFU-E	Burst-forming unit -- erythrocytes
BMC	Bone marrow cell
BTS	British Transplantation Society
b.w.	Body weight
Caco-2	Human acute leukemia cell line
CASE	QSAR Software
CAS	Chemical Abstract Service
CBC	Cord blood cell
CBER	Center for Biologics Evaluation and Research/FDA
CCL-30	Human nasal septum cells – squamous cell carcinoma
CDC	Centers for Disease Control and Prevention/DHHS
CDER	Center for Drug Evaluation and Research/FDA
CFN	The National Board for Laboratory Animals, Stockholm, Sweden
CFR	Code of Federal Regulations
CFU-GM	Colony-forming unit – granulocyte/macrophage
CFU-MK	Colony-forming unit – megakaryocytes
CFSAN	Center for Food Safety and Nutrition/FDA
CNN	Computational Neural Network
CNS	Central Nervous System
CPH 100	Human neuroblastoma cell line -- differentiated
CPSC	Consumer Product Safety Commission
CTLU	Cytotoxicology Laboratory, Uppsala
DEREK	Deduction of Risk from Existing Knowledge (a commercially available knowledge-based expert system - QSAR);
DHHS	Department of Health and Human Services
DIMDI	The German Institute for Medical Documentation and Information

DIV-BBB	Dynamic *in vitro* blood-brain barrier model
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
EC50	Effective concentration of compound that causes 50% of the maximum response
ECITTS	ERGATT/CFN Integrated Toxicity Testing Scheme
ECETOC	European Centre for Ecotoxicology and Toxicology of Chemicals
EC/HO	European Commission/British Home Office
ECVAM	European Centre for the Validation of Alternative Methods
EDIT	Evaluation-Guided Development on *In Vitro* Tests
ELISA	Enzyme-Linked Immunosorbent Assay
ERGATT	European Research Group for Alternatives in Toxicity Testing
EPA	Environmental Protection Agency
EU	European Union
EUCLID	Electronically Useful Chemistry Laboratory Instructional Database
FACS	Fluorescence activated cell sorting
FDA	Food and Drug Administration/DHHS
FDP	Fixed-Dose Procedure
FOIA	Freedom of Information Act
FRAME	Fund for the Replacement of Animals in Medical Experiments
$GABA_A$	gamma-aminobutyric acid; type A receptor is a ligand-gated ion channel complex
Galileo	Publicly available database of chemicals tested for toxicity
GFAP	Glial Fibrillary Acidic Protein
GHS	Globally Harmonized System
GLP	Good Laboratory Practice
H441	Human pulmonary adenocarcinoma cell line
Hb/g	Blood-air partition
HeLa	Human cervical adenocarcinoma cell line
HepG2	Human hepatocellular carcinoma cell line
HESI	Health and Environmental Science Institute
HL-60	Human acute leukemia cell line
HPV	High Production Volume
IC50	Inhibitory concentration estimated to affect endpoint in question by 50%
ICCVAM	Interagency Coordinating Committee on the Validation of Alternative Methods
ICH	International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use;
ILSI	International Life Sciences Institute
IMR32	Human neuroblastoma cell line -- differentiated
INVITTOX	ERGATT FRAME ECVAM Data Bank of In Vitro Techniques in Toxicology (on-line)
IUPAC	The International Union of Pure and Applied Chemistry
JSAAE	Japanese Society for Alternatives to Animal Experiments
Km	Constant that reflects affinity of the enzyme for its substrate

Ko/w	Octanol-water partition; lipophilicity
LC	Lethal blood (or serum) Concentration
LD50	Dose producing lethality in 50% of the animals (median lethal dose)
LDH	Lactate Dehydrogenase
LLC-PK_1	Porcine kidney cell line
LOAEL	Lowest Observable Adverse Effect Level
LR	Likelihood-Ratio
MCASE	A QSAR system for the evaluation of LD50s and MTDs
MDCK	Madin Darby Canine Kidney cells
MEIC	Multicentre Evaluation of *In Vitro* Cytotoxicity
MTD	Maximum Tolerated Dose
MTS	3-(4,5-dimethyl-2-yl)-5-(3-carboxymethoxyphenyl)-2-(4-sulfophenyl)-2H-tetrazolium
MEMO	MEIC Monographs (monographs for 50 MEIC chemicals available from CTLU)
MTT	3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide
NCI	National Cancer Institute/NIH
NHK	Normal human keratinocyte
NHNP	Human brain neural progenitor cell line
NICEATM	NTP Interagency Center for the Evaluation of Alternative Toxicological Methods
NIEHS	National Institute of Environmental Health Sciences/NIH
NIH	National Institutes of Health/DHHS
NIOSH	National Institute for Occupational Safety and Health
NLM	National Library of Medicine/NIH
NMDA	N-methyl-D-aspartate; receptor for neurotransmitter glutamate
NOAEL	No Observed Adverse Effect Level
NRU	Neutral Red Uptake
NT2	Human brain neural progenitor cell line; from teratocarcinoma
NTE	Neuropathy Target Esterase
NTP	National Toxicology Program
OECD	Organisation for Economic Co-operation and Development
OPP	Office of Pesticide Programs/EPA
OPPT	Office of Pollution Prevention and Toxics/EPA
OPPTS	Office of Prevention, Pesticides, and Toxic Substances/EPA
PBBK	Physiologically-Based Biokinetics
PCA	Principal Component Analysis
PCC	Poison Control Center
PCNA	Proliferating cell nuclear antigen
PLS	Partial Least Square Analysis
QSAR	Quantitative Structure-Activity Relationship
QSPR	Quantitative Structure-Property Relationship
QPPR	Quantitative Property-Property Relationship
RC	Registry of Cytotoxicity/ZEBET
RITOX	Research Institute of Toxicology – Utrecht University, the Netherlands

ROS	Reactive Oxygen Species
RTECS	Registry of Toxic Effects of Chemical Substances/NIOSH
RT-PCR	Reverse Transcriptase-Polymerase Chain Reaction
SAR	Structure Activity Relationship
SAS	Statistical Analysis System – (SAS Institute, Inc., Cary, NC, USA)
SGOMSEC	Scientific Group on Methodologies for the Safety Evaluation of Chemicals
SH-SY5Y	Human neuroblastoma cell line -- differentiated
SMILES	Simplified Molecular Input Line Entry Specification (chemical nomenclature)
SR-4897	Murine stromal cells
SOP	Standard Operating Procedures
Sw	Water solubility
TD10	Toxic Dose for 10% of the individuals
TG 401	Test Guideline 401 (Acute Oral Toxicity) [OECD]
TG 420	Test Guideline 420(Acute Oral Toxicity - Fixed Dose Method) [OECD]
TG 423	Test Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method) [OECD]
TG 425	Test Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure) [OECD]
TOPKAT	QSAR Software for the evaluation of LD50s and MTDs
UDP	Up-and-Down Procedure
Vd	Volume of distribution
Vmax	Maximum initial rate of reaction
WEHI-3B	Murine leukemia (myelomonocytic) cells
XTT	sodium 3,3-{1-[(phenylamino)carbonyl]-3,4-tetrazolium}-bis(4-methoxy-6-nitro)benzene sulfonic acid hydrate
ZEBET	German Centre for the Documentation and Validation of Alternative Methods (at BgVV)
3Rs	Refinement, Reduction, and Replacement (of Animal Use)
3T3	BALB/c mouse fibroblast cells
9L	Rat glioma cells