

Abbreviations

ADH	alcohol dehydrogenase
ADME	absorption, distribution, metabolism, and elimination
AFB ₁	aflatoxin B ₁
AhR	aryl hydrocarbon receptor
AIDS	acquired immune deficiency syndrome
ALDH2	aldehyde dehydrogenase 2
ALL	acute lymphoblastic leukaemia
AML	acute myeloid leukaemia
AP-1	activator protein 1
AR	androgen receptor
ARNT	aryl hydrocarbon receptor nuclear translocator
ATLL	adult T-cell leukaemia/lymphoma
ATP	adenosine triphosphate
B[a]P	benzo[a]pyrene
BCME	bis(chloromethyl)ether
BL	Burkitt lymphoma
BrdU	5-bromo-2'-deoxyuridine
bw	body weight
CA	chromosomal aberrations
CCL2	chemokine (C-C motif) ligand 2
CIN	cervical intraepithelial neoplasia
CLL	chronic lymphocytic leukaemia
CML	chronic myeloid leukaemia
CMME	chloromethyl methyl ether
COSMIC	Catalogue of Somatic Mutations in Cancer
COX-2	cyclooxygenase 2
CT	computed tomography

CYP450	cytochrome P450
DCVC	1,2-dichlorovinyl-cysteine
DCVG	(1,2-dichlorovinyl)glutathione
DDT	dichlorodiphenyltrichloroethane
DES	diethylstilbestrol
DMA(V)	dimethylarsinic acid
DMBA	7,12-dimethylbenz[<i>a</i>]anthracene
DOHaD	developmental origins of health and disease
DSBs	double-strand breaks
eBL	endemic Burkitt lymphoma
EBNA	EBV nuclear antigen 1
EBV	Epstein–Barr virus
EGF	epidermal growth factor
EH	epoxide hydrolase
ENCODE	Encyclopedia of DNA Elements
ENU	<i>N</i> -nitrosoethylurea
EPA	United States Environmental Protection Agency
ER	estrogen receptor
ERK	extracellular signal-regulated kinase
ER α	estrogen receptor alpha
F-344	Fischer 344
FANC/BRCA	Fanconi anaemia complementation groups/breast cancer A
FISH	fluorescence in situ hybridization
GLP	good laboratory practice
GSH	glutathione
GST	glutathione <i>S</i> -transferase
GSTM1	glutathione- <i>S</i> -transferase M1
GTP	guanosine-5'-triphosphate
GWAS	genome-wide association study
H ₂ O ₂	hydrogen peroxide
Hb	haemoglobin
HBsAg	hepatitis B surface antigen
HBV	hepatitis B virus
HBx	HBV X protein
HCC	hepatocellular carcinoma
HCV	hepatitis C virus
HER	human epidermal growth factor receptor
HIF-1 α	hypoxia-inducible transcription factor 1 alpha
HIV	human immunodeficiency virus
HIV-1	human immunodeficiency virus type 1
HMGB1	high-mobility group box 1 protein
HNSCC	head and neck squamous cell carcinoma
HPB	4-hydroxy-1-(3-pyridyl)-1-butanone
HPV	human papillomavirus
Hsp90	heat shock protein 90
HSV-1	herpes simplex virus type 1
HTLV-1	human T-cell lymphotropic virus type 1
IARC	International Agency for Research on Cancer
ICD	International Classification of Diseases
IGF-1	insulin-like growth factor 1

IgM	immunoglobulin M
IL-1 α	interleukin 1 alpha
InChI	International Chemical Identifier
IRIS	Integrated Risk Information System
IUPAC	International Union of Pure and Applied Chemistry
JNK	c-Jun N-terminal kinase
K14	keratin 14
KEGG	Kyoto Encyclopedia of Genes and Genomes
KSHV	Kaposi sarcoma-associated herpesvirus
LANA	latency-associated nuclear antigen
LET	linear energy transfer
LMP	latent membrane protein
lncRNA	long non-coding RNA
MALT	mucosa-associated lymphoid tissue
MAPK	mitogen-activated protein kinase
methyl-CCNU	1-(2-chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea
MHV-68	Murid herpesvirus 68
miRNA	microRNA
MMA	monomethylarsenic
MMA(III)	monomethylarsinous acid
MMPs	matrix metalloproteinases
MN	micronuclei
MNNG	<i>N</i> -methyl- <i>N'</i> -nitro- <i>N</i> -nitrosoguanidine
MOCA	4,4'-methylenebis(2-chloroaniline)
NAB	<i>N'</i> -nitrosoanabasine
NAD ⁺	oxidized nicotinamide adenine dinucleotide
NADH	reduced nicotinamide adenine dinucleotide
NADPH	nicotinamide adenine dinucleotide phosphate
NAT	<i>N'</i> -nitrosoanatabine
NDEA	<i>N</i> -nitrosodiethylamine
NDMA	<i>N</i> -nitrosodimethylamine
NF- κ B	nuclear factor kappa-light-chain-enhancer of activated B cells
NHL	non-Hodgkin lymphoma
NK	natural killer
NNAL	4-(methylnitrosamino)-1-(3-pyridyl)-1-butanol
NNK	4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone
NNN	<i>N'</i> -nitrosornicotine
\cdot NO	nitric oxide
NPV	negative predictive value
NQO1	NAD(P)H:quinone oxidoreductase 1
Nrf ₂	nuclear factor erythroid 2-related factor 2
O ₂ ⁻	superoxide
OAT	organic anion transporter
\cdot OH	hydroxyl radical
PAHs	polycyclic aromatic hydrocarbons
PCB 77	3,3',4,4'-tetrachlorobiphenyl
PCB 118	2,3',4,4',5-pentachlorobiphenyl
PCB 126	3,3',4,4',5-pentachlorobiphenyl
PCB 128	2,2',3,3',4,4'-hexachlorobiphenyl
PCB 153	2,2',4,4',5,5'-hexachlorobiphenyl

PCBs	polychlorinated biphenyls
PCNA	proliferating cell nuclear antigen
PeCDF	2,3,4,7,8-pentachlorodibenzofuran
PGHS-2	prostaglandin-endoperoxide synthase 2
PGRMC1	progesterone receptor membrane component 1
PI3K	phosphoinositide 3-kinase
PPAR	peroxisome proliferator-activated receptor
PPV	positive predictive value
PR	progesterone receptor
RET/PTC	rearranged during transfection/papillary thyroid carcinoma
SCC	squamous cell carcinoma
SCE	sister chromatid exchange
SCID	severe combined immunodeficiency
SIV	simian immunodeficiency virus
SREBP1c	sterol regulatory element-binding protein 1c
STAT3	signal transducer and activator of transcription 3
SULT1B1	sulfotransferase family cytosolic 1B member 1
SV40	simian virus 40
TCDD	2,3,7,8-tetrachlorodibenzo- <i>para</i> -dioxin
TCE	trichloroethylene
TCF8	transcription factor 8
TD ₅₀	dose rate (in mg/kg body weight/day) that is estimated to reduce the proportion of tumour-free animals by 50%
TGF-β	transforming growth factor beta
TNF-α	tumour necrosis factor alpha
ToxCast	Toxicity Forecaster
TPA	12- <i>O</i> -tetradecanoylphorbol-13-acetate
UDP	uridine-5'-diphosphate
UV	ultraviolet
vFLIP	viral Fas-associated death domain-like IL-1-converting enzyme inhibitory protein
vGPCR	viral G protein-coupled receptor
WHO	World Health Organization