

## LIST OF ABBREVIATIONS AND SYMBOLS

< - Less than

>- More than

°C- Degree centigrade

5-FU - 5-fluorouracil

ACP- Acid phosphatase

ALP- Alkaline Phosphate

ANOVA - Analysis of Variance

AO-EtBr – Acridine Orange - Ethidium Bromide

ATP Adenosine tri phosphate

BCIP - 5-Bromo-4-chloro-3-indolyl phosphate

BSA- Bovine Serum Albumin/ Body Surface Area

BSLT - Brine shrimp lethality test

CAM - Cell adhesion molecules

CAT- CATALASE

CDNB- 1-Chloro- 2,4-Dinitrochlorobenzene

COCl<sub>2</sub>- Cobalt chloride

COSY - Homonuclear correlation spectroscopy

CPCSEA - Purpose of Control and Supervision of Experiments on Animals

CuSO<sub>4</sub>, 5H<sub>2</sub>O- Copper Sulphate

D1 - Delay time

DAPI - 4',6-diamidino-2-phenylindole

DCM - Dichloromethane

DLA - Dalton's lymphoma ascites

DMSO - Dimethyl sulfoxide

DNA – Deoxyribonucleic acid

DNPH- 2,4Dinitrophenylhydrazane

DPPH - 2, 2-diphenyl-1- picrylhydrazyl

DTNB- 5,5'-dithiobis-(2-nitrobenzoic acid)

DTPA - Diethylene-tri-amine-pentaacetic acid

EAC - Ehrlich ascites carcinoma

EDTA- Ethylene diaminetetraacetic acid

EEGGL: Ethanol extract of *Calotropis gigantea* Linn.

ELISA – Enzyme linked immunosorbent assay

ESI - Electrospray ionization

EtBr - Ethidium bromide

FBS - Foetal bovine serum

FC - Folin-Ciocalteu

FeCl<sub>3</sub> – Ferric chloride

FITC - Fluorescein isothiocyanate

GAE – Gallic acid

GHS - Globally Harmonised System

GPx- Glutathione peroxidase

GR- Glutathione reductase

GSH- Reduced Glutathione

GSSG- Glutathione disulfide

GST- Glutathione-S-transferase

H and E - Haematoxylin and eosin

H<sub>2</sub>DCFDA – 2', 7'-dichlorodihydrofluorescein diacetate

H<sub>2</sub>O<sub>2</sub>- Hydrogen peroxide

H<sub>2</sub>SO<sub>4</sub>- Sulphuric Acid

HAI – Head area intensity

Hb - Haemoglobin

HCL – Hydrochloric acid

HCOOH - Formic acid

HLC – Human lymphocyte cells

HMBC - Heteronuclear Multiple Bond Correlation

HOCl - Hypochlorous acid

HOCl - Hypochlorous acid

HPV – Human papilloma virus

HRBC - Human red blood cell

HSQC - Heteronuclear Single Quantum Coherence

IC50 – Inhibitory concentration

IR - Infra-red

KBr – Potassium bromide

KCl - Potassium chloride

KNO<sub>2</sub> - Potassium nitrite

LCMS - Liquid chromatography-mass spectroscopy

LDH - Lactate dehydrogenase

MDA- Malondialdehyde

MeOD - Methanol-d4

MLCs - Mice lymphocytes

MMP-Mitochondrial membrane potential

MnO<sub>2</sub> - Manganese dioxide

MPO - Myeloperoxide

MST - Mean survival time

MTT - 3-(4,5-dimethyl-2-thiazolyl)- 2,5-diphenyl-tetrazolium bromide

Na<sub>2</sub>CO<sub>3</sub> – Sodium bicarbonate

Na<sub>2</sub>HPO<sub>4</sub> - Di sodium hydrogen phosphate

NaCl – Sodium chloride

NADH – Nicotinamide adenine dinucleotide

NaF- Sodium fluoride

Na-K- Sodium-Potassium tartarate

NaOH- Sodium hydroxide

NBT – Nitrobluetetrazolium

NBT-BCIP - Nitro-blue tetrazolium and 5-bromo-4-chloro-3'-indolyphosphate

NMR - Nuclear Magnetic Resonance

NMR solvent - Methanol-d4 of Cambridge isotopes

NO – Nitric oxide

NS - Number of scan

OECD - Economic Cooperation and Development

OH - Hydroxyl radicals

ONOO- - Peroxynitrite

PAF - Platelets activating factor

PBS- phosphate-buffered saline

PCV - Packed cell volume

PI - Propidium Iodide

PMS - Phenazinethiosulfate

PMS/NADH - Phenazinethiosulfate-nicotinamide adenine dinucleotide

PNP- Para nitro phenol

PNPP- Paranitro phenol Phosphate

PVDF - Polyvinylidene difluoride

RBC – Red blood cell

RIPA – Radioimmuno precipitation assay buffer

RNA – Ribonucleic acid

ROS-Reactive oxygen species

RPMI – Roswell Park Memorial Institute

SDS – Sodium dodecyl sulphate

SDS-PAGE – sodium dodecyl sulfate-polyacrylamide electrophoretic gel

SEM – Standard Error of Mean

SEM- Scanning electron microscope

SGOT- Serum glutamic-oxaloacetic transaminase

SGPT- Serum glutamic pyruvic transaminase

SOD- Super oxide dismutase

TAB-(Typhoid)

TAI - Tail area intensity

TBA- Thiobarbaturic acid

TBST - Tris-buffered saline (TBS) and Polysorbate 20 (tween-20)

TCA- Trichloroacetic acid

TNB - 2-nitrobenzoic acid

TNF $\alpha$  – Tumor necrotic factor  $\alpha$

WECGL: Water extract of *Calotropis gigantea* Linn.

$\mu$ g- Microgram

$\mu$ l- Microliter

$\mu$ M- Micro molar