



**Anti-Angiogenic Efficacy of Chitosan Nanoparticles on Mice
Bearing Ehrlich Carcinoma and Subjected to Gamma radiation**

A Thesis
Submitted in Partial Fulfillment of the Requirements for the
Master Degree of Science in
Zoology

By

**Manal Ahmed Mohamed Ahmed
B.Sc. Zoology / Chemistry Department
(2003)**

Under Supervision of

**Prof. Dr. Nefissa H. Meky
Professor of Physiology, Zoology
Department, Faculty of Science
Ain Shams University**

**Prof. Dr. Ussama Z. Said
Professor of Physiological
Chemistry, National Center for
Radiation Research and
Technology, Atomic Energy
Authority**

**Prof. Dr. Neamat H. Ahmed
Professor of Cell Biology and Histology,
National center for Radiation Research and Technology,
Atomic Energy Authority**



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Thesis Supervisors:

Prof. Dr. Nefissa H. Meky

Professor of Physiology, Zoology Department, Faculty of Science
Ain Shams University

Prof. Dr. Ussama Z. Said

Professor of Physiological Chemistry, National Center for Radiation
Research and Technology, Atomic Energy Authority

Prof. Dr. Neamat H. Ahmed

Professor of Cell Biology and Histology, National center for Radiation
Research and Technology, Atomic Energy Authority

Approval sheet

Name: Manal Ahmed Mohamed Ahmed

Title: Anti-Angiogenic Efficacy of Chitosan Nanoparticles on Mice Bearing Ehrlich Carcinoma and Subjected to Gamma radiation

Scientific degree: Master Degree of Science in Zoology (physiology)

Approved by:

Professor Dr. Tahany Amar Mohamed

Professor of physiology, faculty of science, El Mansoura University

Professor Dr. Sameir Mostafa Abd El Aziz

Professor of Radiation Biochemistry, the middle East regional center for Radioisotopes for Arabic countries

Prof. Dr. Nefissa H. Mehy

Professor of Physiology, Zoology Department, Faculty of Science, Ain Shams University

Prof. Dr. Neamat H. Ahmed

Professor of Cell Biology and Histology, National center for Radiation Research and Technology, Atomic Energy Authority

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LIST OF ABBREVIATIONS

| <u>Abbrev.</u> | <u>Full term</u> |
|-----------------------------------|------------------------------------|
| AMD | Age Related Muscular Degeneration |
| ATI | After Tumor Inoculation |
| CS | Chitosan |
| CD4 | Cluster of Differentiation- 4 |
| CD8 | Cluster of Differentiation- 8 |
| CNPs | Chitosan nanoparticles |
| DNA | Deoxyribonucleic Acid |
| EAC | Ehrlich Ascites Carcinoma |
| EAT | Ehrlich Ascites Tumor |
| EC | Ehrlich Carcinoma |
| ECM | Extracellular Matrix |
| EDTA | Ethylene Diamine Tetra Acetic Acid |
| ELISA | Enzyme Linked Immune Sorbent Assay |
| GSH | Reduced Glutathione |
| Gy | Gray |
| H₂O₂ | Hydrogen Peroxide |
| i.p | Intraperitoneal |
| IR | Ionizing Radiation |
| KGy | Kilo Gray |
| LDR | Low-dose radiation |
| LPO | Lipid Peroxidation |

| | |
|--------------------------------|--------------------------------------|
| LPL | Lipoprotein Lipase |
| M | Mean |
| MMP | Metalloproteinases |
| NF-κB | Nuclear Factor kappa-B |
| NK | Natural killer cell |
| NO | Nitric Oxide |
| NCI | National Cancer Institute |
| NC | Normal Control group |
| NVC | Non-Viable cells |
| O.D | Optical Density |
| PDGF | Platelet Derived growth factor |
| RBCs | Red Blood Cells |
| RNS | Reactive Nitrogen Species |
| ROS | Reactive Oxygen Species |
| r.p.m | Revolutions Per Minute |
| S.C. | Subcutaneously |
| SOD | Superoxide Dismutase |
| SE | Standard Error |
| TBARS | Thiobarbituric Acid Reactive Species |
| TEM | Transmission Electron Microscopy |
| Th | T-helper cell |
| TNF-α | Tumor Necrosis Factor-Alpha |
| Treg | Regulatory T cell |
| VEGF | Vascular Endothelial Growth factor |

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