



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



MONA MAGHRABY

**“Evaluation of The Effect of Cisplatin and Low-Level
Laser Irradiation on Head and Neck Squamous Cell
Carcinoma Cell Line”
In Vitro Study**

*Thesis Submitted to Faculty of Dentistry, Ain Shams University
In partial fulfillment of the requirements for Degree of Doctor of
Philosophy in Oral Pathology*

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الحمد لله الذي جعلنا
من عباده المخلصين

To my wonderful mother..

Thank you for being so nurturing, caring and protective. You are the true bliss in my life.

To my devoted father..

I am deeply indebted to you for planting the virtue of hard work in me ever since I was a little kid.

To Husseln, my lovely husband and backbone, who unfailingly helps me weather the storms of life and make it through hard times.

To Ihab and Hoda, my elder kind siblings and idols, who have always been a source of motivation and inspiration to me.

To my little angel, Karma, without whom this work would have been completed one year earlier.



My great family...

***Your love and support to me are like the oxygen that keeps the ember of
determination always burning inside my soul...***

Acknowledgment

I would like to express my profound gratitude to **Dr. Houry Moustafa Baghdadi**, Professor and Head of Oral Pathology Department, Faculty of Dentistry, Ain Shams University, for her professional supervision, constant motivation and solicitous sisterly mentorship that helped propel me on the right path. To you, I am forever grateful.

I want to delightfully acknowledge **Dr. Ali Mohamed Saafan**, Professor of Dental Laser Applications-Medical Department and Vice Dean for Postgraduate Studies and Research Affairs at National Institute of Laser Enhanced Sciences, Cairo University, for his insightful guidance, expert vision and great enthusiasm that invigorated my will to accomplish this work.

I would also like to thank **Dr. Seham Ahmad Abdel Ghani**, Lecturer of Oral Pathology, Faculty of Dentistry, Ain Shams University, for kindly offering me her precious time and valuable assistance. I owe you a lot for encouraging me to seek an independent mindset.

A wholehearted acknowledgment is merited to my dear friend and advisor, Bacem Ottoman, who reaches out to me, whenever I feel stumped. Thank you for always being there and never failing me.

Last but not least, my thanks extend to all the members of Oral Pathology Department, Faculty of Dentistry, Ain Shams University.

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List of Abbreviations

A: Adenine

AIF: Apoptosis-Inducing Factor

Akt: Protein Kinase encoded by the oncogene in the Transforming retrovirus isolated from the stock A-strain K (AK) mouse

ANOVA: Analysis of Variance

Apaf-1: Apoptotic Protease Activating Factor-1

ATCC: American Type Culture Collection

ATP: Adenosine Triphosphate

ATPase: Adenosine Triphosphatase

Bad: Bcl-2-Associated Agonist of Cell Death

Bak: Bcl-2 Antagonist Killer

Bax: Bcl-2-Associated x Protein

Bcl-2: B-Cell Lymphoma 2

Bcl-XL: B-Cell Lymphoma-Extra Large

BH: Bcl-2 Homology

Bid: BH3-Interacting Domain Death Agonist

Bik: Bcl-2-Interacting Killer

Bim: Bcl-2-Interacting Mediator of Cell Death

Bok/Mtd: Bcl-2-related Ovarian Killer/Matador

C: Cytosine

CAD: Caspase-Activated Deoxyribonuclease

CARD: Caspase Recruitment Domain

CDKI: Cyclin-Dependent Kinase Inhibitor

cDNA: Complementary Deoxyribonucleic Acid

Circ: Circularity

CL: Confidence Interval Limit

cm: Centimeter

Conc.: Concentration

COS-7: CV-1 Cells (simian) in Origin and carrying SV40 genetic material.

Cox: Cytochrome c Oxidase

Ct: Cycle Threshold

CW: Continuous Wave

CYCS: Cytochrome c, Somatic

Cyt c: Cytochrome c

Cytochrome P450: Cytochrome Pigment absorbing at 450 nm

dADP: Deoxyadenosine Diphosphate

dATP: Deoxyadenosine Triphosphate

dCTP: Deoxycytidine Triphosphate

DD: Death Domain

df: Degree of Freedom

DFF45: DNA Fragmentation Factor 45

dGTP: Deoxyguanosine Triphosphate

DISC: Death-Inducing Signaling Complex

DMEM: Dulbecco's Modified Eagle's Medium

DNA: Deoxyribonucleic Acid

DNase: Deoxyribonuclease

dNTP: Deoxynucleotide Triphosphate

dTTP: Deoxythymidine Triphosphate

EBV: Epstein-Barr Virus

EDTA: Ethylenediamine Tetraacetic Acid

ELISA: Enzyme-Linked Immunosorbent Assay

ETC: Electron Transport Chain

F: Forward primer – Fitness value (in ANOVA)

FADD: Fas-Associated Death Domain

Fas: First Apoptosis Signal

FasL: First Apoptosis Signal Ligand

FBS: Fetal Bovine Serum

FDA: Food and Drug Administration

g: Gram

G: Guanine

GaAs: Gallium-Aluminium-Arsenide

GDP: Guanosine Diphosphate

GSH: Glutathione

GSK3 β : Glycogen Synthase Kinase 3 β

H&E: Hematoxylin and Eosin

HeLa: Cervical cancer cell line named after Henrietta Lacks

He-Ne: Helium-Neon

HEp-2: Human Epithelial type 2

HepG2: Human Hepatocellular Carcinoma G2 cells

HF: High Fluence

HF-LLLI: High-Fluence Low-Level Laser Irradiation

HNC: Head and Neck Cancer

HNSCC: Head and Neck Squamous Cell Carcinoma

HPV: Human Papillomavirus

HRP: Horseradish Peroxidase

IC50: Inhibitory Concentration to 50% of cells

ICAD: Inhibitor of Caspase-Activated Deoxyribonuclease

IMS: Intermembrane Space

Inc.: Incorporated

J: Joule

Kbp: Kilo Base-pairs