PCR BASED ASSAY OF MITOCHONDRIAL DNA MUTATIONS IN ORAL LEUKOPLAKIA: CORRELATION WITH COX-2 EXPRESSION

Thesis

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بسم الله الرحمن الرحيم

وقل رب زدني علما

صدق الله العظيم

To Mom and Dad,
who always picked me up on time and inspire me
by love, encouragement and support….

To my beloved husband, Ehab,
and my dear sons, Mohannad and Eyad
Thank you for your support and patience….

To all who will read this one day and
find it useful,
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List of Abbreviations

ANOVA: Analysis of Variance

ATP: Adenosine Tri-Phosphate

Bcl-2: B-cell lymphoma-2

BLAST: Basic Local Alignment Search Tool

COX: Cyclo-oxygenase

Cyt-c: cytochrome -c

DAB: Diamino Benzidine

D-loop: Displacement Loop

DNA: Deoxyribonucleic Acid

dNTP: deoxyribonucleotide triphosphate

DPX: Distrene, Plasticiser, Xylene

EB: Ethidium Bromide

EBV: Epstein Barr Virus

EDTA: Ethylene Diamine Tetra Acetic Acid

H&E: Hematoxylin and Eosin

HBV: Hepatitis B Virus

HIF: Hypoxia Inducible Factor

HIV: Human Immunodeficiency Virus

HNSCC: Head and Neck Squamous Cell Carcinoma

HPV: Human Papilloma Virus

HSV: Herpes Simplex Virus

MDB: Membrane Desalting Buffer

MOMP: Mitochondrial Outer Membrane Permeabilization

MtDNA: Mitochondrial DNA

MW: Molecular Weight

NADH: reduced Nicotinamide Adenine Dinucleotide

NSAIDs: Non-Steroidal Anti-Inflammatory Drugs

OED: Oral Epithelial Dysplasia

OSCC: Oral Squamous Cell Carcinoma

PBS: Phosphate Buffer Saline

PCR: Polymerase Chain Reaction

PGs: Prostaglandins

pH: Power of Hydrogen

PKB: Protein Kinase B

PMDs: Potentially Malignant Disorders

PTEN: Phosphatase and Tensin homolog

PTP: Permeability Transition Pore

ROS: Reactive Oxygen Species

rpm: revolution per minute

SPSS: Statistical Package for Social Science

TAE: Tris-Acetate EDTA

Taq: Thermus aquaticus

TCA: Tricarboxylic Acid

tRNA: transfer Ribonucleic Acid

UV: Ultra Violet

WHO: World Health Organization

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