

Effect of Gold Nanosemicubes with and without laser exposure on Oral Squamous Cell Carcinoma cell line

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Dedication

*This work is dedicated to my loving
supporting parents*

My dear husband

And my precious kids

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List of Abbreviations

ACD	Accidental Cell Death
AO/EB	Acridine Orange/Ethidium Bromide
Bax	Bcl2-Associated X Protein
Bcl-2	B-Cell Lymphoma Protein-2
bHLH	Basic Helix Loop Helix
BSA	Bovine Serum Albumin
cDNA	Complementary DNA
Cq	Quantification Cycle
DEDs	Death Effector Domains
DEPC	Diethyl Pyrocarbonate
DISC	Death Inducing Signaling Complex
DMEM	Dulbeco's Modified Eagle's Medium
DNA	Deoxyribonucleic acid
DOX	Doxorubicin

DR3	Death Receptor-3
DR4	Death Receptor-4
EDTA	Ethylenediaminetetraacetic Acid
EGFR	Epidermal Growth Factor Receptor
ELISA	Enzyme-Linked Immunosorbent Assay
EMT	Epithelial Mesenchymal Transition
EPR	Enhanced Permeability And Retention
EXCM	Extracellular Matrix
FADD	Fas Associated Death Domain
Fas	First Apoptosis Signal
FBS	Fetal Bovine Serum
GAPDH	Glyceraldehyde-3-Phosphate Dehydrogenase
GNPs	Gold Nanoparticles
GNSCs	Gold Nano-Semicubes

HNSCC	Head and Neck Squamous Cell Carcinoma
HPV	Human Papilloma Virus
IR	Ionizing Radiation
LSPR	Localized Surface Plasmon Resonance
mRNA	Messenger RNA
MTT	3-[4,5-Dimethylthiazole-2-yl]-2,5-Diphenyltetrazolium Bromide
Myc	Myelocytomatosis Oncogene Cellular Homolog
NIR	Near Infrared Radiation
NP	Nanoparticle
NPs	Nanoparticles
OD	Optical Density
OPSCC	Oropharyngeal Squamous Cell Carcinoma

OSCC	Oral Squamous Cell Carcinoma
PCD	Programmed Cell Death
PCR	Polymerase Chain Reaction
PEG	Polyethylene Glycol
PEG-GNSCs	Polyethylene Glycol Gold Nano-Semicubes
PEO	Polyethylene Oxide
P-TEFb	Positive Transcription Elongation Factor
PTT	Photothermal Therapy
qPCR	Quantitative Real-Time PCR
RES	Reticulo-Endothelial System
RMS	Reactive Molecular Species
RNA	Ribonucleic acid
RNA Pol II	RNA Polymerase II
RT-PCR	Real Time- Polymerase Chain Reaction

SCC	Squamous Cell Carcinoma
SPR	Surface Plasmon Resonance
SPSS	Statistical Package for the Social Sciences
TAE	Tris Acetate EDTA
TEM	Transmission Electron Microscope
TMB	3,3',5,5'-Tetramethyl Benzidine
TNF1	Tumor Necrosis Factor-1 Receptor
TNF-R	Tumor Necrosis Factor Receptors
TRAIL	TNF-Related Apoptosis-Inducing Ligand
TRAIL-R	TNF-Related Apoptosis-Inducing Ligand Receptor
VM	Vasculogenic Mimicry
WHO	World Health Organization