

Evaluation of miR-96 and miR-155 expression in breast cancer

Thesis

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By

Shaimaa Mohamed Mohamed Mohamed

Assistant Lecturer of biochemistry
(*M.B., B. Ch. & M. Sc. Medical Biochemistry*)
Faculty of Medicine –Ain Shams University

Supervised By

Prof. Dr. Azza Hassan AbouGhalia

*Prof. of Medical Biochemistry and Molecular Biology
Faculty of Medicine- Ain Shams University*

Prof. Dr. Sanaa Eissa Mohamed

*Prof. of Medical Biochemistry and Molecular Biology
Faculty of Medicine- Ain Shams University*

Ass. Prof. Dr. Hanan Hussein Shehata

*Ass. Prof. of Medical Biochemistry and Molecular Biology
Faculty of Medicine- Ain Shams University*

Ass. Prof. Dr. Mohamed Elsayed El shinawi

*Ass. Prof. of General Surgery
Faculty of Medicine- Ain Shams University*

**Medical Biochemistry Department
Ain Shams University- Faculty of Medicine
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«...وَقُلْ رَبِّ

زِدْنِي عِلْمًا»

من الآية (١١٤)

سورة طه





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✧ *To My Dear Parents*

For their pray to Allah for me

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For their endurance and loving

✧ *To My Sisters and My Brother*

For their love and support

Approval Sheet

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NAME OF STUDENT: Shaimaa Mohamed Mohamed Mohamed

DEGREE: Master Degree in Basic Science (Medical Biochemistry)

THIS THESIS HAS BEEN SUPERVISED BY:

Prof. Dr. Azza Hassan AbouGhalia -----

Prof. Dr. Sanaa Eissa Mohamed -----

Ass .Prof. Dr Hanan Hussein Shehata -----

Ass .Prof. Dr. Mohamed Elsayed El Shinawy -----

EXAMINATION COMMEITTTEE:

Prof. Dr. -----

Prof. Dr -----

Prof. Dr . -----

DECLARATION

*This thesis has not been submitted for a degree at this
University or any other University*

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List of abbreviations

AGO	: Argonate protein
AJCC	: American Joint Committee of cancer.
BIC	: B cell integration cluster
Bp	: Base pair
BMI	: Body mass index
BRCA (1, 2)	: Breast cancer Susceptibility gene (1, 2)
CA 15-3	: Carcinoma antigen 15-3
CA 27.29	: Carcinoma antigen 27.29
CD24	: Cluster of of differentiation number 24
CD44	: Cluster of of differentiation number 44
cDNA	: Complementary DNA
CEA	: Carcinoma embryonic antigen
Cis	: Carcinoma in situ
CT	: Cycle threshold
Daf-12	: Nuclear hormone receptor in C. elegans
DCIS	: Ductal carcinoma in situ
DNA	: Deoxy ribonucleic acid
dNTPs	: Deoxy nucleoside triphosphate
Drosha	: Double stranded RNA specific endoribonuclease
eIF6	: Eukaryotic translation initiation factor6
eIF4E	: Eukaryotic translation initiation factor 4E
eIF4G	: Eukaryotic translation initiation factor 4 gamma

ER	: Estrogen receptor
Est-1	: E26 transformation specific-1
F	: Analysis of variance (ANOVA)
FOXO	: Forkhead home box o protein
FOXO1	: Forkhead home box o protein 1
FOXO3	: Forkhead home box o protein 3
GDP	: Guanosine diphosphate
GTP	: Guanosine -5'-triphosphate
HDAC	: Histone deacetylase complex
HER2/neu	: Human epidermal growth factor receptor2
Hs	: Homosapiens
IDC	: Invasive ductal carcinoma
ILC	: Invasive lobular carcinoma
LCIS	: Lobular carcinoma in situ
Lin	: Heterochronic genes in c.elegans
(M)	: Metastasis
m7G	: 7-methyl-guanosine
MHT	: Menopausal hormone therapy
mir	: pre- miRNA
miR	:Mature miRNA
miR*	: Passenger miRNA
MRI	: Magnetic Resonance Imaging
mRNA	: Messenger ribonucleic acid
(N)	: Lymph node
NPV	: Negative predictive value
OCP	: Oral contraceptive pills
PCR	: Polymerase chain reaction

PPV	: Positive predictive value
PR	: Progesterone receptor
pre-miRNA	: Precursor miRNA
pri-miRNA	: Primary miRNA transcript
RAN-GAP	: RAN-GTPase activating protein
RAN-GTP	: RAS-related nuclear protein with bound GTP
RISC	: RNA induced silencing complex
RECK	: Reversion-inducing cysteine-rich protein with Kazal motifs
Rn	: Normalized reported signal
RNA	: Ribonucleic acid
RNAse III	: Ribonuclease III
ROC	: Receiver-operating characteristic
rpm	: Revolution per minute
RT-PCR	: Reverse transcriptase polymerase chain reaction
SD	: Standard deviation
Socs1	: Cytokine signaling 1
SPSS	: Statistical Package for the Social Sciences software
t	: Independent- Samples T test
(T)	: Tumour Grade
Taq DNA	: Thermus aquatica deoxy ribonucleic acid
T_m	: Melting temperature
TN	: True negative

TP	: True positive
TP53INP1	: Tumor protein 53-induced nuclear protein 1
TNM	: Tumor-nodes-metastases
U	: Mann whitney U test
USA	: United States of America
UTR	: Untranslated region
UV	: Ultraviolet
WHO	: World health organization
14q	: Segment 21 of the long arm of chromosome
Δ	: Delta

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