

# Serum adiponectin level as a prognostic marker Of NASH in obese type II Diabetic Egyptian patients

Thesis

Submitted for fulfillment of master degree In Internal Medicine

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# **DEDICATION**

To my parents, my wife, my son and my family
whom I am indebted to
them for happiness
in my life.

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# **LIST OF ABBREVIATIONS**

AAR	AST/ALT ratio.
ACO	Acetyl CO-A
ALP	Alkaline Phosphatase.
ALT	Alanine Aminotransferase.
AMPK	AMP-Activated Kinase.
ANGPTL3	Angiopoietin-like Protein 3
ApoBl00	Apolipoprotein B100.
APPL1	Adaptor Protein containing Pleckstrin homology domain.
APRI	Aspartate Aminotransferase to Platelet Ratio Index.
ARFI	Acoustic Radiation Force Impulse.
ASH	Alcoholic Steatohepatitis.
AST	Aspartate aminotransferase.
AUC	Area Under the Curve.
AUROC	Area Under the Receiver Operating Curve.
BMI	Body Mass Index.
C2CI4	Perchloroethylene.
CAP	Controlled Attenuation Parameter.
CCI4	Carbon tetrachloride.
CK-18	CytoKeratin-18.
CLD	Chronic Liver Disease.
CREBP	Carbohydrate Response Element Binding Protein.
CRP	C-Reactive Protein.
CT	Computed Tomography.
CVD	Cardiovascular disease.
DNA	Deoxy Ribonucleic Acid
DPI	Doppler Perfusion Index
ELF	Enhanced Liver Fibrosis.
ELISA	Enzyme Linked Immuno-Sorbent Assay.
ER	Endoplasmic Reticulum.
EtBr	Ethyl Bromide.
FBS	Fasting Blood Sugar.
FLI	Fatty Liver Index.
G6pase	Glucose-6-phosphatase.
Gck	Glucokinase.
GFR	GlomularFilteration Rate
GGT	Gamma GlutamylTransferase.
HA	Hyaluronic Acid.
HAART	Highly Active Antiretroviral Drugs.
HBsAg	Hepatitis B Surface Antigen.
HCVAb	Hepatitis C Virus Antibody.

HDL-C	High Density Lipoprotein Cholesterol.
HMW	High Molecular Weight.
HOMA	Homeostasis Model Assessment .
HSCs	Hepatic Stellate Cells.
HU	Hounsefield Unit
ICAM-1	Intercellular Adhesion Molecule-1.
IL	Interleukin.
IU	International Unit.
IV	Intra Venous.
KDa	KiloDalton
KDa	Kilogram
LDL-C	Low Density Lipoprotein-Cholesterol.
LPS	LipoPolySaccharides.
MCP-1	Monocyte Chemoattractant Protein-1.
mL	Milliliter.
	Millimeter.
MRC	
MRI	Mitochondrial Respiratory Chain.
mRNA	Magnetic Resonance Imaging.  Magnetic Resonance Imaging.
	Messenger Ribonucleic Acid.
MRS	Magnetic ResonanceSpectoroscopy.
MS	Metabolic Syndrome.
NAFLD	Non Alcoholic Fatty Liver Disease.
NAS NASH	NAFLD Activity Score.
	Non Alcoholic Steatchenatitis Clinical Passanch Network
NASH CRN NCEP ATP-III	Nonalcoholic Steatohepatitis Clinical Research Network.
NCEI AII-III	National Cholesterol Education Program: Adult
NEFA	Treatment Program III
NGSP	Non-Esterified Fatty Acids.  National Glycohemoglobin Standardization Programe
NFS	NAFLD Fibrosis Score.
	Nanogram.
ng	Nanometer
nm NNFL	Non-NASH Fatty Liver.
NPV	Negative Predictive Value.
NT	Nash Test.
OELF	
OSA	Original European Liver Fibrosis.
P3NP	Obstructive Sleep Apnea.  Procollagen III N-peptide.
PCR	
	Polymerase Chain Reaction.  Platelet Derived Growth Factor
PDGF	Platelet Derived Growth Factor.  PhosphoEnelPyrnyeteCorboyyKingso 1
PEPCK1	PhosphoEnolPyruvateCarboxyKinase 1.
pm	Picomole.

PPARs	Peroxisomal Proliferator Activated Receptors.
PPV	Positive Predictive Value.
PTX 3	Plasma Pentraxin 3.
qPCR	Quantitative Real Time PCR.
REC	Research Ethical Committee.
RNA	Ribonucleic Acid.
RNS	Reactive Nitrogen Species.
ROS	Reactive Oxygen Species.
RT-PCR	Reverse Transcriptase- Polymerase Chain Reaction.
SD	Standard Deviation.
SPEA	Serum prolidase enzyme activity.
sRAGE	Soluble Receptor for Advanced GlycationEndproducts.
SREBP	Sterol Regulatory Element Binding Protein.
ST	SteatoTest.
TG	Triglycerides.
TIMP 1	Tissue-Inhibited matrix Metalloproteinase Inhibitor-1.
TNF	Tumor Necrosis Factor.
TZD	Thiazolidinediones.
U/L	Unit/Liter.
UCP2	Uncoupling protein 2
UDCA	Ursodeoxycholic Acid.
ULN	Upper Limit of Normal.
US	UltraSonography.
USA	United States of America.
VCTE	Vibration Control Transient Elastography.
VEGF	Vascular Endothelial Growth Factor.
WGO	World Guideline Organization
VLDL	Very Low-Density Lipoprotein
μL	Micro Liter.
$\mu M$	Micro Meter

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