

شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلو

# بسم الله الرحمن الرحيم





MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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شبكة المعلومات الجامعية التوثيق الإلكترونى والميكروفيلم

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



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MONA MAGHRABY



# PREDICTIVE VALUE OF SERUM CHEMERIN AND NAFLD FIBROSIS SCORE TO ULTRASONOGRAPHIC DETECTION AND QUANTIFICATION OF STEATOSIS IN NONALCOHOLIC FATTY LIVER DISEASE PATIENTS

### **Thesis**

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### القيمة التنبؤية لمادة الكيميرين بالمصل ودرجة التليف للكشف بالموجات فوق الصوتية وكمية تشمع الكبد في مرضي الكبد الدهني غير الكحولي

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مقدمة من

الطبيب

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# DEDICATION

TO THE PERSONS WHO
WAS AND STILL
SUPPORTING ME IN MY
LIFE.

TOTHEPERSONS WHO

MAKE MESTANDING UP

AND CONTINUE

FIGTHING

TO MY FAMILY

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### LIST OF ABBREVIATIONS

**1H-MRS** Proton Magnetic Resonance Spectroscopy

**2D SWE** 2D Shear Wave Elastography

**AASLD** American Association for the Study of Liver Disease

ACC Acetyl-Coa Carboxylase

AdipoR2 Adiponectin And Adiponectin Receptor 2

AGA American Gastroenterological Association

**ALT** Alanine Aminotransferase

APOC3 Apolipoprotein C3

**APRI** AST to Platelet Ratio Index

**ARFI** Acoustic Radiation Force Impulse

**AST** Aspartate Aminotransferase

**BMI** Body Mass Index

**CCL2** Chemokine Ligand Type 2

**CCLR2** C-C Chemokine Receptor-Like 2

**Chrebp** Carbohydrate-Responsive Element-Binding Protein

**CK-18** Cytokeratin 18

**CMV** Cytomegalo Virus

**CRP** C-Reactive Protein

**CT** Computed Tomography

**CVD** Cardiovascular Disease

**DGAT** DAG O-Acyltransferase

**DNL** De Novo Hepatic Lipogenesis

**EBV** Epstein Bar Virus

**ELISA** Enzyme-Linked Immunosorbent Assay

**ER** Endoplasmic Reticulum

**FAS** Fatty acid synthase

**FATPs** Fatty Acid Transport Protein

**FATPs** Fatty Acid Transport Protein

**FFAs** Free Fatty Acids

**FGF21** Fibroblast Growth Factor 21

**FLI** Fatty Liver Index

**FLIP** Fatty Liver Inhibition Of Progression

**FXRs** Farnesoid X Receptors

**GGT** Γ-Glutamyltransferase

**GPRs** G Protein-Coupled Receptors

**GWAS** Genome-Wide Association Studies

**HBV** Hepatitis B Virus

**HCC** hepatocellular carcinoma

**HCV** Hepatitis C Virus

**HGP** Hepatic Glucose Production

**HIV** Human Immunodeficiency Virus

**HMG-CoA** Hydroxymethylglutaryl-CoA (HMG-CoA) reductase inhibitors

**HOMA-IR** Homeostatic Model Assessment Of Insulin Resistance

HRI Hepatorenal Index

**HSCs** Hepatic Stellate Cells

**IL-6** Interleukin-6

**IL-8** Interleukin-8

INR International Normalized Ratio

IR Insulin Resistance

LOXL2 Lysil Oxidase Homologue 2

**LPS** Lipopolysaccharide

**LT** Liver Transplantation

**LXRs** Liver X Receptors

miRNA Microrna

MRE Magnetic Resonance Elastography

MRI Magnetic Resonance Imaging

MS Metabolic Syndrome

**NAFLD** Non-alcoholic fatty liver disease

NAS NAFLD Activity Score

**NASH** Non-alcoholic steatohepatitis

**NF kβ** Necrosis Factor kβ

NIAAA National Institute On Alcohol Abuse And Alcoholism

OR Odds Ratio

**PNPLA3** Patatin-Like Phospholipase Domain-Containing Protein 3

**PPARs** Peroxisome Proliferator Activated Receptors

**PPARs** Peroxisome Proliferator Activated Receptors

**PSWE** Point Shear Wave Elastography

**RCT** Randomized Controlled Trials

**SAF** Steatosis Activity Fibrosis

**SFAs** Saturated Fatty Acids

**SNPs** Single-Nucleotide Polymorphisms

**SREBP-1c** Sterol Regulatory Element-Binding Protein – 1c

**SS** Simple Steatosis

**T2DM** Type 2 Diabetes Mellitus

**TG**₃ Triglycerides

**TGFβ-1** Transforming Growth Factor Beta-1

**THR-β** The Thyroid Hormone Receptor Beta

**TM6SF2** Transmembrane 6 Superfamily Member 2

**TNFR-1** Tumor Necrosis Factor receptor 1

**TNF-α** Tumor Necrosis Factor-Alpha

**TSH** Thyroid Stimulting Hormone

VCTE; FibroScan Vibration Control Transient Elastography

**VLDL** Very Low Density Lipoprotein

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