



# **EVALUATION OF SERUM PHENYL LACTATE AS A DIAGNOSTIC TEST OF NON ALCOHOLIC FATTY LIVER DISEASE IN EGYPTIAN PATIENTS**

*Thesis*

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*Ahmed Elsayed Mohamed*

# *Dedication*

*Special thanks to my **Mother**  
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## List of Abbreviations

<b>AASLD</b>	American association for the study of liver diseases
<b>ACEI</b>	Angiotensin converting enzyme inhibitor
<b>ALD</b>	Alcoholic liver disease
<b>ALT</b>	Alanine amino transferase
<b>ANA</b>	Antinuclear antibody
<b>ARB</b>	angiotensin receptor blockers
<b>ASMA</b>	Anti smooth muscle antibody
<b>AST</b>	Aspartate amino transferase
<b>BASH</b>	Both alcoholic and nonalcoholic steatohepatitis
<b>BMI</b>	Body mass index
<b>CAP</b>	controlled attenuation parameter
<b>CASH</b>	chemotherapy-associated steatohepatitis
<b>CHB</b>	Chronic hepatitis B virus
<b>CHC</b>	Chronic hepatitis C virus
<b>CHOL</b>	Cholesterol
<b>CKD</b>	Chronic kidney disease
<b>CT</b>	computed tomography
<b>CVD</b>	Cardiovascular disease
<b>DASH</b>	Drug -associated steatohepatitis
<b>EASD</b>	European association for study of diabetes

<b>EASL</b> .....	European association for study of liver
<b>EASO</b> .....	European association for study of obesity
<b>ECM</b> .....	Extra Cullar Matrix
<b>e-GFR</b> .....	Estimated – glomerular filtration rate
<b>ELF</b> .....	European Liver Fibrosis
<b>FBG</b> .....	Fasting blood glucose
<b>FDA</b> .....	Food and drug administration
<b>FFA</b> .....	Free fatty acids
<b>FLI</b> .....	fatty liver index
<b>GGT</b> .....	Gamma glutamyl transferase
<b>GWAS</b> .....	Genome-wide association studies
<b>HA</b> .....	Hyaluronic acid
<b>HBV</b> .....	Hepatitis B virus
<b>HCV</b> .....	Hepatitis C virus
<b>HDL</b> .....	Low high-density lipoprotein
<b>Hh</b> .....	Hedgehog
<b>HIF</b> .....	Hypoxia inducible factors
<b>HSCs</b> .....	Hepatic stellate cells
<b>IFG</b> .....	Impaired fasting glucose
<b>IH</b> .....	Intermittent hypoxia
<b>IL</b> .....	Interleukin
<b>IR</b> .....	Insulin resistance
<b>LDL</b> .....	Low-density lipoprotein
<b>LSM</b> .....	Liver stiffness measurement
<b>MetS</b> .....	Metabolic syndrome
<b>MRI</b> .....	Magnetic resonance imaging

<b>mRNA</b>	Messenger ribonucleic acid
<b>NAFLD</b>	Nonalcoholic fatty liver disease
<b>NAS</b>	NAFLD Activity Score
<b>NASH</b>	Nonalcoholic steatohepatitis
<b>NFS</b>	NAFLD fibrosis score
<b>NPV</b>	Negative predictive value
<b>OSA</b>	Obstructive sleep apnea
<b>P3NP</b>	Peptide of pro-collagen III
<b>PASH</b>	PNPLA3-associated steatohepatitis
<b>PHLA</b>	PHENYL LACTIC ACID
<b>PPV</b>	Positive predictive value
<b>RAAS</b>	Renin-Angiotensin-Aldosterone System
<b>RCTs</b>	Randomized controlled trials
<b>SOS</b>	Swedish obese subjects
<b>SS</b>	Simple steatosis
<b>TE</b>	Transient elastography
<b>TG</b>	Triglycerides
<b>TIMP</b>	Tissue inhibitor of metalloproteinase
<b>TNF</b>	Tumor necrosis factor
<b>TNF-<math>\alpha</math></b>	Tumour necrosis factor-alpha
<b>TZD</b>	Thiazolidinediones
<b>UDCA</b>	Ursodeoxycholic acid
<b>US</b>	Ultrasonography
<b>VEGF</b>	Vascular endothelial growth factor
<b>WGO</b>	World Gastroenterology Organisation
<b>WHO</b>	World Health Organization

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