

SERUM HEPCIDIN IN PATIENTS WITH HCV-RELATED CHRONIC BENIGN LIVER DISEASE AND HEPATOCELLULAR CARCINOMA

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿ وَأَنْزَلَ اللَّهُ عَلَيْكَ الْكِتَابَ وَالْحِكْمَةَ وَعَلَّمَكَ مَا لَمْ
تَكُن تَعْلَمُ وَكَانَ فَضْلُ اللَّهِ عَلَيْكَ عَظِيمًا ﴾

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✍ *Mohamed Magdy*

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List of Abbreviations

Abb.	Full Term
AASLD	American Association for the Study of Liver Diseases
ACD	Anemia of chronic diseases
AFP	Alphafetoprotein
AJCC	The American Joint Committee on Cancer
ALA	Aminolevulinic acid
ALT	Alanine aminotransferase
ANOVA	Analysis of variance
Apo-Tf	Apotransferrin
APRI	Aspartate aminotransferases to platelet ratio index
AST	Aspartate aminotransferase
ATP	Adenosine triphosphate
AUC	Area under the curve
BCLC	Barcelona clinic liver cancer
BMP	Bone Morphogenetic protein
c/EBP	C/Enhancer- binding protein
C-AMP	Cyclic adenosine monophosphate
CD	Cluster differentiation
CHC	Chronic hepatitis C
CI	Confidence interval
CLD	Chronic liver disease
CLIP score	Cancer of the Liver Italian Program score
CREAT	Creatinine

List of Abbreviations (Cont...)

Abb.	Full Term
CREBPH	Responsive element binding protein H
CT	Computer tomography
CTL	cytotoxic T lymphocytes
CYP3A4	cytochrome P 3A4
Dcytb	Duodenal cytochrome b
DMT	Divalent metal transporter
DNA	Double standard nucleic acid
ECF	Extracellular fluid
ELF	Enhanced Liver Fibrosis
ELISA	Enzyme linked immunosorbent assay
Epo	Erythropoietin
EVR	Early viral response
FDG	Fluorodeoxyglucose
FDV	Faldaprevir
Fe	Iron
Fe⁺⁺	Ferrous ion
Fe⁺⁺⁺	Ferric ion
FSH	Follicular stimulating hormone
GDF	Growth differentiation factor
GDF	Growth differentiation factor
GRACILE	Growth retardation, aminoaciduria, cholestasis, iron overload, lactic acidosis, and early death
GTPases	Guanine triphosphatases
H/F RATIO	Hepcidin/ferritin ratio

List of Abbreviations (Cont...)

Abb.	Full Term
HB	Hemoglobin
HBD	Hepcidin binding domain
HbeAg	Hepatitis B envelope antigen
HbsAg	Hepatitis B surface antigen
HBV	hepatitis B virus
HCC	Hepatocellular carcinoma
HCG	Human chorionic gonadotropin
HCP1	Heme carrier protein 1
HCV	Hepatitis C virus
HDAC	Histone deacetylase
HFE	Human hemochromatosis protein
H-ferritin	Heavy ferritin
HIC	Hepatic iron content
HIF	Hypoxia inducible factor
HIV	Human immune-deficiency virus
Hjv	Hemojuvelin
HLA	Human leucocyte associated antigen
HNE	Hydroxynonenal
HTT	Hepatic transit times
HVPG	Hepatic venous pressure gradient
IFN	Interferon
IL	Interleukin
INR	The international normalized ratio for prothrombin time

List of Abbreviations (Cont...)

Abb.	Full Term
IU	International unit
IV	Intravenous
JAK.....	Janus kinase
kDa	kilo Dalton
Kg	kilogram
LEAP	Liver expressed antimicrobial peptide
L-ferritin	Light ferritin
LKM antibody	Liver kidney mitochondrial antibody
LPS.....	Lipopolysacraide
mg	Milligram
mL	milliliter
MRI.....	Magnetic resonance imaging
mRNA.....	Messenger ribonucleic acid
MWA	Microwave ablation
NF-KB.....	Nuclear factor Kappa B
NK	Natural killer
NPV	Negative predictive value
NR.....	Non responder
NS protein	Non - structural protein
OH	Hydroxyl radical
OhdG	Hydroxydeoxyguanosine
OLT.....	Orthotopic liver transplantation
PCFT.....	Proton-coupled folate transporter
PCR.....	Polymerase chain reaction

List of Abbreviations (Cont...)

Abb.	Full Term
PEG-IFN	Pegylated interferon
PEI	Percutaneous ethanol injection
PET	Positron emission tomography
PIVKA II	Prothrombin produced by vitamin K absence or antagonism II
PLT	Platelet
PPV	Positive predictive value
PR	Pegylated interferon and ribavirin
RBV	Ribavirin
RFA	Radiofrequency ablation
RIA	Radioactive immune assay
RGT	Response-guided therapy
ROC curve	Receiver Operating Characteristic curve
ROS	Reactive oxygen species
RVR	Rapid viral response
S protein	Structural protein
S.D	Standard Deviation
SBRT	Stereotactic body radiation therapy
SE	Standard error
SF	Serum ferritin
SMV	Simeprevir
SOF	Sofosbuvir
SPSS	Statistical package version
STAT	Signal transducer and activator of transcription

List of Abbreviations (Cont...)

Abb.	Full Term
STEAP	Six transmembrane epithelial antigen of prostate
SUV	Standardized uptake values
SVR	Sustained virological responses
TACE	Transarterial chemoembolization
TE	Transient elastography
Tf	Transferrin
TfR	Transferrin receptor
TGF	Transforming growth factor
TIBC	Total iron binding capacity
TMPRSS6	Transmembrane Serine protease 6
TNM	Tumor, node, metastasis
TSA	Trichostatin A
UICC	The Union Internationale Contre le Cancer
VHL	Von Hippel-Lindau
WBC	White blood cell
Y	Yttrium

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