

Evaluation of the diagnostic and therapeutic roles of non-coding RNA and Cell proliferation related gene association in Hepatocellular carcinoma

Thesis

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LIST OF ABBREVIATION

3'-UTR.....	3' untranslated region
AASLD	American Association for the Study of Liver Diseases
AFB1	Aflatoxin B1
AFP	Alpha-1 fetoprotein
AFP-L3	Lectin lens culinaris agglutinin-reactive AFP
Ago.....	Argonaute
AJCC.....	American Joint Committee on cancer
AST	Aspartate transaminase
AUC	Area Under the Curve
BMP7.....	Bone Morphogenetic Protein 7 gene
CBC.....	Complete blood picture
CCND1	Cyclin D1
Cdc6	Cell division cycle 6
Cdc7	Cell division cycle 7
cDNA	Complementary DNA
CDK.....	Cyclin Dependant Kinase
Cdt1	Chromatin licensing and DNA replication factor 1
ceRNAs	Competing endogenous RNAs
circRNA	Circular RNA
CLIP	Cancer of the Liver Italian Program
CMP.....	Chromatin modifying proteins
CT.....	Cycle Threshold, Computed tomography
DDK.....	Cdc7-Dbf-dependent kinase
DEPC	Diethylpyrocarbonate
DMEM	Dulbecco's Modified Eagle's Medium
DNA.....	Deoxy Ribonucleic Acid
dNTP	Deoxy Nucleoside Triphosphate
dUTP	Deoxy Uridine Triphosphate
EDTA.....	Ethylenediaminetetraacetic acid

EGFP.....Enhanced green fluorescent protein
 eIF4E.....eukaryotic translation initiation factor 4E
 eIF6.....eukaryotic translation initiation factor 6
 eIF4G.....eukaryotic translation initiation factor 4G
 FBSFetal bovine serum
 FDA.....Food and Drug Administration
 FBSFetal bovine serum
 FDA.....Food and Drug Administration
 FGF19Fibroblast Growth Factor 19
 Foxp1.....Forkhead transcription factor
 gGram
 GGT mRNA..... Gamma-glutamyl transferase mRNA
 GP73Golgi protein 73
 HBsAg.....Hepatitis B Virus surface Antigen
 HBVHepatitis B virus
 HCCHepatocellular Carcinoma
 HCVHepatitis C virus
 HGF.....Hepatocyte growth factor
 HiBECs.....human intrahepatic biliary epithelial cells
 HULC..... Highly up-regulated in liver cancer
 IFNInterferon
 IL6..... interleukin 6
 IGF-IIInsulin-like growth factor II
 Imp8.....Importin 8
 INR.....international normalized ratio
 KSPkinesin spindle protein
 let-7Lethal 7
 lin-4Lineage defective 4
 LncRNALong noncoding RNA
 LTx.....Liver transplantation
 MAPK.....Mitogen-activated protein kinase

MCM..... Minichromosome maintenance family
miRNP.....microRNA ribonucleoprotein complex
miR-34a.....Micro Ribonucleic acid-34a
miRNAs Micro ribonucleic acid
MREsmiRNA response elements
MRI Magnetic resonance imaging
mRNAMessenger RNA
MTS 3-(4,5-dimethylthiazol-2-yl)-5-(3-
carboxymethoxyphenyl)-2-(4-sulfophenyl)-2H-
tetrazolium, inner salt
MyD88 Myeloid differentiation primary response 88
NADH Nicotinamide adenine dinucleotide
NADHP.....Nicotinamide adenine dinucleotide phosphate
NAFLDNonalcoholic fatty liver disease
NASH.....Non-alcoholic steatohepatitis
ncRNANon-coding RNA, Non coding Ribonucleic Acid
NPV..... Negative Predictive Value
OCCM.....Protein complex composed of ORC, Cdc6, Cdt1
and MCM
ORC Origin recognition complex
PABP.....poly (A)-binding protein
P bodiesmRNA processing bodies
PES.....phenazine ethosulfate
piRNA.....Piwi-interacting Ribonucleic Acid
PIVKA-II Protein Induced by Vitamin K antagonist-II
PKN3.....Protein kinase N3
PLK1 polo-like kinase 1
PPVPositive Predictive Value
primiRs..... primary miRNA transcripts
RISC.....RNA-induced silencing complex
RNA Ribonucleic Acid

RNAi	RNA interference
ROC	A. Receiver Operating Characteristics curve
RRM2.....	M2 subunit of ribonucleotide reductase
rRNA.....	Ribosomal RNA
RT.....	Reverse Transcription
RT-PCR.....	Reverse Transcription/ Real time Polymerase Chain Reaction
<i>S. cerevisiae</i>	<i>Saccharomyces cerevisiae</i>
SCCA	Squamous cell carcinoma antigen
SD.....	Standard Deviation, See
shRNA.....	Short-hairpin Ribonucleic Acid
siRNA	Small interfering Ribonucleic Acid, Small interfering Ribonucleic Acid
SPSS.....	Statistical Package for the Social Sciences
TACE	Trans-arterial chemoembolization
TGF- β 1.....	Transforming growth factor – β 1
T _m	Melting temperature
TNM.....	Tumor-node-metastasis
tRNA	Transfer RNA
US.....	Ultrasonography
VEGF	Vascular endothelial growth factor
Δ CT	Delta Cycle Threshold
μ g/ml	Microgram/deciliter

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