

## *Curriculum vitae*

**Date Prepared:** December 30, 2024  
**Name:** Yujin Hoshida, M.D., Ph.D.  
**Office Address:** 5323 Harry Hines Blvd, Dallas TX 75390  
**Work E-Mail:** [Yujin.Hoshida@UTSouthwestern.edu](mailto:Yujin.Hoshida@UTSouthwestern.edu)

### **Education**

Year	Degree	Field of Study	Institution
1988 - 1994	M.D.	Medicine	University of Tsukuba, Ibaraki, Japan
1999 - 2003	Ph.D.	Medical Sciences	University of Tokyo, Tokyo, Japan

### **Postgraduate/postdoctoral Training**

Year(s)	Titles	Specialty/Discipline	Institution
1994 - 1995	Resident	Internal Medicine	University of Tokyo Hospital, Tokyo, Japan
1995 - 1996	Resident	Internal Medicine, General Anesthesia	Japanese Red Cross Medical Center, Tokyo, Japan
1996 - 1997	Fellow	Gastroenterology	Tokyo Metropolitan Tama Geriatric Hospital, Tokyo, Japan
1997 - 1999	Fellow	Hepatology	Toranomon Hospital, Tokyo, Japan
2003 - 2004	Postdoc fellow	Genome Science	Research Center for Advanced Science and Technology, University of Tokyo, Tokyo, Japan
2004 - 2008	Postdoc fellow	Cancer Genomics	Cancer Program, Broad Institute of MIT and Harvard University, Cambridge, MA

### **Current Licensure and Certification**

#### Licensure

1994 Japanese medical license

#### Board and Other Certification

1997 Board Certification in Internal Medicine, Japanese Society of Internal Medicine

2002 Board Certification in Gastroenterology, Japanese Society of Gastroenterology

2002 Board Certification in Gastroenterological Endoscopy, Japan Gastroenterological Endoscopy Society

2002 Board Certification in Hepatology, Japan Society of Hepatology

### **Honors and Awards**

Year	Name of Honor/Award
2002	Travel fellowship, International Society for Computational Biology
2003 - 2004	Viral Hepatitis Research Foundation
2007 - 2009	Research Fellowship, Charles A. King Trust
2015-2020	Career Scientist Award, Irma T Hirschl Trust
2015	Dr. Harold and Golden Lamport Research Award
2018 -	Elected member, American Society for Clinical Investigation (ASCI)
2018 -	Cancer Prevention & Research Institute of Texas (CPRIT) Scholar in Cancer Research
2021 -	American Gastroenterological Association (AGA) Fellow (AGAF)
2022 -	American Association for the Study of Liver Disease (AASLD) Fellow (FAASLD)

### **Faculty Academic Appointments**

Year(s)	Academic Title	Department	Academic Institution
2012 - 2016	Assistant Professor of Medicine	Department of Medicine	Icahn School of Medicine at Mount Sinai
2016 - 2018	Associate Professor of Medicine	Department of Medicine	Icahn School of Medicine at Mount Sinai
2018 - 2020	Adjunct Associate Professor	Department of Medicine	Icahn School of Medicine at Mount Sinai
2018 - 2022	Associate Professor of Internal Medicine (tenured)	Department of Internal Medicine	UT Southwestern Medical Center
2018 -	Director, Liver Tumor Translational Research	Simmons Comprehensive Cancer Center, Department of Internal Medicine	UT Southwestern Medical Center
2022 -	Professor of Internal Medicine (tenured)	Department of Internal Medicine	UT Southwestern Medical Center
2023 -	H. Ray and Paula Calvert Chair in Gastroenterology Oncology	Department of Internal Medicine	UT Southwestern Medical Center

### **Appointments at Hospitals/Affiliated Institutions**

<u>Past</u>			
Year(s)	Position Title	Department/Division	Institution
1998 - 1999	Medical staff	Department of Hepatology	Toranomon Hospital, Tokyo, Japan
2009 - 2012	Research Scientist	Cancer Program	Broad Institute of MIT and Harvard University

### **Other Professional Positions**

Year(s)	Position Title	Institution
2019 -	Scientific Advisory Board	Helio Genomics
2022 -	Scientific Advisory Board	Espervita Therapeutics
2022 - 2023	Scientific Advisory Board	Roche Diagnostics
2023	Scientific Advisory Board	Elevar Therapeutics

### **Professional Societies**

Dates	Society Name, member
2012 -	American Association for Cancer Research (AACR)
2012 -	American Association for the Study of Liver Disease (AASLD)
2012 -	American Gastroenterological Association (AGA)
2019 -	American Society of Clinical Oncology (ASCO)
	<b>Committees</b>
2017 - 2020	AASLD Journal Publication Committee, Elected member
2016 -	AASLD Abstract Review Committee, Member
2017 -	AGA Abstract Review Committee, Member, Chair (HCC clinical abstract)
2019 - 2021	International Liver Cancer Association (ILCA) Education Committee, Member
2019 – 2021	AASLD Hepatobiliary Neoplasia SIG, Global Outreach Sub-committee, Member
2019 - 2021	ILCA HCC Biomarker Guidelines expert panel, Member, Chair (risk biomarker sub-panel)
2020 - 2022	AASLD Fibrosis Special Interest Group (SIG), Steering Committee, Elected member
2020 -	The Texas Collaborative Center for Hepatocellular Cancer (TeCH), Scientific Committee, Member
2021 - 2023	AASLD Liver Cancer SIG, Steering Committee, Elected member
2021 -	AASLD Abstract Review Committee, Chair (hepatobiliary neoplasia abstracts)
2022 -	ILCA Abstract Review Committee
2022 - 2023	AGA, Nominating Committee, Elected member
2022 -	AGA Institute Council, Liver & Biliary (LB) section, Elected member
2023 -	AGA Institute Council, Gastrointestinal Oncology (GIONC) section, Elected member
2024 -	AASLD Global Outreach and Engagement Committee, Elected member
2024 -	American Society of Clinical Oncology (ASCO) Gastrointestinal Cancers Symposium Committee, Elected member

### **Grant Review Activities**

Year(s)	Name of Review Committee	Organization
---------	--------------------------	--------------

2013	Non Thematic Programme 2013	French National Research Registry, France
2013	New Organ Prize, Review Panel	New Organ Foundation
2013 - 2017	Research Council Grant Review Board	Hong Kong Health and Medical Research Fund, Hong Kong
2014	SCH: EXP: Collaborative Research	National Science Foundation
2014	Cooperative Basic Research Grant, CBRG13nov	Singapore National Medical Research Council, Singapore
2014	GAP-CRG	Swiss Cancer League, Switzerland
2014	Research Grant Review Panel	Swiss National Research Foundation, Switzerland
2014	UAEU Grant Program 2014 Review Panel	UAE University Grant Program, UAE
2014	Individual Research Grants Review Panel	Israel Science Foundation, Israel
2015	Tumor Identity Card Program	French League Against Cancer, France
2015	Molecular & Cellular Medicine Board, Cancer	Medical Research Council, UK
2016	Individual Research Grants Review Panel	Israel Science Foundation, Israel
2016	Research Grant Review Panel	Kuwait Foundation for the Advancement of Sciences, Kuwait
2017	Canada Research Chairs Program, Review Panel	Government of Canada
2017	Chemo-Dietary Prevention (CDP) study section	NIH
2017	Hepatobiliary Pathophysiology (HBPP) study section	NIH
2017	ZCA1 SRB-2 (J2)	NIH
2018	VIB Grand Challenges Programme	VIB, Belgium
2018	Oncopole EMC <sup>2</sup> Review Panel	Fonds de Recherche du Québec
2018	ZCA1 RPRB-L (J1) P	NIH
2018	Liver Cancer Panel	PRCRP, DOD
2019	ZRG1 OBT-B (55) R	NIH
2019	Personal Research Grants	Israel Science Foundation
2019	Viral & Autoimmune Hepatitis Fellowship	Medical Research Council, UK
2020	ZCA1 RPRB-M (M1) (P20 SPORE)	NIH
2020	Cancer Prevention Study Section (CPSS)	NIH
2020	ZRG1 DKUS-R10 (R41, 43)	NIH
2020	ZCA1 RPRB-M (J1) S (P20 SPORE)	NIH
2020	Liver Cancer Panel 2	PRCRP, DOD
2020	California North State University, Mini-Grants	California North State University
2020	Ulysse Incentive Grant for Mobility in Scientific Research (MISU)	French National Research Registry, France
2021	ZCA1 RPRB-L (M1) S (P01)	NIH

2021	ZDK1 GRB-C (M1) 2 (RC2)	NIH
2021	Canada Research Chairs Program, Review Panel	Government of Canada
2021	GrantSuccess Program	Thomas Jefferson University
2022	Simmons Cancer Center - Touchstone Diabetes Center, Cancer & Obesity Translational Research Pilot Project	University of Texas Southwestern
2022	RC2 on the genetics of NAFLD	NIH
2022	Canada Research Chairs Program, Review Panel	Government of Canada
2022	KU Leuven BZAP program	University of Leuven, Belgium
2023	ZRG1 CDPT-B (02) F	NIH
2023	Cancer Prevention Study Section (CPSS)	NIH
2023	PRCRP Pre-Application Screening	PRCRP, DOD
2023	Principal Investigator Projects - PROFI	Austrian Science Fund
2024	ZCA1 RPRB - T (M1) (P01)	NIH
2024 - 2027	CPSS, standing member	NIH
2024	ZDK1 GRB - C (M3) (RC2)	NIH

### **Editorial Activities**

Year(s)	Journal Name
<b><u>Associate Editor</u></b>	
2021 -	Hepatology (official journal of AASLD)
2022 -	Liver Cancer (official journal of Asia-Pacific Primary Liver Cancer Expert Association [APPLE])
<b><u>Editorial Board</u></b>	
2007 - 2019	Journal of Hepatology (an official journal of European Association for Study of Liver)
2010 - 2019	Clinical Cancer Research (an official journal of AACR)
2020 - 2023	Gastroenterology (an official journal of AGA)
2021 -	Seminars in Liver Disease
<b><u>Ad Hoc Reviewer</u></b>	
2007 -	Journal of Hepatology
2008 -	Nature Biotechnology
2008 -	Gastroenterology
2009 -	Cancer Research
2009 -	Cancer
2009 -	The Oncologist
2009 -	BMC Cancer
2009 -	BMC Medical Genomics
2010 -	Archives of Internal Medicine
2010 -	PLOS ONE

2010 -	Hepatology
2010 -	Clinical Cancer Research
2010 -	International Journal of Cancer
2010 -	Cancer Science
2010 -	Expert Review of Molecular Diagnostics
2011 -	Expert Review of Gastroenterology and Hepatology
2011 -	World Journal of Gastroenterology
2012 -	JAMA
2012 -	Alimentary Pharmacology & Therapeutics
2012 -	Carcinogenesis
2012 -	Bioinformatics
2012 -	HPB Surgery
2013 -	PLOS Computational Biology
2013 -	Database
2013 -	New England Journal of Medicine
2013 -	Liver International
2013 -	Nucleic Acid Research
2014 -	Nature Medicine
2014 -	Nature Genetics
2014 -	American Journal of Gastroenterology
2015 -	Nature Communications
2015 -	Gut
2015 -	Cell Systems
2015 -	Scientific Reports
2016 -	Oncotarget
2017 -	Advanced Drug Delivery Reviews
2017 -	Digestive Diseases and Sciences
2017 -	eLife
2017 -	Experimental and Molecular Medicine
2018 -	JAMA Oncology
2018 -	American Journal of Pathology
2018 -	Clinical Gastroenterology and Hepatology
2018 -	Cellular and Molecular Gastroenterology and Hepatology
2018 -	Expert Review of Anticancer Therapy
2018 -	Journal of Medical Virology
2019 -	Cell
2020 -	JAMA Oncology
2020 -	Hepatology Communications
2021 -	Nature Reviews Gastroenterology & Hepatology

2021 -	British Journal of Cancer
2022 -	Lancet Gastroenterology and Hepatology
2023 -	Liver Cancer
2023 -	Seminars in Liver Diseases
2024 -	Lancet Oncology

## **Grant Support**

### **Present**

NIH/NCI R01CA292930 Hoshida (PI) 04/01/2025 - 03/31/2030

*Non-invasive etiology-adjusted precision liver cancer risk prediction*

Goals: The goal of this project is to develop biomarkers and algorithms for etiology-adjusted liver cancer risk prediction.

Role: PI

NIH/NCI U01CA288375 Hoshida, Diehl, Moylan, Chung (MPI) 09/21/2023 - 08/31/2028

*Therapeutic modulation of a proteomic HCC risk signature with statins in patients with liver cirrhosis*

Goals: The goal of this project is to evaluate modulation of a serum-based HCC risk biomarker with statins in the settings of cohort studies and clinical trials.

Role: Contact PI

NIH/NCI R01CA282178 Hoshida, Singal (MPI) 09/06/2023 - 08/31/2028

*Epigallocatechin gallate for prevention of lethal cirrhosis complications*

Goals: The goal of this project is to evaluate epigallocatechin gallate for hepatocellular carcinoma chemoprevention in a phase II placebo-controlled clinical trial in patients with cirrhosis.

Role: Contact PI

NIH/NCI U01CA283935 Singal, Hoshida (MPI) 09/19/2023 - 08/31/2028

*Precision HCC risk stratification in patients with cirrhosis*

Goals: The goal of this project is to develop biomarkers and imaging modality for precision HCC screening.

Role: MPI

European Research Council, ERC-AdG-2020-101021417 FIBCAN Baumert (PI) 08/01/2021 - 07/31/2026

*Targeted strategies for prevention and treatment of fibrosis-associated liver cancer*

Goals: The goal of this study is to identify and develop novel treatment and preventive strategies for liver fibrosis and cancer.

Role: Subcontract PI

NIH/NCI R01CA255621 Chung, Hoshida (MPI) 09/01/2021 - 08/31/2027

*Trial of Statins for Chemoprevention in Hepatocellular Carcinoma*

Goals: The goal of this project is to test atorvastatin as hepatocellular carcinoma chemoprevention in phase II clinical trial.

Role: MPI

NIH/NIGMS R01GM140012      Xiao (PI)      01/01/2021 - 12/31/2024  
*Developing computational algorithms for histopathological image analysis*  
Goals: The goal of this project is to develop deep-learning computational algorithm to analyze histological images.  
Role: Co-I

CPRIT RP200554      Singal, Hoshida (MPI)      08/31/2020 – 08/30/2025  
*A Novel Risk Stratification and Early Detection Strategy to Reduce Liver Cancer Mortality*  
Goals: The goal of this project is to develop strategy of personalized HCC screening to reduce HCC mortality in Texas.  
Role: MPI

NIH/NCI R01CA233794-S1      Hoshida (PI)      09/01/2022 - 08/31/2025  
*Non-invasive monitoring of metabolic liver cancer risk*  
Goals: The goal of this project is to validate liver cancer risk biomarkers in patients with metabolic liver diseases.  
Role: PI

NIH/NCI R01 CA233794      Hoshida (PI)      09/23/2019 - 08/31/2025  
*Reverse-engineering precision liver cancer chemoprevention*  
Goals: The goal of this project is to identify targets, drugs, and biomarkers for liver cancer chemoprevention.  
Role: PI

NIH/NCI U01CA226052      Mehta, Singal, Hoshida, Drake (MPI)      03/14/2019 - 02/29/2025  
Glycopathology of HCC: identification of the source cells of serum fucosylation  
Goals: The goal of this project is to identify glycomic biomarkers in HCC  
Role: MPI

CPRIT RR180016      Hoshida (PI)      06/01/2018 - 05/31/2025  
*Recruitment of Rising Stars*  
Goals: The goal of this project is to develop and establish a comprehensive translational research program in liver cancer.  
Role: PI

### Past

NIH/NCI      U01CA230694      Singal (PI)      09/14/2018 - 07/31/2023  
*Precision risk stratification and screening for HCC among patients with cirrhosis in the United States*  
Goals: To develop and evaluate a precision screening strategy for early-stage HCC in patients with cirrhosis that matches the best screening tests to individual risk and screening test performance.  
Role: subcontract PI

University of Texas System      Hoshida (PI)      08/01/2018 – 12/31/2023  
*Translational STARS award*  
Goals: To establish translational research laboratory in liver cancer.  
Role: PI

NIH/NIMHD R01MD012565 Singal (PI) 03/01/2018 - 02/28/2023  
*Multilevel factors for racial/ethnic and socioeconomic disparities in prognosis of hepatocellular carcinoma*  
Goals: The goal of this project is to determine factors associated with racial/ethnic disparities in hepatocellular carcinoma prognosis.  
Role: subcontract PI

AASLD PINNACLE Liang (PI) 07/31/2021 - 07/30/2022  
*Role of macrophage mitochondrial DNA in obesity-induced hepatocellular carcinoma*  
Goals: The goal of this project is to study the role of macrophage mitochondrial DNA in obesity-induced hepatocellular carcinoma.  
Role: Co-I

NIH/NCI R01 CA212008 Singal (PI) 09/01/2017 - 08/31/2022  
*Precision screening for hepatocellular carcinoma in patients with cirrhosis*  
Goals: The goal of this study is to examine and establish personalized HCC screening strategies incorporating new biomarkers  
Role: Subcontract PI

European Research Council, 671231 HEPCIR Baumert (PI) 01/01/2016 - 07/31/2022  
*Cell circuits as targets and biomarkers for liver disease and cancer prevention*  
Goals: The goal of this study is to establish cell-based models of hepatocarcinogenesis and identify liver cancer chemoprevention therapies.  
Role: Subcontract PI

NIH/NCI 261201200042I-P00004-26100007-1 Limburg (PI) 09/04/2014 – 06/28/2021  
*Pilot study of EGFR inhibition with erlotinib in cirrhosis to inhibit fibrogenesis and prevent hepatocellular carcinoma*  
Goals: To evaluate safety and on-target effect of erlotinib for HCC chemoprevention.  
Role: Site PI

Morphic Therapeutic Hoshida (PI) 09/30/2019 – 09/30/2020  
*Evaluation of integrin inhibitors as anti-fibrotic agents.*  
Goals: The goal of this project is to assess anti-fibrotic effect of integrin inhibitors in organotypic ex vivo culture of human liver tissues.  
Role: PI

DOD CA150178 Lujambio (PI) 9/30/2016 - 07/27/2018  
*Functional genomics screen for combination therapy discovery in liver cancer.*  
Goals: The goal of this project is to identify novel combination therapies for liver cancer using RNA interference technology.  
Role: co-I

NIH R01 CA207311 Domingo-Domenech (PI) 07/01/2016 – 07/27/2018  
*Role of GATA2 signaling network in lethal prostate cancer*  
Goals: To study GATA2-related signaling pathways essential for driving cancer cell aggressiveness.  
Role: co-I

NIH/NCATS Dudley (PI) 07/18/2017-07/27/2018

*Pre-clinical testing of a novel therapeutic for nonalcoholic steatohepatitis*

Goals: The goal of this project is to identify novel therapeutics in nonalcoholic steatohepatitis by using informatics screen and experimental validation.

Role: co-I

DOD Galsky (PI) 9/30/2017-7/27/2018

*Circulating tumor cell-based patient-derived xenograft models of metastatic bladder cancer as a platform for development of novel therapeutic approaches*

Goals: The goal of this project is to identify candidate therapies for metastatic bladder cancer.

Role: co-I

Irma T. Hirschl/Monique Weill-Caulier Scholar Award Hoshida (PI) 01/01/2015-12/31/2018

*Molecular prognostic prediction and classification of liver cancer.*

Goals: The goal of this project is to identify novel prognostic indicators and subtyping biomarkers in liver cancer.

Role: PI

Kyowa Hakko Kirin Hoshida (PI) 02/01/2017-12/31/2018

*Exploration and evaluation of liver disease and cancer chemoprevention agents.*

Goals: The goal of this project is to identify and evaluate liver cirrhosis/cancer chemoprevention agents from compound libraries at Kyowa Hakko Kirin.

Role: PI

DOD CA150281 Hoshida (PI) 09/15/16-07/27/18

*Gene regulatory networks as targets and biomarkers for liver cancer chemoprevention after clearance of oncogenic hepatitis C virus*

Goals: To identify HCC chemoprevention biomarkers and targets post-hepatitis C virus eradication.

Role: PI

Allergan Hoshida (PI) 05/01/2017-04/30/2018

*Transcriptome analysis of liver biopsy tissues from CENTAUR study.*

Goals: To evaluate the effect of cenicriviroc (CVC) on molecular pathways in liver tissues from patients enrolled in CENTAUR trial.

Role: PI

NIH/NCI U19 CA148065 Hunter (PI) 07/15/10-06/30/11

*Discovery, biology and risk of inherited variants in breast cancer*

Goals: Determine genetic variants and relevant molecular aberrations associated with breast cancer.

Role: co-PI

European Commission Framework Programme 7, #259744 Llovet (PI) 01/11/10-04/30/14

*Genomic predictors and oncogenic drivers in hepatocellular carcinoma (Heptromic)*

Goals: Determine genomic predictors and oncogenic drivers in hepatocellular carcinoma.

Role: co-I

NIH/NIDDK R01 DK080789 Sadler-Edepli (PI) 04/01/14-12/31/15

*Epigenetic regulation of development and liver regeneration by UHRF1*

Goals: Determine mechanism of epigenomic regulation by UHRF1 in liver regeneration using model organisms including zebrafish.

Role: co-I

H3 Biomedicine Hoshida (PI) 04/01/2014-03/31/2015

*Evaluation of FGF19/FGFR4 inhibitor in HCC*

Goals: The goals of the project are to evaluate i) the viability effect and pathway modulation of selective FGFR4 inhibitors on FGF19 amplified ex vivo slices from HCC ii) the FGF19 RNA and protein levels and correlate with the FGF19 amplification using ex vivo liver slices from HCC.

Role: PI

Enanta Hoshida (PI) 06/01/2017-12/31/2017

*Transcriptomic Analysis (RNA sequencing) and Bioinformatics Analysis for Samples Generated in the In Vivo Antifibrotic Efficacy Study of Enanta compounds EPS-2305 and EPS-2191.*

Goals: To evaluate the effect of Enanta compounds on molecular pathways in liver tissues from rat model of liver fibrosis.

Role: PI

Gilead Sciences Hoshida (PI) 09/01/2017-08/31/2018

*Assessment of Gilead therapeutics in human precision cut liver samples.*

Goals: The goal of this project is to evaluate anti-fibrotic effect of Gilead's compounds in ex vivo culture of human fibrotic liver tissues.

Role: PI

AbbVie Friedman, Hoshida (PI) 04/01/2016-12/31/2017

*Evaluate anti-fibrotic mechanisms of highest interest in (I) human normal vs fibrotic Precision Cut Liver Slices and (II) TAA model.*

Goals: The goal of this project is to evaluate potential antifibrotic effect of experimental compounds in human liver slice culture and TAA model.

Role: co-PI

Astra Zeneca Friedman, Hoshida (PI) 09/01/2017-8/31/2018

*Antifibrotic efficacy study of drug AZD3355.*

Goals: The goal of this project is to evaluate anti-fibrotic effect of Astra Zeneca's compounds in ex vivo culture of human fibrotic liver tissues.

Role: co-PI

NIH/NIDDK R01 DK099558 Hoshida (PI) 07/01/13 -06/30/18

*Molecular prognostic indicators in liver cirrhosis and cancer*

The goal of this study is to generate transcriptome profiles of clinical cohorts and determine molecular prognostic indicators for liver cirrhosis and cancer.

Role: PI

Allergan Hoshida (PI) 02/01/2017-01/31/2018

*Evaluation of cenicriviroc as a potential liver cancer chemoprevention and anti-fibrotic agent.*

Goals: To evaluate the effect of cenicriviroc (CVC) on the HCC risk gene signatures, fibrogenic gene expression, and modulation of target molecules (CCR2/CCR5) in organotypic ex vivo culture of patient-derived fibrotic liver tissues.

Role: PI

### Clinical Trials Activities

	Sponsor: Cancer Prevention Network, National Cancer Institute, NIH
Title	Pilot Study of EGFR Inhibition with Erlotinib in Cirrhosis to Inhibit Fibrogenesis and Prevent Hepatocellular Carcinoma (MAY2013-02-02)
Role	Site PI

	Sponsor: National Cancer Institute, NIH
Title	Phase II clinical trial of liver cancer chemoprevention with low-dose erlotinib
Role	Contact PI

	Sponsor: National Cancer Institute, NIH
Title	A national translational science network of precision-based immunotherapy for primary liver cancer (PLC).
Role	Site PI

	Sponsor: National Cancer Institute, NIH
Title	Trial of statins for chemoprevention in hepatocellular carcinoma (TORCH)
Role	Co-PI

	Sponsor: National Cancer Institute, NIH
Title	Epigallocatechin gallate for prevention of lethal cirrhosis complications (CATCH-B)
Role	Contact PI

### Invited lectures, session chair/moderator

1. "High-throughput profiling of informative genes on paraffin-embedded tissue using universal bead array" in **Gene Expression and Tumors: Discovery and Diagnostics**, Boston, MA. Dec.5, 2006.
2. "Gene expression profiles from paraffin-embedded HCC tissues" in **2nd Mount Sinai Liver Cancer Program Meeting**, Mount Sinai School of Medicine, NY, June 23, 2007.
3. "Molecular classification of HCC: Meta-analysis" in **3rd Mount Sinai Liver Cancer Program Meeting, Towards Personalized Medicine in Hepatocellular Carcinoma**, Mount Sinai School of Medicine, NY, Oct. 3, 2008.
4. "Oligonucleotide microarray analysis" in **3rd Mount Sinai Liver Cancer Program Meeting, Towards Personalized Medicine in Hepatocellular Carcinoma: Post-meeting workshops**, Mount Sinai School of Medicine, NY, Oct. 4, 2008.
5. "Gene Expression Profiling of FFPE Tissues for Outcome Research" in **Interdisciplinary Workshop: Incorporating novel tumor tissue biomarker analyses into population based studies of human cancer**, Dana-Farber/Harvard Cancer Center, Boston, MA. Oct.24, 2008.
6. "Application of genomics technologies to HCC" in **Post graduate course MGT 5747 - HCC from the Disciplina de Gastroenterologia Clinica - FMUSP at the Cancer Institute of Sao Paulo (ICESP)**, in Sao Paulo, Brazil. Mar.10, 2009.

7. “Gene profiling to identify patients at-risk for HCC development” in **4th Mount Sinai Liver Cancer Program Meeting, Novel Targets and Drugs in Hepatocellular Carcinoma**, Mount Sinai School of Medicine, NY, Oct. 5, 2009.
8. “Update in biotechnologies for genomic studies” in **4th Mount Sinai Liver Cancer Program Meeting, Novel Targets and Drugs in Hepatocellular Carcinoma: Post-meeting workshops**, Mount Sinai School of Medicine, in NY, Oct. 5, 2009.
9. “Linking fibrosis with cancer risk: molecular perspective” in **European Association for Study of Liver (EASL) special conference, Hepatocellular carcinoma: from genomics to treatment**, in Dubrovnik, Croatia, June 25-26, 2010
10. “Molecular signatures and prognosis”, Luncheon workshop, **4th annual meeting of International Liver Cancer Association**, in Montreal, Canada, Sept. 10-12, 2010
11. “Pathways and gene expression profiles” (session chair), General session 1, **4th annual meeting of International Liver Cancer Association**, in Montreal, Canada, Sept. 10-12, 2010
12. “Molecular identification of patients at risk of HCC” in **5th Mount Sinai Liver Cancer Program Meeting, From Genomics to Treatment of Hepatocellular Carcinoma**, Mount Sinai School of Medicine, NY, Dec. 9, 2010.
13. “Molecular classification of HCC: importance of translational research” in **Enhancing Clinical Outcomes in Hepatocellular Carcinoma: A Multidisciplinary Expert Practice Meeting**, in San Francisco, California, Nov. 3, 2011.
14. “Molecular profiles of hepatocellular carcinoma: implications in prognostic prediction and targeted therapy” in **Cancer Genomics: a way to personalized medicine**, at Chang Gung Memorial Hospital, in Taoyuan, Taiwan, Feb. 15, 2012.
15. “HCC and other liver tumors” (session chair) in **22nd Congress of the Asian Pacific Association for the Study of the Liver (APASL)**, in Taipei, Taiwan, Feb. 16, 2012.
16. “Molecular profiles of hepatocellular carcinoma: implications in prognostic prediction and targeted therapy” in **22nd Congress of APASL**, in Taipei, Taiwan, Feb. 16, 2012.
17. “Linking animal model to human in liver diseases using genomic signatures” in **International HCC Workshop**, in Graz, Austria, Oct. 24, 2012.
18. “Omics in assessing prognosis in cirrhosis” in **American Association for Study of Liver Diseases (AASLD)/EASL Clinical Research Single Topic Conference, Portal Hypertension and Variceal Hemorrhage**, in Atlanta, June 8, 2013
19. “Molecular prognostic indicators of liver cirrhosis and cancer” in **Research Seminar Series at University Hospital Basel**, in Basel, Switzerland, June 24, 2013.
20. “Non-tumoral tissue signatures in the molecular classification” in **ILCA-NCI-AASLD Consensus symposium on Molecular classification of HCC**, in Washington DC, Sept. 12, 2013.
21. “Molecular signature for management of hepatocellular carcinoma” in **Internal Medicine Grand Round, Loyola University Medical Center**, in Chicago, Oct. 29, 2013.
22. “Integration with a molecular classification of cirrhosis” in **EASL Molecular Pathogenesis and Translational Research in Liver Cancer (HCC Summit)**, in Geneva, Switzerland, Feb. 15, 2014.
23. “Molecular classification and prognostic prediction of hepatocellular carcinoma” in annual meeting of **American Association for Cancer Research**, in San Francisco, Apr. 8, 2014.
24. “Molecular classification and prognostic prediction of hepatocellular carcinoma” in **Laennec Liver Pathology Conference**, in New York, May 9, 2014.
25. “Molecular signatures for management of hepatocellular carcinoma” in **Translational Research Lecture Series, Pennsylvania Biotechnology Center/Drexel University**, in Doylestown, Sep. 25, 2014.
26. “Molecular classification of HCC” in **The 11th Japan Society of Hepatology, Single Topic Conference, Hepatitis B –Recent progress in basic and clinical research-**, in Hiroshima, Japan,

Nov. 21, 2014.

27. “Molecular classification of HCC” in **International Liver Cancer Association (ILCA), School of Liver Cancer 2014**, in New York, Dec. 12, 2014.
28. “New approach: how to fill the gaps in screening and surveillance” in **16th Princeton HBV Workshop 2015**, in Princeton, Mar. 18-19, 2015.
29. “Biomarkers for risk stratification emerging from genomic studies in HCC” in **The International Liver Congress (annual meeting of EASL) 2015**, in Vienna, Austria, Apr. 22, 2015.
30. “Molecular signature-based risk stratification in HCC” in **2015 Seoul Liver Symposium**, Seoul, South Korea, Oct. 30, 2015.
31. “Molecular signature-based liver cancer chemoprevention” in the annual **TheraHCC program meeting**, in Strasbourg, France, Dec. 8-10, 2015.
32. “Molecular information-guided HCC drug development” in **The 13th Japan Association of Molecular Targeted Therapy for HCC (annual meeting of JAMTT-HCC)**, in Tokyo, Japan, Jan. 16, 2016.
33. “Molecular information-based development of therapeutics, preventatives, and biomarkers in HCC” in the 3rd annual meeting of **International Research Center for Cancer and Metabolism (Kumamoto University, Advanced Research Project A)**, in Kumamoto, Japan, Mar. 10, 2016.
34. “Molecular classification of HCC” in **The 4th Symposium on Translational Genomics with Special Focus on Liver Cancer**, National Cancer Institute, in Bethesda, Mar. 18, 2016.
35. “Potential approach to identify the NAFLD patient who will develop HCC” in **The 1st International Workshop on NASH Biomarkers**, in Washington DC, Apr. 29, 2016.
36. “NAFLD and cancer prediction: mechanistic and clinical implication” in **The 2nd Paris NASH Symposium**, in Paris, France, June 30, 2016.
37. “Systems Biology Approaches (session co-chair)” at **ISMMS-RPI Joint Symposium and Workshop, New Connections in Cancer Research: Bridging Basic Science, Clinical Science, and New Technologies**, in New York, Sep. 20, 2016.
38. “Pathogenesis of HCV-induced HCC” at **EASL-AASLD special conference, New perspectives in hepatitis C virus infection**, in Paris, France, Sep. 23, 2016.
39. “Chemoprevention in HCC” at **Mount Sinai Liver Cancer Program, annual retreat**, in New York, Dec. 16, 2016.
40. “Big data-driven liver cancer chemoprevention discovery” at **2nd Stony Brook Cancer Center – Tisch Cancer Institute joint conference on metabolism and cancer**, in New York, Jan. 17, 2017.
41. “Genetic and genomic features of fatty liver disease, fibrosis and cancer” at **Keystone Symposia, Bile Acid Receptors as Signal Integrators in Liver and Metabolism**, in Monterey, Mar. 3-7, 2017.
42. “Precision liver cancer prevention” at **UT Southwestern, Digestive & Liver Conference**, in Dallas, Mar. 15, 2017.
43. “Transcriptomic dissection of liver cancer risks in cirrhosis” at **Hepatobiliary Cancers: Pathobiology and Translational Advances** (co-sponsored by NCI, AASLD, and Cholangiocarcinoma Foundation), in Glen Allen, Virginia, Dec. 7-10, 2017.
44. “Risk score-stratified hepatocellular carcinoma screening in patients with cirrhosis” at **NCI, US-Japan 20th International Conference on Emerging Infectious Diseases (EID) in the Pacific Rim**, Shenzhen, China, Jan. 11, 2018.
45. “Molecular targeted prevention and treatment of hepatocellular carcinoma” at **University of Pennsylvania PSOC Seminar Series**, Pennsylvania, Jan. 22, 2018.
46. “Molecular signature-based prevention and treatment of hepatocellular carcinoma” at **University of Strasbourg/Inserm, HEPCIR Program, Seminar Series**, Strasbourg, France, Feb. 6, 2018.
47. “Molecular subtype and molecular targeted therapies in HCC” at **American Association for Cancer Research (AACR) Annual Meeting, Major Symposium**, Chicago, Apr. 15, 2018.

48. “Mechanisms of carcinogenesis in the cirrhotic liver“ at **Global Hepatitis Summit**, Toronto, Canada, Jun. 16, 2018.
49. “Transcriptome-based precision medicine approach for liver cancer risk prediction and chemoprevention” at **Population Health and Prevention in the Omics and Big Data Era**, Stanford University, San Francisco, Oct. 17, 2018.
50. “Molecular prognostic indicators in liver cirrhosis and cancer” at **NCI-AACR-AASLD Working Group Workshop on Hepatocellular Cancer: New Indications and Directions**, at National Cancer Institute, Bethesda, Nov. 7, 2018.
51. “Precision medicine in HCC research” at **AASLD Annual Meeting, Clinical Research Workshop**, San Francisco, Nov. 9, 2018.
52. “Exploring Mechanisms of HCC in NASH” at **AASLD Annual Meeting, Early Morning Workshop**, Nov. 12, 2018.
53. “Personalized and precision care for HCC” at **3rd Annual Current Perspectives in Hepatology (CPH): A single theme symposium on Hepatocellular Carcinoma**, University of Tennessee Health Sciences Center, Memphis, Apr. 27, 2019.
54. “Molecular drivers of HCC” at **Digestive Disease Week (DDW), Clinical Symposium**, San Diego, May 21, 2019.
55. “Precision medicine in hepatocellular carcinoma research” at **UCSD Division of Gastroenterology 13th Annual Research Symposium “Precision Medicine in Gastroenterology and Hepatology”**, UC San Diego, San Diego, June 7, 2019.
56. “Molecular predictors of progressive liver damages: a non-transplant perspective” at **ASHI/Banff Joint Scientific Meeting**, Pittsburgh, Sept 25, 2019.
57. “Molecular HCC risk prediction and chemoprevention” at **NCI CCR Liver Cancer Program Seminar Series**, Bethesda, Nov 14, 2019.
58. “Molecular Subtypes: translating genomics into drug therapy” at **HCC-TAG 2020 Conference**, Salt Lake City, Feb 28, 2020.
59. “Classification and prognosis of hepatocellular carcinoma” at **The 9th International Forum of the Japanese Society of Gastroenterology**, Hiroshima, Apr 23, 2020.
60. “Risk stratification biomarkers – are we close?” at **International Liver Cancer Association (ILCA) Single Topic Workshop on HCC Risk Stratification and Surveillance**, Paris, June 11, 2020.
61. “HCV-related hepatocarcinogenesis: Host factors as clues to chemoprevention” at **USC Tumor Microenvironment (TME) Program Meeting**, Los Angeles, Aug. 14, 2020.
62. “Risk stratification for HCC” at **Texas Collaborative Center for Hepatocellular Cancer (TeCH) Annual Symposium**, Houston, Oct. 17, 2020.
63. “Molecular risk prediction for HBV HCC” at **Annual meeting of Liver Foundation West Bengal - Emerging Therapy Landscape- HBV cure -HCC control**, Kolkata, India, Dec. 11, 2020.
64. “Molecular prognostic prediction in liver cancer” at **Keystone Symposia Hepatobiliary Cancers: Pathobiology and Translational Advances**, Vancouver, Canada, March 22, 2021.
65. “Using big data in drug development for precision medicine” at **Copenhagen Bioscience Conference, Precision medicine – from patient to lab and back again**, Copenhagen, Denmark, May 3, 2021.
66. “Molecular drivers and targets in hepatocellular carcinoma” at **Japan Society of Hepatology (JSH) annual meeting**, Sapporo, Japan, June 18, 2021.
67. “Microenvironment writes the outcomes of cirrhosis and hepatoma” at **Global Hepatitis Summit 2020, 17th International Symposium on Virus Hepatitis and Liver Disease (ISVHLD)**, Taipei, June 19, 2021.
68. “The influence of micro-environment on HCC progression” at **Global Hepatitis Summit 2020, 17th ISVHLD**, Taipei, June 19, 2021.

69. “Evidence-based strategies to leverage immunogenicity in hepatocellular carcinoma” at **American Society of Clinical Oncology (ASCO) Virtual Satellite Symposium**, June 9, 2021.
70. “HCC risk stratification using gene signatures” at **EASL/AASLD HCC Endpoint Conference**, virtual, October 28, 2021.
71. “Round Table: Prevention and follow-up endpoints” (Program Chair) at **EASL/AASLD HCC Endpoint Conference**, virtual, October 28, 2021.
72. “Molecular signatures of NASH induced HCC and how the epidemiology of HCC is changing in the U.S.” at **AASLD/Japan Society of Hepatology Joint Symposium**, Anaheim, November 8, 2021.
73. “Liver Fibrosis SIG: Multidisciplinary Perspectives in Developing New Treatments for NASH Fibrosis” (Program Chair) at **AASLD annual meeting**, Anaheim, November 12, 2021.
74. “Treatment and prevention of hepatocellular carcinoma” at **UT Southwestern, Department of Internal Medicine, Grand Round**, December 10, 2021.
75. “Risk stratification biomarkers – are we close?” at **ILCA Single Topic Workshop on HCC Risk Stratification and Surveillance**, Paris, France, June 9, 2022.
76. “Hepatic and systemic drivers of lethal disease progression in fibrotic NASH” at **Keystone Symposia, Inter-organ crosstalk in non-alcoholic steatohepatitis**, Whistler, Canada, August 9, 2022.
77. "Reverse-engineering discovery of targets, involved cell types, and compounds for liver cancer chemoprevention" at **NIH/NCI Translational Advances in Cancer Prevention Agent Development (TACPAD)**, Rockville, September 7, 2022.
78. “Cancer risk predictive molecular biomarkers in biliary tract cancer” at **4th Annual Cholangiocarcinoma (CCA) Summit**, Denver, October 14, 2022.
79. “Precision liver cancer chemoprevention” at **Japan Digestive Disease Week 2022 (JDDW 2022)**, Fukuoka, Japan, October 27, 2022.
80. “Hepatology research in the U.S.” at **Chiba University Division of Gastroenterology Grand Round**, Chiba, Japan, November 1, 2022.
81. “Overview of HCC: risk factors, screening, and key role of multidisciplinary teams for optimal treatment and patient outcomes” at **Medical Crossfire: Multidisciplinary Strategies to Leverage Clinical Advances on Immune-Based Therapies for Patients with Hepatocellular Carcinoma**, Washington DC, November 5, 2022.
82. “AASLD Multidisciplinary Treatment of Liver Cancers, including HCC and Cholangiocarcinoma (Session chair)” at **DDW**, Chicago, May 8, 2023.
83. “**NCI Pre-Cancer Atlas, Think Tank** (Panelist)”, Rockville, May 1-2, 2023.
84. “Integrative molecular analysis of HCC and CCA: similarities and differences” at **FASEB Scientific Conference, Cholangiocarcinoma: Molecular Drivers, Microenvironment, and Precision Medicine**, August 15, 2023.
85. “Predicting future risk of developing HCC” at **1st Bermuda Global Summit on GI Malignancies**, October 5, 2023.
86. “Chemoprevention: avoiding development of cirrhosis into HCC” at **1st Bermuda Global Summit on GI Malignancies**, October 5, 2023.
87. “Emerging Translational Approaches Targeting Cellular-geospatial Heterogeneity in Cholangiocarcinoma” (Program chair) at **AASLD annual meeting**, Boston, November 12, 2023.
88. “Hepatology, The Editors' Cut: Basic and Translational Studies” at **AASLD annual meeting**, Boston, November 12, 2023.
89. “Reverse-engineering liver cancer prevention” at **Thomas Jefferson University, Jefferson Health, Sidney Kimmel Cancer Center, Grand round**, March 6, 2024.
90. “Biomarkers for risk stratification and chemoprevention of hepatocellular carcinoma” at **Italian Liver Foundation, Yellow Webinar**, March 18, 2024.
91. “The interplay between fibrotic tumor microenvironment, immune response and metabolic

- reprogramming in hepatobiliary neoplasia” (Session chair) at **DDW**, Washington, D.C., May 19, 2024.
92. “Reverse-engineering precision liver cancer prevention” at **Showa University School of Medicine, Grand Round**, Tokyo, Japan, June 11, 2024.
  93. “Opportunities for liver cancer prevention in Asian liver disease patients” in “Cutting edge of HCC basic in Asia” session at **JSH annual meeting**, Kumamoto, Japan, June 13, 2024.
  94. “Reverse-engineering precision liver cancer prevention” at **National Center for Global Health and Medicine, Liver Disease Study Group**, Chiba, Japan, June 24, 2024.
  95. “Hepatology Editor’s picks: Noticeable publications in 2023-2024” in “Meet the Editor, CMH & AASLD Journals” session at **The Liver Week 2024**, Seoul, Korea, June 28, 2024.
  96. “Genomic and Epigenetic Clues to Persistent Risk of HCC after Curing Hepatitis C” in “KASL-AASLD Joint Symposium. HCC Evolution: Understanding Risks and Therapeutic Approaches” session at **The Liver Week 2024**, Seoul, Korea, June 28, 2024.
  97. “NIDDK Liver Cirrhosis Network (LCN) ancillary project and statin chemoprevention project” at NCI Translational Liver Cancer Consortium (TLC) Meeting, Rockville, MD, August 8, 2024.
  98. “Deciphering liver cancer: molecular pathways, mechanisms, and high-risk groups for carcinogenesis and recurrence” at APASL Oncology, Chiba, Japan, September 24, 2024.
  99. “Basic Science Symposium: Metabolic landscape and networks in hepatobiliary malignancies” (session moderator) at **AASLD annual meeting**, San Diego, November 15, 2024.
  100. “Advanced diagnostics and monitoring for hepatocellular carcinoma: Molecular-based targeted therapies in HCC” (lecturer, panelist) at **AASLD annual meeting**, San Diego, November 18, 2024.
  101. “HCC risk stratification/monitoring biomarkers” at **NCI Translational Liver Cancer (TLC) consortium, Biomarker & Imaging Working Group**, December 6, 2024.

### **Technological and Other Scientific Innovations**

PCT/EP2016/059477: Clinical gene signature-based human cell culture model and uses thereof (licensed), Co-Inventor
PCT/IL2016/051002: Ectopic lymphoid structures as targets for cancer detection, risk prediction and therapy (pending), Co-Inventor
Provisional filing (BEX21P0131): Method for diagnosis and/or prognosis of liver disease progression and risk of hepatocellular carcinoma, Co-Inventor
Non-provisional filing (No.: 17/896,944): Methods for the assessment of risk and treatments for liver cancers and lethal liver disease complications, Inventor
Technology disclosure being filing (No. 63/383,441): Molecular signature assay for predicting long-term liver fibrosis progression, Inventor
Technology disclosure being filing (No. 63/509,362): Molecular signature assay for prognostic prediction in non-alcoholic fatty liver disease, Inventor

### **Bibliography**

#### **Peer-Reviewed Publications**

#### **Original Research Articles**

1. Hoshida Y, Ikeda K, Kobayashi M, Suzuki Y, Tsubota A, Saitoh S, Arase Y, Kobayashi M, Murashima

- N, Chayama K, Kumada H. Chronic liver disease in the extremely elderly of 80 years or more: clinical characteristics, prognosis and patient survival analysis. **J Hepatol.** 1999;31(5):860-6.
2. Hoshida Y, Ikeda K, Saito S, Kobayashi M, Kobayashi M, Suzuki Y, Tsubota A, Koida I, Arase Y, Murashima N, Chayama K, Kumada H. [The efficacy and prognosis of transcatheter chemoembolization for hepatocellular carcinoma in the elderly]. **Nihon Shokakibyō Gakkai Zasshi.** 1999;96(2):142-6.
  3. Hoshida Y, Saitoh S, Murashima N, Ogawa A, Arase Y, Kobayashi M, Suzuki Y, Tsubota A, Chayama K, Ikeda K, Kumada H. Vaginal variceal hemorrhage in a patient with primary biliary cirrhosis: a case successfully treated by balloon-occluded retrograde transvenous obliteration. **Am J Gastroenterol.** 1999;94(10):3081-3.
  4. Hoshida Y, Yamakado S, Shinoki K, Takeuchi T, Nagai T, Hyakuna Y, Itoh Y. Aged Budd-Chiari syndrome attributed to chronic deep venous thrombosis with alcoholic liver cirrhosis. **J Gastroenterol.** 1999;34(5):634-9.
  5. Hirano K, Kondo Y, Teratani T, Obi S, Fujishima T, Hoshida Y, Tateishi R, Sato S, Koike Y, Shiina S, Imai Y, Shiratori Y, Omata M. Hepatocellular carcinoma depicted as hypoattenuation on CT hepatic arteriography (CTA) and hyperattenuation on CT during arterial portography (CTAP). **J Gastroenterol.** 2001;36(5):346-9.
  6. Hoshida Y, Moriyama M, Otsuka M, Kato N, Goto T, Taniguchi H, Shiratori Y, Seki N, Omata M. Identification of genes associated with sensitivity to 5-fluorouracil and cisplatin in hepatoma cells. **J Gastroenterol.** 2002;37 Suppl 14:92-5.
  7. Hoshida Y, Shiratori Y, Koike Y, Obi S, Hamamura K, Teratani T, Shiina S, Omata M. Hepatic volumetry to predict adverse events in percutaneous ablation of hepatocellular carcinoma. **Hepatogastroenterology.** 2002;49(44):451-5.
  8. Hoshida Y, Shiratori Y, Omata M. Cost-effectiveness of adjuvant interferon therapy after surgical resection of Hepatitis C-related hepatocellular carcinoma. **Liver.** 2002;22(6):479-85.
  9. Moriyama M, Hoshida Y, Otsuka M, Nishimura S, Kato N, Goto T, Taniguchi H, Shiratori Y, Seki N, Omata M. Relevance network between chemosensitivity and transcriptome in human hepatoma cells. **Mol Cancer Ther.** 2003;2(2):199-205.
  10. Otsuka M, Hoshida Y, Kato N, Moriyama M, Taniguchi H, Arai M, Mori M, Seki N, Omata M. Liver chip and gene shaving. **J Gastroenterol.** 2003;38 Suppl 15:89-92.
  11. Wang Y, Kato N, Hoshida Y, Yoshida H, Taniguchi H, Goto T, Moriyama M, Otsuka M, Shiina S, Shiratori Y, Ito Y, Omata M. Interleukin-1beta gene polymorphisms associated with hepatocellular carcinoma in hepatitis C virus infection. **Hepatology.** 2003;37(1):65-71.
  12. Imamura T, Kanai F, Kawakami T, Amarsanaa J, Ijichi H, Hoshida Y, Tanaka Y, Ikenoue T, Tateishi K, Kawabe T, Arakawa Y, Miyagishi M, Taira K, Yokosuka O, Omata M. Proteomic analysis of the TGF-beta signaling pathway in pancreatic carcinoma cells using stable RNA interference to silence Smad4 expression. **Biochem Biophys Res Commun.** 2004;318(1):289-96.
  13. Moriyama M, Hoshida Y, Kato N, Otsuka M, Yoshida H, Kawabe T, Omata M. Genes associated with human hepatocellular carcinoma cell chemosensitivity to 5-fluorouracil plus interferon-alpha combination chemotherapy. **Int J Oncol.** 2004;25(5):1279-87.
  14. Otsuka M, Kato N, Shao RX, Hoshida Y, Ijichi H, Koike Y, Taniguchi H, Moriyama M, Shiratori Y, Kawabe T, Omata M. Vitamin K2 inhibits the growth and invasiveness of hepatocellular carcinoma cells via protein kinase A activation. **Hepatology.** 2004;40(1):243-51.
  15. Qiu Y, Hoshida Y, Kato N, Moriyama M, Otsuka M, Taniguchi H, Kawabe T, Omata M. A simple combination of serum type IV collagen and prothrombin time to diagnose cirrhosis in patients with chronic active hepatitis C. **Hepatol Res.** 2004;30(4):214-20.
  16. Wang Y, Kato N, Hoshida Y, Otsuka M, Taniguchi H, Moriyama M, Shiina S, Kawabe T, Ito YM, Omata M. UDP-glucuronosyltransferase 1A7 genetic polymorphisms are associated with

- hepatocellular carcinoma in japanese patients with hepatitis C virus infection. **Clin Cancer Res.** 2004;10(7):2441-6.
17. Hoshida Y, Kato N, Yoshida H, Wang Y, Tanaka M, Goto T, Otsuka M, Taniguchi H, Moriyama M, Imazeki F, Yokosuka O, Kawabe T, Shiratori Y, Omata M. Hepatitis C virus core protein and hepatitis activity are associated through transactivation of interleukin-8. **J Infect Dis.** 2005;192(2):266-75.
  18. Inamura K, Fujiwara T, Hoshida Y, Isagawa T, Jones MH, Virtanen C, Shimane M, Satoh Y, Okumura S, Nakagawa K, Tsuchiya E, Ishikawa S, Aburatani H, Nomura H, Ishikawa Y. Two subclasses of lung squamous cell carcinoma with different gene expression profiles and prognosis identified by hierarchical clustering and non-negative matrix factorization. **Oncogene.** 2005;24(47):7105-13.
  19. Kato N, Ji G, Wang Y, Baba M, Hoshida Y, Otsuka M, Taniguchi H, Moriyama M, Dharel N, Goto T, Shao RX, Matsuura T, Ishii K, Shiina S, Kawabe T, Muramatsu M, Omata M. Large-scale search of single nucleotide polymorphisms for hepatocellular carcinoma susceptibility genes in patients with hepatitis C. **Hepatology.** 2005;42(4):846-53.
  20. Kawakami T, Hoshida Y, Kanai F, Tanaka Y, Tateishi K, Ikenoue T, Obi S, Sato S, Teratani T, Shiina S, Kawabe T, Suzuki T, Hatano N, Taniguchi H, Omata M. Proteomic analysis of sera from hepatocellular carcinoma patients after radiofrequency ablation treatment. **Proteomics.** 2005;5(16):4287-95.
  21. Nakai Y, Otsuka M, Hoshida Y, Tada M, Komatsu Y, Kawabe T, Omata M. Identifying genes with differential expression in gemcitabine-resistant pancreatic cancer cells using comprehensive transcriptome analysis. **Oncol Rep.** 2005;14(5):1263-7.
  22. Otsuka M, Kato N, Ichimura T, Abe S, Tanaka Y, Taniguchi H, Hoshida Y, Moriyama M, Wang Y, Shao RX, Narayan D, Muroyama R, Kanai F, Kawabe T, Isobe T, Omata M. Vitamin K2 binds 17beta-hydroxysteroid dehydrogenase 4 and modulates estrogen metabolism. **Life Sci.** 2005;76(21):2473-82.
  23. Shao RX, Hoshida Y, Otsuka M, Kato N, Tateishi R, Teratani T, Shiina S, Taniguchi H, Moriyama M, Kawabe T, Omata M. Hepatic gene expression profiles associated with fibrosis progression and hepatocarcinogenesis in hepatitis C patients. **World J Gastroenterol.** 2005;11(13):1995-9.
  24. Shao RX, Otsuka M, Kato N, Taniguchi H, Hoshida Y, Moriyama M, Kawabe T, Omata M. Acyclic retinoid inhibits human hepatoma cell growth by suppressing fibroblast growth factor-mediated signaling pathways. **Gastroenterology.** 2005;128(1):86-95.
  25. Shibata W, Hirata Y, Yoshida H, Otsuka M, Hoshida Y, Ogura K, Maeda S, Ohmae T, Yanai A, Mitsuno Y, Seki N, Kawabe T, Omata M. NF-kappaB and ERK-signaling pathways contribute to the gene expression induced by cag PAI-positive-Helicobacter pylori infection. **World J Gastroenterol.** 2005;11(39):6134-43.
  26. Aggarwal A, Guo DL, Hoshida Y, Yuen ST, Chu KM, So S, Boussioutas A, Chen X, Bowtell D, Aburatani H, Leung SY, Tan P. Topological and functional discovery in a gene coexpression meta-network of gastric cancer. **Cancer Res.** 2006;66(1):232-41.
  27. Demichelis F, Fall K, Perner S, Andren O, Schmidt F, Setlur SR, Hoshida Y, Mosquera JM, Pawitan Y, Lee C, Adami HO, Mucci LA, Kantoff PW, Andersson SO, Chinnaiyan AM, Johansson JE, Rubin MA. TMPRSS2:ERG gene fusion associated with lethal prostate cancer in a watchful waiting cohort. **Oncogene.** 2007;26(31):4596-9.
  28. Hoshida Y, Brunet JP, Tamayo P, Golub TR, Mesirov JP. Subclass mapping: identifying common subtypes in independent disease data sets. **PLoS One.** 2007;2(11):e1195.
  29. Hoshida Y, Moriyama M, Otsuka M, Kato N, Taniguchi H, Shiratori Y, Seki N, Omata M. Gene expressions associated with chemosensitivity in human hepatoma cells. **Hepatogastroenterology.** 2007;54(74):489-92.
  30. Koike Y, Yoshida H, Shiina S, Teratani T, Obi S, Sato S, Akamatsu M, Tateishi R, Fujishima T, Hoshida Y, Kanda M, Ishikawa T, Shiratori Y, Omata M. Changes in hepatic functional reserve after percutaneous tumor ablation for hepatocellular carcinoma: long-term follow up for 227 consecutive

- patients with a single lesion. **Hepatol Int.** 2007;1(2):295-301.
31. Chiang DY, Villanueva A, Hoshida Y, Peix J, Newell P, Minguez B, LeBlanc AC, Donovan DJ, Thung SN, Sole M, Tovar V, Alsinet C, Ramos AH, Barretina J, Roayaie S, Schwartz M, Waxman S, Bruix J, Mazzaferro V, Ligon AH, Najfeld V, Friedman SL, Sellers WR, Meyerson M, Llovet JM. Focal gains of VEGFA and molecular classification of hepatocellular carcinoma. **Cancer Res.** 2008;68(16):6779-88.
  32. Hoshida Y, Villanueva A, Kobayashi M, Peix J, Chiang DY, Camargo A, Gupta S, Moore J, Wrobel MJ, Lerner J, Reich M, Chan JA, Glickman JN, Ikeda K, Hashimoto M, Watanabe G, Daidone MG, Roayaie S, Schwartz M, Thung S, Salvesen HB, Gabriel S, Mazzaferro V, Bruix J, Friedman SL, Kumada H, Llovet JM, Golub TR. Gene expression in fixed tissues and outcome in hepatocellular carcinoma. **N Engl J Med.** 2008;359(19):1995-2004.
  33. Setlur SR, Mertz KD, Hoshida Y, Demichelis F, Lupien M, Perner S, Sboner A, Pawitan Y, Andren O, Johnson LA, Tang J, Adami HO, Calza S, Chinnaiyan AM, Rhodes D, Tomlins S, Fall K, Mucci LA, Kantoff PW, Stampfer MJ, Andersson SO, Varenhorst E, Johansson JE, Brown M, Golub TR, Rubin MA. Estrogen-dependent signaling in a molecularly distinct subclass of aggressive prostate cancer. **J Natl Cancer Inst.** 2008;100(11):815-25.
  34. Villanueva A, Chiang DY, Newell P, Peix J, Thung S, Alsinet C, Tovar V, Roayaie S, Minguez B, Sole M, Battiston C, Van Laarhoven S, Fiel MI, Di Feo A, Hoshida Y, Yea S, Toffanin S, Ramos A, Martignetti JA, Mazzaferro V, Bruix J, Waxman S, Schwartz M, Meyerson M, Friedman SL, Llovet JM. Pivotal role of mTOR signaling in hepatocellular carcinoma. **Gastroenterology.** 2008;135(6):1972-83, 83 e1-11.
  35. Xu L, Shen SS, Hoshida Y, Subramanian A, Ross K, Brunet JP, Wagner SN, Ramaswamy S, Mesirov JP, Hynes RO. Gene expression changes in an animal melanoma model correlate with aggressiveness of human melanoma metastases. **Mol Cancer Res.** 2008;6(5):760-9.
  36. Hoshida Y, Nijman SM, Kobayashi M, Chan JA, Brunet JP, Chiang DY, Villanueva A, Newell P, Ikeda K, Hashimoto M, Watanabe G, Gabriel S, Friedman SL, Kumada H, Llovet JM, Golub TR. Integrative transcriptome analysis reveals common molecular subclasses of human hepatocellular carcinoma. **Cancer Res.** 2009;69(18):7385-92.
  37. Newell P, Toffanin S, Villanueva A, Chiang DY, Minguez B, Cabellos L, Savic R, Hoshida Y, Lim KH, Melgar-Lesmes P, Yea S, Peix J, Deniz K, Fiel MI, Thung S, Alsinet C, Tovar V, Mazzaferro V, Bruix J, Roayaie S, Schwartz M, Friedman SL, Llovet JM. Ras pathway activation in hepatocellular carcinoma and anti-tumoral effect of combined sorafenib and rapamycin in vivo. **J Hepatol.** 2009;51(4):725-33.
  38. Viswanathan SR, Powers JT, Einhorn W, Hoshida Y, Ng TL, Toffanin S, O'Sullivan M, Lu J, Phillips LA, Lockhart VL, Shah SP, Tanwar PS, Mermel CH, Beroukhim R, Azam M, Teixeira J, Meyerson M, Hughes TP, Llovet JM, Radich J, Mullighan CG, Golub TR, Sorensen PH, Daley GQ. Lin28 promotes transformation and is associated with advanced human malignancies. **Nat Genet.** 2009;41(7):843-8.
  39. Hoshida Y. Nearest template prediction: a single-sample-based flexible class prediction with confidence assessment. **PLoS One.** 2010;5(11):e15543.
  40. Sboner A, Demichelis F, Calza S, Pawitan Y, Setlur SR, Hoshida Y, Perner S, Adami HO, Fall K, Mucci LA, Kantoff PW, Stampfer M, Andersson SO, Varenhorst E, Johansson JE, Gerstein MB, Golub TR, Rubin MA, Andren O. Molecular sampling of prostate cancer: a dilemma for predicting disease progression. **BMC Med Genomics.** 2010;3:8.
  41. Tovar V, Alsinet C, Villanueva A, Hoshida Y, Chiang DY, Sole M, Thung S, Moyano S, Toffanin S, Minguez B, Cabellos L, Peix J, Schwartz M, Mazzaferro V, Bruix J, Llovet JM. IGF activation in a molecular subclass of hepatocellular carcinoma and pre-clinical efficacy of IGF-1R blockage. **J Hepatol.** 2010;52(4):550-9.

42. Bass AJ, Lawrence MS, Brace LE, Ramos AH, Drier Y, Cibulskis K, Sougnez C, Voet D, Saksena G, Sivachenko A, Jing R, Parkin M, Pugh T, Verhaak RG, Stransky N, Boutin AT, Barretina J, Solit DB, Vakiani E, Shao W, Mishina Y, Warmuth M, Jimenez J, Chiang DY, Signoretti S, Kaelin WG, Jr., Spardy N, Hahn WC, Hoshida Y, Ogino S, DePinho RA, Chin L, Garraway LA, Fuchs CS, Baselga J, Tabernero J, Gabriel S, Lander ES, Getz G, Meyerson M. Genomic sequencing of colorectal adenocarcinomas identifies a recurrent VTI1A-TCF7L2 fusion. **Nat Genet.** 2011;43(10):964-8.
43. Ding Z, Wu CJ, Chu GC, Xiao Y, Ho D, Zhang J, Perry SR, Labrot ES, Wu X, Lis R, Hoshida Y, Hiller D, Hu B, Jiang S, Zheng H, Stegh AH, Scott KL, Signoretti S, Bardeesy N, Wang YA, Hill DE, Golub TR, Stampfer MJ, Wong WH, Loda M, Mucci L, Chin L, DePinho RA. SMAD4-dependent barrier constrains prostate cancer growth and metastatic progression. **Nature.** 2011;470(7333):269-73.
44. Minguez B, Hoshida Y, Villanueva A, Toffanin S, Cabellos L, Thung S, Mandeli J, Sia D, April C, Fan JB, Lachenmayer A, Savic R, Roayaie S, Mazzaferro V, Bruix J, Schwartz M, Friedman SL, Llovet JM. Gene-expression signature of vascular invasion in hepatocellular carcinoma. **J Hepatol.** 2011;55(6):1325-31.
45. Penney KL, Sinnott JA, Fall K, Pawitan Y, Hoshida Y, Kraft P, Stark JR, Fiorentino M, Perner S, Finn S, Calza S, Flavin R, Freedman ML, Setlur S, Sesso HD, Andersson SO, Martin N, Kantoff PW, Johansson JE, Adami HO, Rubin MA, Loda M, Golub TR, Andren O, Stampfer MJ, Mucci LA. mRNA expression signature of Gleason grade predicts lethal prostate cancer. **J Clin Oncol.** 2011;29(17):2391-6.
46. Tarocchi M, Hannivoort R, Hoshida Y, Lee UE, Vetter D, Narla G, Villanueva A, Oren M, Llovet JM, Friedman SL. Carcinogen-induced hepatic tumors in KLF6+/- mice recapitulate aggressive human hepatocellular carcinoma associated with p53 pathway deregulation. **Hepatology.** 2011;54(2):522-31.
47. Toffanin S, Hoshida Y, Lachenmayer A, Villanueva A, Cabellos L, Minguez B, Savic R, Ward SC, Thung S, Chiang DY, Alsinet C, Tovar V, Roayaie S, Schwartz M, Bruix J, Waxman S, Friedman SL, Golub T, Mazzaferro V, Llovet JM. MicroRNA-based classification of hepatocellular carcinoma and oncogenic role of miR-517a. **Gastroenterology.** 2011;140(5):1618-28 e16.
48. Villanueva A, Hoshida Y, Battiston C, Tovar V, Sia D, Alsinet C, Cornella H, Liberzon A, Kobayashi M, Kumada H, Thung SN, Bruix J, Newell P, April C, Fan JB, Roayaie S, Mazzaferro V, Schwartz ME, Llovet JM. Combining clinical, pathology, and gene expression data to predict recurrence of hepatocellular carcinoma. **Gastroenterology.** 2011;140(5):1501-12 e2.
49. Lachenmayer A, Alsinet C, Savic R, Cabellos L, Toffanin S, Hoshida Y, Villanueva A, Minguez B, Newell P, Tsai HW, Barretina J, Thung S, Ward SC, Bruix J, Mazzaferro V, Schwartz M, Friedman SL, Llovet JM. Wnt-pathway activation in two molecular classes of hepatocellular carcinoma and experimental modulation by sorafenib. **Clin Cancer Res.** 2012;18(18):4997-5007.
50. Lachenmayer A, Toffanin S, Cabellos L, Alsinet C, Hoshida Y, Villanueva A, Minguez B, Tsai HW, Ward SC, Thung S, Friedman SL, Llovet JM. Combination therapy for hepatocellular carcinoma: additive preclinical efficacy of the HDAC inhibitor panobinostat with sorafenib. **J Hepatol.** 2012;56(6):1343-50.
51. Villanueva A, Alsinet C, Yanger K, Hoshida Y, Zong Y, Toffanin S, Rodriguez-Carunchio L, Sole M, Thung S, Stanger BZ, Llovet JM. Notch signaling is activated in human hepatocellular carcinoma and induces tumor formation in mice. **Gastroenterology.** 2012;143(6):1660-9 e7.
52. Waldron L, Ogino S, Hoshida Y, Shima K, McCart Reed AE, Simpson PT, Baba Y, Noshio K, Segata N, Vargas AC, Cummings MC, Lakhani SR, Kirkner GJ, Giovannucci E, Quackenbush J, Golub TR, Fuchs CS, Parmigiani G, Huttenhower C. Expression profiling of archival tumors for long-term health studies. **Clin Cancer Res.** 2012;18(22):6136-46.
53. Yamauchi M, Morikawa T, Kuchiba A, Imamura Y, Qian ZR, Nishihara R, Liao X, Waldron L, Hoshida Y, Huttenhower C, Chan AT, Giovannucci E, Fuchs C, Ogino S. Assessment of colorectal cancer molecular features along bowel subsites challenges the conception of distinct dichotomy of

- proximal versus distal colorectum. **Gut**. 2012;61(6):847-54.
54. Hoshida Y, Villanueva A, Sangiovanni A, Sole M, Hur C, Andersson KL, Chung RT, Gould J, Kojima K, Gupta S, Taylor B, Crenshaw A, Gabriel S, Minguez B, Iavarone M, Friedman SL, Colombo M, Llovet JM, Golub TR. Prognostic gene expression signature for patients with hepatitis C-related early-stage cirrhosis. **Gastroenterology**. 2013;144(5):1024-30.
  55. Revill K, Wang T, Lachenmayer A, Kojima K, Harrington A, Li J, Hoshida Y, Llovet JM, Powers S. Genome-wide methylation analysis and epigenetic unmasking identify tumor suppressor genes in hepatocellular carcinoma. **Gastroenterology**. 2013;145(6):1424-35 e1-25.
  56. Sia D, Hoshida Y, Villanueva A, Roayaie S, Ferrer J, Tabak B, Peix J, Sole M, Tovar V, Alsinet C, Cornella H, Klotzle B, Fan JB, Cotsoglou C, Thung SN, Fuster J, Waxman S, Garcia-Valdecasas JC, Bruix J, Schwartz ME, Beroukhim R, Mazzaferro V, Llovet JM. Integrative molecular analysis of intrahepatic cholangiocarcinoma reveals 2 classes that have different outcomes. **Gastroenterology**. 2013;144(4):829-40.
  57. Fuchs BC, Hoshida Y, Fujii T, Wei L, Yamada S, Lauwers GY, McGinn CM, DePeralta DK, Chen X, Kuroda T, Lanuti M, Schmitt AD, Gupta S, Crenshaw A, Onofrio R, Taylor B, Winckler W, Bardeesy N, Caravan P, Golub TR, Tanabe KK. Epidermal growth factor receptor inhibition attenuates liver fibrosis and development of hepatocellular carcinoma. **Hepatology**. 2014;59(4):1577-90.
  58. King LY, Johnson KB, Zheng H, Wei L, Gudewicz T, Hoshida Y, Corey KE, Ajayi T, Ufere N, Baumert TF, Chan AT, Tanabe KK, Fuchs BC, Chung RT. Host genetics predict clinical deterioration in HCV-related cirrhosis. **PLoS One**. 2014;9(12):e114747.
  59. Kojima K, April C, Canasto-Chibuque C, Chen X, Deshmukh M, Venkatesh A, Tan PS, Kobayashi M, Kumada H, Fan JB, Hoshida Y. Transcriptome profiling of archived sectioned formalin-fixed paraffin-embedded (AS-FFPE) tissue for disease classification. **PLoS One**. 2014;9(1):e86961.
  60. Li WQ, Han J, Widlund HR, Correll M, Wang YE, Quackenbush J, Mihm MC, Canales AL, Wu S, Golub T, Hoshida Y, Hunter DJ, Murphy G, Kupper TS, Qureshi AA. CXCR4 pathway associated with family history of melanoma. **Cancer causes & control : CCC**. 2014;25(1):125-32.
  61. Mudbhary R, Hoshida Y, Chernyavskaya Y, Jacob V, Villanueva A, Fiel MI, Chen X, Kojima K, Thung S, Bronson RT, Lachenmayer A, Revill K, Alsinet C, Sachidanandam R, Desai A, SenBanerjee S, Ukomadu C, Llovet JM, Sadler KC. UHRF1 overexpression drives DNA hypomethylation and hepatocellular carcinoma. **Cancer Cell**. 2014;25(2):196-209.
  62. Venkatesh A, Sun X, Hoshida Y. Prognostic gene signature profiles of hepatitis C-related early-stage liver cirrhosis. **Genom Data**. 2014;2:361-2.
  63. Bergthold G, Bandopadhyay P, Hoshida Y, Ramkissoon S, Ramkissoon L, Rich B, Maire CL, Paoletta BR, Schumacher SE, Tabak B, Ferrer-Luna R, Ozek M, Sav A, Santagata S, Wen PY, Goumnerova LC, Ligon AH, Stiles C, Segal R, Golub T, Grill J, Ligon KL, Chan JA, Kieran MW, Beroukhim R. Expression profiles of 151 pediatric low-grade gliomas reveal molecular differences associated with location and histological subtype. **Neuro Oncol**. 2015;17(11):1486-96.
  64. Cornella H, Alsinet C, Sayols S, Zhang Z, Hao K, Cabellos L, Hoshida Y, Villanueva A, Thung S, Ward SC, Rodriguez-Carunchio L, Vila-Casadesus M, Imbeaud S, Lachenmayer A, Quaglia A, Nagorney DM, Minguez B, Carrilho F, Roberts LR, Waxman S, Mazzaferro V, Schwartz M, Esteller M, Heaton ND, Zucman-Rossi J, Llovet JM. Unique genomic profile of fibrolamellar hepatocellular carcinoma. **Gastroenterology**. 2015;148(4):806-18 e10.
  65. El-Shamy A, Eng FJ, Doyle EH, Klepper AL, Sun X, Sangiovanni A, Iavarone M, Colombo M, Schwartz RE, Hoshida Y, Branch AD. A cell culture system for distinguishing hepatitis C viruses with and without liver cancer-related mutations in the viral core gene. **J Hepatol**. 2015;63(6):1323-33.
  66. Finkin S, Yuan D, Stein I, Taniguchi K, Weber A, Unger K, Browning JL, Goossens N, Nakagawa S, Gunasekaran G, Schwartz ME, Kobayashi M, Kumada H, Berger M, Pappo O, Rajewsky K, Hoshida Y, Karin M, Heikenwalder M, Ben-Neriah Y, Pikarsky E. Ectopic lymphoid structures function as

- microniches for tumor progenitor cells in hepatocellular carcinoma. **Nat Immunol.** 2015;16(12):1235-44.
67. Fitamant J, Kottakis F, Benhamouche S, Tian HS, Chuvin N, Parachoniak CA, Nagle JM, Perera RM, Lapouge M, Deshpande V, Zhu AX, Lai A, Min B, Hoshida Y, Avruch J, Sia D, Camprecios G, McClatchey AI, Llovet JM, Morrissey D, Raj L, Bardeesy N. YAP Inhibition Restores Hepatocyte Differentiation in Advanced HCC, Leading to Tumor Regression. **Cell Rep.** 2015;10(10):1692-707.
  68. Jacob V, Chernyavskaya Y, Chen X, Tan PS, Kent B, Hoshida Y, Sadler KC. DNA hypomethylation induces a DNA replication-associated cell cycle arrest to block hepatic outgrowth in uhrfl mutant zebrafish embryos. **Development.** 2015;142(3):510-21.
  69. King LY, Canasto-Chibuque C, Johnson KB, Yip S, Chen X, Kojima K, Deshmukh M, Venkatesh A, Tan PS, Sun X, Villanueva A, Sangiovanni A, Nair V, Mahajan M, Kobayashi M, Kumada H, Iavarone M, Colombo M, Fiel MI, Friedman SL, Llovet JM, Chung RT, Hoshida Y. A genomic and clinical prognostic index for hepatitis C-related early-stage cirrhosis that predicts clinical deterioration. **Gut.** 2015;64(8):1296-302.
  70. Kishikawa T, Otsuka M, Tan PS, Ohno M, Sun X, Yoshikawa T, Shibata C, Takata A, Kojima K, Takehana K, Ohishi M, Ota S, Noyama T, Kondo Y, Sato M, Soga T, Hoshida Y, Koike K. Decreased miR122 in hepatocellular carcinoma leads to chemoresistance with increased arginine. **Oncotarget.** 2015;6(10):8339-52.
  71. Kocabayoglu P, Lade A, Lee YA, Dragomir AC, Sun X, Fiel MI, Thung S, Aloman C, Soriano P, Hoshida Y, Friedman SL. beta-PDGF receptor expressed by hepatic stellate cells regulates fibrosis in murine liver injury, but not carcinogenesis. **J Hepatol.** 2015;63(1):141-7.
  72. Miltiadous O, Sia D, Hoshida Y, Fiel MI, Harrington AN, Thung SN, Tan PS, Dong H, Revill K, Chang CY, Roayaie S, Byrne TJ, Mazzaferro V, Rakela J, Florman S, Schwartz M, Llovet JM. Progenitor cell markers predict outcome of patients with hepatocellular carcinoma beyond Milan criteria undergoing liver transplantation. **J Hepatol.** 2015;63(6):1368-77.
  73. Sia D, Losic B, Moeini A, Cabellos L, Hao K, Revill K, Bonal D, Miltiadous O, Zhang Z, Hoshida Y, Cornella H, Castillo-Martin M, Pinyol R, Kasai Y, Roayaie S, Thung SN, Fuster J, Schwartz ME, Waxman S, Cordon-Cardo C, Schadt E, Mazzaferro V, Llovet JM. Massive parallel sequencing uncovers actionable FGFR2-PPHLN1 fusion and ARAF mutations in intrahepatic cholangiocarcinoma. **Nat Commun.** 2015;6:6087.
  74. Teixeira A, Yen B, Gusella GL, Thomas AG, Mullen MP, Aberg J, Chen X, Hoshida Y, van Bakel H, Schadt E, Basler CF, Garcia-Sastre A, Mosoian A. Prothymosin alpha variants isolated from CD8+ T cells and cervicovaginal fluid suppress HIV-1 replication through type I interferon induction. **J Infect Dis.** 2015;211(9):1467-75.
  75. Vidal SJ, Rodriguez-Bravo V, Quinn SA, Rodriguez-Barrueco R, Lujambio A, Williams E, Sun X, de la Iglesia-Vicente J, Lee A, Readhead B, Chen X, Galsky M, Esteve B, Petrylak DP, Dudley JT, Rabadan R, Silva JM, Hoshida Y, Lowe SW, Cordon-Cardo C, Domingo-Domenech J. A targetable GATA2-IGF2 axis confers aggressiveness in lethal prostate cancer. **Cancer Cell.** 2015;27(2):223-39.
  76. Villanueva A, Portela A, Sayols S, Battiston C, Hoshida Y, Mendez-Gonzalez J, Imbeaud S, Letouze E, Hernandez-Gea V, Cornella H, Pinyol R, Sole M, Fuster J, Zucman-Rossi J, Mazzaferro V, Esteller M, Llovet JM, Consortium H. DNA methylation-based prognosis and epidrivers in hepatocellular carcinoma. **Hepatology.** 2015;61(6):1945-56.
  77. Asgharpour A, Cazanave SC, Pacana T, Seneshaw M, Vincent R, Banini BA, Kumar DP, Daita K, Min HK, Mirshahi F, Bedossa P, Sun X, Hoshida Y, Koduru SV, Contaifer D, Jr., Warncke UO, Wijesinghe DS, Sanyal AJ. A diet-induced animal model of non-alcoholic fatty liver disease and hepatocellular cancer. **J Hepatol.** 2016;65(3):579-88.
  78. Aylon Y, Gershoni A, Rotkopf R, Biton IE, Porat Z, Koh AP, Sun X, Lee Y, Fiel MI, Hoshida Y, Friedman SL, Johnson RL, Oren M. The LATS2 tumor suppressor inhibits SREBP and suppresses

- hepatic cholesterol accumulation. **Genes Dev.** 2016;30(7):786-97.
79. Goossens N, Hoshida Y, Song WM, Jung M, Morel P, Nakagawa S, Zhang B, Frossard JL, Spahr L, Friedman SL, Negro F, Rubbia-Brandt L, Giostra E. Nonalcoholic Steatohepatitis Is Associated With Increased Mortality in Obese Patients Undergoing Bariatric Surgery. **Clin Gastroenterol Hepatol.** 2016;14(11):1619-28.
  80. Jiao J, Ooka K, Fey H, Fiel MI, Rahmman AH, Kojima K, Hoshida Y, Chen X, de Paula T, Vetter D, Sastre D, Lee KH, Lee Y, Bansal M, Friedman SL, Merad M, Aloman C. Interleukin-15 receptor alpha on hepatic stellate cells regulates hepatic fibrogenesis in mice. **J Hepatol.** 2016;65(2):344-53.
  81. Kim RS, Hasegawa D, Goossens N, Tsuchida T, Athwal V, Sun X, Robinson CL, Bhattacharya D, Chou HI, Zhang DY, Fuchs BC, Lee Y, Hoshida Y, Friedman SL. The XBP1 Arm of the Unfolded Protein Response Induces Fibrogenic Activity in Hepatic Stellate Cells Through Autophagy. **Sci Rep.** 2016;6:39342.
  82. Kocabayoglu P, Zhang DY, Kojima K, Hoshida Y, Friedman SL. Induction and contribution of beta platelet-derived growth factor signalling by hepatic stellate cells to liver regeneration after partial hepatectomy in mice. **Liver Int.** 2016;36(6):874-82.
  83. Lu H, Rogowskyj J, Yu W, Venkatesh A, Khan N, Nakagawa S, Goossens N, Koh AP, Higashi T, Gunasekaran G, Schwarz ME, Hiotis SP, Xu X, Kinney W, Hoshida Y, Block T, Cuconati A, Du Y. Novel substituted aminothiazoles as potent and selective anti-hepatocellular carcinoma agents. **Bioorg Med Chem Lett.** 2016;26(23):5819-24.
  84. Nakagawa S, Wei L, Song WM, Higashi T, Ghoshal S, Kim RS, Bian CB, Yamada S, Sun X, Venkatesh A, Goossens N, Bain G, Lauwers GY, Koh AP, El-Abtah M, Ahmad NB, Hoshida H, Erstad DJ, Gunasekaran G, Lee Y, Yu ML, Chuang WL, Dai CY, Kobayashi M, Kumada H, Beppu T, Baba H, Mahajan M, Nair VD, Lanuti M, Villanueva A, Sangiovanni A, Iavarone M, Colombo M, Llovet JM, Subramanian A, Tager AM, Friedman SL, Baumert TF, Schwarz ME, Chung RT, Tanabe KK, Zhang B, Fuchs BC, Hoshida Y, Precision Liver Cancer Prevention C. Molecular Liver Cancer Prevention in Cirrhosis by Organ Transcriptome Analysis and Lysophosphatidic Acid Pathway Inhibition. **Cancer Cell.** 2016;30(6):879-90.
  85. Schmidt B, Wei L, DePeralta DK, Hoshida Y, Tan PS, Sun X, Sventek JP, Lanuti M, Tanabe KK, Fuchs BC. Molecular subclasses of hepatocellular carcinoma predict sensitivity to fibroblast growth factor receptor inhibition. **Int J Cancer.** 2016;138(6):1494-505.
  86. Tan PS, Nakagawa S, Goossens N, Venkatesh A, Huang T, Ward SC, Sun X, Song WM, Koh A, Canasto-Chibuque C, Deshmukh M, Nair V, Mahajan M, Zhang B, Fiel MI, Kobayashi M, Kumada H, Hoshida Y. Clinicopathological indices to predict hepatocellular carcinoma molecular classification. **Liver Int.** 2016;36(1):108-18.
  87. Verrier ER, Colpitts CC, Bach C, Heydmann L, Zona L, Xiao F, Thumann C, Crouchet E, Gaudin R, Sureau C, Cosset FL, McKeating JA, Pessaux P, Hoshida Y, Schuster C, Zeisel MB, Baumert TF. Solute Carrier NTCP Regulates Innate Antiviral Immune Responses Targeting Hepatitis C Virus Infection of Hepatocytes. **Cell Rep.** 2016;17(5):1357-68.
  88. Zhang C, Hoshida Y, Sadler KC. Comparative Epigenomic Profiling of the DNA Methylome in Mouse and Zebrafish Uncovers High Interspecies Divergence. **Front Genet.** 2016;7:110.
  89. Zhang DY, Goossens N, Guo J, Tsai MC, Chou HI, Altunkaynak C, Sangiovanni A, Iavarone M, Colombo M, Kobayashi M, Kumada H, Villanueva A, Llovet JM, Hoshida Y, Friedman SL. A hepatic stellate cell gene expression signature associated with outcomes in hepatitis C cirrhosis and hepatocellular carcinoma after curative resection. **Gut.** 2016;65(10):1754-64.
  90. Bansal R, Nakagawa S, Yazdani S, van Baarlen J, Venkatesh A, Koh AP, Song WM, Goossens N, Watanabe H, Beasley MB, Powell CA, Storm G, Kaminski N, van Goor H, Friedman SL, Hoshida Y, Prakash J. Integrin alpha 11 in the regulation of the myofibroblast phenotype: implications for fibrotic diseases. **Exp Mol Med.** 2017;49(11):e396.

91. Bollard J, Miguela V, Ruiz de Galarreta M, Venkatesh A, Bian CB, Roberto MP, Tovar V, Sia D, Molina-Sanchez P, Nguyen CB, Nakagawa S, Llovet JM, Hoshida Y, Lujambio A. Palbociclib (PD-0332991), a selective CDK4/6 inhibitor, restricts tumour growth in preclinical models of hepatocellular carcinoma. **Gut**. 2017;66(7):1286-96.
92. Chernyavskaya Y, Mudbhary R, Zhang C, Tokarz D, Jacob V, Gopinath S, Sun X, Wang S, Magnani E, Madakashira BP, Yoder JA, Hoshida Y, Sadler KC. Loss of DNA methylation in zebrafish embryos activates retrotransposons to trigger antiviral signaling. **Development**. 2017;144(16):2925-39.
93. Goossens N, Singal AG, King LY, Andersson KL, Fuchs BC, Besa C, Taouli B, Chung RT, Hoshida Y, Prevention PLC. Cost-Effectiveness of Risk Score-Stratified Hepatocellular Carcinoma Screening in Patients with Cirrhosis. **Clinical and Translational Gastroenterology**. 2017;8.
94. Hectors SJ, Wagner M, Bane O, Besa C, Lewis S, Remark R, Chen N, Fiel MI, Zhu HF, Gnjjatic S, Merad M, Hoshida Y, Taouli B. Quantification of hepatocellular carcinoma heterogeneity with multiparametric magnetic resonance imaging. **Scientific Reports**. 2017;7.
95. Hicks DF, Goossens N, Blas-Garcia A, Tsuchida T, Wooden B, Wallace MC, Nieto N, Lade A, Redhead B, Cederbaum AI, Dudley JT, Fuchs BC, Lee YA, Hoshida Y, Friedman SL. Transcriptome-based repurposing of apigenin as a potential anti-fibrotic agent targeting hepatic stellate cells. **Sci Rep**. 2017;7:42563.
96. Kenny TC, Schmidt H, Adelson K, Hoshida Y, Koh AP, Shah N, Mandeli J, Ting J, Germain D. Patient-derived Interstitial Fluids and Predisposition to Aggressive Sporadic Breast Cancer through Collagen Remodeling and Inactivation of p53. **Clin Cancer Res**. 2017;23(18):5446-59.
97. Ono A, Goossens N, Finn RS, Schmidt WN, Thung SN, Im GY, Hoshida Y, Precision Liver Cancer Prevention C. Persisting risk of hepatocellular carcinoma after hepatitis C virus cure monitored by a liver transcriptome signature. **Hepatology**. 2017;66(4):1344-6.
98. Shtraizent N, DeRossi C, Nayar S, Sachidanandam R, Katz LS, Prince A, Koh AP, Vincek A, Hadas Y, Hoshida Y, Scott DK, Eliyahu E, Freeze HH, Sadler KC, Chu J. MPI depletion enhances O-GlcNAcylation of p53 and suppresses the Warburg effect. **Elife**. 2017;6.
99. Sydor S, Manka P, Best J, Jafoui S, Sowa JP, Zoubek ME, Hernandez-Gea V, Cubero FJ, Kalsch J, Vetter D, Fiel MI, Hoshida Y, Bian CB, Nelson LJ, Moshage H, Faber KN, Paul A, Baba HA, Gerken G, Friedman SL, Canbay A, Bechmann LP. Kruppel-like factor 6 is a transcriptional activator of autophagy in acute liver injury. **Sci Rep**. 2017;7(1):8119.
100. Taouli B, Hoshida Y, Kakite S, Chen X, Tan PS, Sun X, Kihira S, Kojima K, Toffanin S, Fiel MI, Hirschfield H, Wagner M, Llovet JM. Imaging-based surrogate markers of transcriptome subclasses and signatures in hepatocellular carcinoma: preliminary results. **Eur Radiol**. 2017;27(11):4472-81.
101. Tovar V, Cornella H, Moeini A, Vidal S, Hoshida Y, Sia D, Peix J, Cabellos L, Alsinet C, Torrecilla S, Martinez-Quetglas I, Lozano JJ, Desbois-Mouthon C, Sole M, Domingo-Domenech J, Villanueva A, Llovet JM. Tumour initiating cells and IGF/FGF signalling contribute to sorafenib resistance in hepatocellular carcinoma. **Gut**. 2017;66(3):530-40.
102. Deshmukh M, Nakagawa S, Higashi T, Vincek A, Venkatesh A, Ruiz de Galarreta M, Koh AP, Goossens N, Hirschfield H, Bian CB, Fujiwara N, Ono A, Hoshida H, El-Abtah M, Ahmad NB, Lujambio A, Sanchez R, Fuchs BC, Poelstra K, Prakash J, Hoshida Y, Precision Liver Cancer Prevention C. Cell type-specific pharmacological kinase inhibition for cancer chemoprevention. **Nanomedicine**. 2018;14(2):317-25.
103. Fujiwara N, Nakagawa H, Enooku K, Kudo Y, Hayata Y, Nakatsuka T, Tanaka Y, Tateishi R, Hikiba Y, Misumi K, Tanaka M, Hayashi A, Shibahara J, Fukayama M, Arita J, Hasegawa K, Hirschfield H, Hoshida Y, Hirata Y, Otsuka M, Tateishi K, Koike K. CPT2 downregulation adapts HCC to lipid-rich environment and promotes carcinogenesis via acylcarnitine accumulation in obesity. **Gut**. 2018;67(8):1493-504.
104. Hirschfield H, Bian CB, Higashi T, Nakagawa S, Zeleke TZ, Nair VD, Fuchs BC, Hoshida Y. In vitro

- modeling of hepatocellular carcinoma molecular subtypes for anti-cancer drug assessment. **Experimental and Molecular Medicine**. 2018;50.
105. Kancherla V, Abdullazade S, Matter MS, Lanzafame M, Quagliata L, Roma G, Hoshida Y, Terracciano LM, Ng CKY, Piscuoglio S. Genomic Analysis Revealed New Oncogenic Signatures in TP53-Mutant Hepatocellular Carcinoma. **Front Genet**. 2018;9:2.
  106. Lee YA, Noon LA, Akat KM, Ybanez MD, Lee TF, Berres ML, Fujiwara N, Goossens N, Chou HI, Parvin-Nejad FP, Khambu B, Kramer EGM, Gordon R, Pflieger C, Germain D, John GR, Campbell KN, Yue Z, Yin XM, Cuervo AM, Czaja MJ, Fiel MI, Hoshida Y, Friedman SL. Autophagy is a gatekeeper of hepatic differentiation and carcinogenesis by controlling the degradation of Yap. **Nat Commun**. 2018;9(1):4962.
  107. Ma S, Ogino S, Parsana P, Nishihara R, Qian Z, Shen J, Mima K, Masugi Y, Cao Y, Nowak JA, Shima K, Hoshida Y, Giovannucci EL, Gala MK, Chan AT, Fuchs CS, Parmigiani G, Huttenhower C, Waldron L. Continuity of transcriptomes among colorectal cancer subtypes based on meta-analysis. **Genome Biol**. 2018;19(1):142.
  108. Rodriguez-Bravo V, Pippa R, Song WM, Carceles-Cordon M, Dominguez-Andres A, Fujiwara N, Woo J, Koh AP, Ertel A, Lokareddy RK, Cuesta-Dominguez A, Kim RS, Rodriguez-Fernandez I, Li P, Gordon R, Hirschfield H, Prats JM, Reddy EP, Fatatis A, Petrylak DP, Gomella L, Kelly WK, Lowe SW, Knudsen KE, Galsky MD, Cingolani G, Lujambio A, Hoshida Y, Domingo-Domenech J. Nuclear Pores Promote Lethal Prostate Cancer by Increasing POM121-Driven E2F1, MYC, and AR Nuclear Import. **Cell**. 2018;174(5):1200-15 e20.
  109. Trepo E, Goossens N, Fujiwara N, Song WM, Colaprico A, Marot A, Spahr L, Demetter P, Sempoux C, Im GY, Saldarriaga J, Gustot T, Deviere J, Thung SN, Minsart C, Serste T, Bontempi G, Abdelrahman K, Henrion J, Degre D, Lucidi V, Rubbia-Brandt L, Nair VD, Moreno C, Deltenre P, Hoshida Y, Franchimont D. Combination of Gene Expression Signature and Model for End-Stage Liver Disease Score Predicts Survival of Patients With Severe Alcoholic Hepatitis. **Gastroenterology**. 2018;154(4):965-75.
  110. Tsuchida T, Lee YA, Fujiwara N, Ybanez M, Allen B, Martins S, Fiel MI, Goossens N, Chou HI, Hoshida Y, Friedman SL. A simple diet- and chemical-induced murine NASH model with rapid progression of steatohepatitis, fibrosis and liver cancer. **J Hepatol**. 2018;69(2):385-95.
  111. Van Renne N, Roca Suarez AA, Duong FHT, Gondeau C, Calabrese D, Fontaine N, Ababsa A, Bandiera S, Croonenborghs T, Pochet N, De Blasi V, Pessaux P, Piardi T, Sommacale D, Ono A, Chayama K, Fujita M, Nakagawa H, Hoshida Y, Zeisel MB, Heim MH, Baumert TF, Lupberger J. miR-135a-5p-mediated downregulation of protein tyrosine phosphatase receptor delta is a candidate driver of HCV-associated hepatocarcinogenesis. **Gut**. 2018;67(5):953-62.
  112. Enooku K, Nakagawa H, Fujiwara N, Kondo M, Minami T, Hoshida Y, Shibahara J, Tateishi R, Koike K. Altered serum acylcarnitine profile is associated with the status of nonalcoholic fatty liver disease (NAFLD) and NAFLD-related hepatocellular carcinoma. **Sci Rep**. 2019;9(1):10663.
  113. Golob-Schwarzl N, Bettermann K, Mehta AK, Kessler SM, Unterluggauer J, Krassnig S, Kojima K, Chen X, Hoshida Y, Bardeesy NM, Muller H, Svendova V, Schimek MG, Diwokoy C, Lipfert A, Mahajan V, Stumptner C, Thuringer A, Frohlich LF, Stojakovic T, Nilsson KPR, Kolbe T, Rulicke T, Magin TM, Strnad P, Kiemer AK, Moriggl R, Haybaeck J. High Keratin 8/18 Ratio Predicts Aggressive Hepatocellular Cancer Phenotype. **Transl Oncol**. 2019;12(2):256-68.
  114. Hamdane N, Juhling F, Crouchet E, El Saghire H, Thumann C, Oudot MA, Bandiera S, Saviano A, Ponsolles C, Roca Suarez AA, Li S, Fujiwara N, Ono A, Davidson I, Bardeesy N, Schmidl C, Bock C, Schuster C, Lupberger J, Habersetzer F, Doffoel M, Piardi T, Sommacale D, Imamura M, Uchida T, Ohdan H, Aikata H, Chayama K, Boldanova T, Pessaux P, Fuchs BC, Hoshida Y, Zeisel MB, Duong FHT, Baumert TF. HCV-Induced Epigenetic Changes Associated With Liver Cancer Risk Persist After Sustained Virologic Response. **Gastroenterology**. 2019;156(8):2313-29 e7.

115. Ishikawa G, Fujiwara N, Hirschfield H, Varricchio L, Hoshida Y, Barosi G, Rosti V, Padilla M, Mazzarini M, Friedman SL, Hoffman R, Migliaccio AR. Shared and Tissue-Specific Expression Signatures between Bone Marrow from Primary Myelofibrosis and Essential Thrombocythemia. **Exp Hematol**. 2019;79:16-25 e3.
116. Lally JSV, Ghoshal S, DePeralta DK, Moaven O, Wei L, Masia R, Erstad DJ, Fujiwara N, Leong V, Houde VP, Anagnostopoulos AE, Wang A, Broadfield LA, Ford RJ, Foster RA, Bates J, Sun H, Wang T, Liu H, Ray AS, Saha AK, Greenwood J, Bhat S, Harriman G, Miao W, Rocnik JL, Westlin WF, Muti P, Tsakiridis T, Harwood HJ, Jr., Kapeller R, Hoshida Y, Tanabe KK, Steinberg GR, Fuchs BC. Inhibition of Acetyl-CoA Carboxylase by Phosphorylation or the Inhibitor ND-654 Suppresses Lipogenesis and Hepatocellular Carcinoma. **Cell Metab**. 2019;29(1):174-82 e5.
117. Li S, Ghoshal S, Sojoodi M, Arora G, Masia R, Erstad DJ, Lanuti M, Hoshida Y, Baumert TF, Tanabe KK, Fuchs BC. Pioglitazone Reduces Hepatocellular Carcinoma Development in Two Rodent Models of Cirrhosis. **J Gastrointest Surg**. 2019;23(1):101-11.
118. Lupberger J, Croonenborghs T, Roca Suarez AA, Van Renne N, Juhling F, Oudot MA, Virzi A, Bandiera S, Jamey C, Meszaros G, Brumar D, Mukherji A, Durand SC, Heydmann L, Verrier ER, El Saghire H, Hamdane N, Bartenschlager R, Fereshetian S, Ramberger E, Sinha R, Nabian M, Everaert C, Jovanovic M, Mertins P, Carr SA, Chayama K, Dali-Youcef N, Ricci R, Bardeesy NM, Fujiwara N, Gevaert O, Zeisel MB, Hoshida Y, Pochet N, Baumert TF. Combined Analysis of Metabolomes, Proteomes, and Transcriptomes of Hepatitis C Virus-Infected Cells and Liver to Identify Pathways Associated With Disease Development. **Gastroenterology**. 2019;157(2):537-51 e9.
119. Yip SH, Fujiwara N, Burke J, Shetler A, Peralta C, Qian T, Hoshida H, Zhu S, Hoshida Y. MPIC: Molecular Prognostic Indicators in Cirrhosis Database for Clinical Context-Specific in Silico Prognostic Biomarker Validation. **Front Genet**. 2019;10:830.
120. Zhu S, Qian T, Hoshida Y, Shen Y, Yu J, Hao K. GIGSEA: genotype imputed gene set enrichment analysis using GWAS summary level data. **Bioinformatics**. 2019;35(1):160-3.
121. Deltenre P, Trepo E, Fujiwara N, Goossens N, Marot A, Dubois M, Spahr L, Henrion J, Moreno C, Hoshida Y. Gene signature-MELD score and alcohol relapse determine long-term prognosis of patients with severe alcoholic hepatitis. **Liver Int**. 2020;40(3):565-70.
122. Eller C, Heydmann L, Colpitts CC, El Saghire H, Piccioni F, Juhling F, Majzoub K, Pons C, Bach C, Lucifora J, Lupberger J, Nassal M, Cowley GS, Fujiwara N, Hsieh SY, Hoshida Y, Felli E, Pessaux P, Sureau C, Schuster C, Root DE, Verrier ER, Baumert TF. A genome-wide gain-of-function screen identifies CDKN2C as a HBV host factor. **Nat Commun**. 2020;11(1):2707.
123. Ha K, Fujita M, Karlic R, Yang S, Xue R, Zhang C, Bai F, Zhang N, Hoshida Y, Polak P, Nakagawa H, Kim HG, Lee H. Somatic mutation landscape reveals differential variability of cell-of-origin for primary liver cancer. **Heliyon**. 2020;6(2):e03350.
124. Hectors SJ, Lewis S, Besa C, King MJ, Said D, Putra J, Ward S, Higashi T, Thung S, Yao S, Laface I, Schwartz M, Gnjjatic S, Merad M, Hoshida Y, Taouli B. MRI radiomics features predict immunological characteristics of hepatocellular carcinoma. **Eur Radiol**. 2020;30(7):3759-69.
125. Kim V, Wal TV, Nishi MY, Montenegro LR, Carrilho FJ, Hoshida Y, Ono SK. Brazilian cohort and genes encoding for drug-metabolizing enzymes and drug transporters. **Pharmacogenomics**. 2020;21(9):575-86.
126. Lin YH, Zhang S, Zhu M, Lu T, Chen K, Wen Z, Wang S, Xiao G, Luo D, Jia Y, Li L, MacConmara M, Hoshida Y, Singal AG, Yopp A, Wang T, Zhu H. Mice With Increased Numbers of Polyploid Hepatocytes Maintain Regenerative Capacity But Develop Fewer Hepatocellular Carcinomas Following Chronic Liver Injury. **Gastroenterology**. 2020;158(6):1698-712 e14.
127. Liu PH, Hsu CY, Su CW, Huang YH, Hou MC, Rich NE, Fujiwara N, Hoshida Y, Singal AG, Huo TI. Thrombocytosis is associated with worse survival in patients with hepatocellular carcinoma. **Liver Int**. 2020;40(10):2522-34.

128. Qin J, Higashi T, Nakagawa S, Fujiwara N, Yamashita YI, Beppu T, Baba H, Kobayashi M, Kumada H, Gunasekaran G, Schiano TD, Thung SN, Fiel MI, Hoshida Y, Ward SC. Steatohepatic variant of hepatocellular carcinoma is associated with both alcoholic steatohepatitis and nonalcoholic steatohepatitis: a study of 2 cohorts with molecular insights. **Am J Surg Pathol**. 2020;44(10):1406-12.
129. Rich NE, John BV, Parikh ND, Rowe I, Mehta N, Khatri G, Thomas SM, Anis M, Mendiratta-Lala M, Hernandez C, Odewole M, Sundaram LT, Konjeti VR, Shetty S, Shah T, Zhu H, Yopp AC, Hoshida Y, Yao FY, Marrero JA, Singal AG. Hepatocellular carcinoma demonstrates heterogeneous growth patterns in a multicenter cohort of patients with cirrhosis. **Hepatology**. 2020;72(5):1654-65.
130. Sojoodi M, Wei L, Erstad DJ, Yamada S, Fujii T, Hirschfield H, Kim RS, Lauwers GY, Lanuti M, Hoshida Y, Tanabe KK, Fuchs BC. Epigallocatechin gallate induces hepatic stellate cell senescence and attenuates development of hepatocellular carcinoma. **Cancer Prev Res (Phila)**. 2020;13(6):497-508.
131. Vogle A, Qian T, Zhu S, Burnett E, Fey H, Zhu Z, Keshavarzian A, Shaikh M, Hoshida Y, Kim M, Aloman C. Restricted immunological and cellular pathways are shared by murine models of chronic alcohol consumption. **Sci Rep**. 2020;10(1):2451.
132. Crouchet E, Bandiera S, Fujiwara N, Li S, El Saghire H, Fernandez-Vaquero M, Riedl T, Sun X, Hirschfield H, Juhling F, Zhu S, Roehlen N, Ponsolles C, Heydmann L, Saviano A, Qian T, Venkatesh A, Lupberger J, Verrier ER, Sojoodi M, Oudot MA, Duong FHT, Masia R, Wei L, Thumann C, Durand SC, Gonzalez-Motos V, Heide D, Hetzer J, Nakagawa S, Ono A, Song WM, Higashi T, Sanchez R, Kim RS, Bian CB, Kiani K, Croonenborghs T, Subramanian A, Chung RT, Straub BK, Schuppan D, Ankavay M, Cocquerel L, Schaeffer E, Goossens N, Koh AP, Mahajan M, Nair VD, Gunasekaran G, Schwartz ME, Bardeesy N, Shalek AK, Rozenblatt-Rosen O, Regev A, Felli E, Pessaux P, Tanabe KK, Heikenwalder M, Schuster C, Pochet N, Zeisel MB, Fuchs BC, Hoshida Y, Baumert TF. A human liver cell-based system modeling a clinical prognostic liver signature for therapeutic discovery. **Nat Commun**. 2021;12(1):5525.
133. DelaCourt A, Black A, Angel P, Drake R, Hoshida Y, Singal A, Lewin D, Taouli B, Lewis S, Schwarz M, Fiel MI, Mehta AS. N-Glycosylation Patterns Correlate with Hepatocellular Carcinoma Genetic Subtypes. **Mol Cancer Res**. 2021;19(11):1868-77.
134. Fujiwara N, Kobayashi M, Fobar AJ, Hoshida A, Marquez CA, Koneru B, Panda G, Taguri M, Qian T, Raman I, Li QZ, Hoshida H, Sezaki H, Kumada H, Tateishi R, Yokoo T, Yopp AC, Chung RT, Fuchs BC, Baumert TF, Marrero JA, Parikh ND, Zhu S, Singal AG, Hoshida Y. A blood-based prognostic liver secretome signature and long-term hepatocellular carcinoma risk in advanced liver fibrosis. **Med (N Y)**. 2021;2(7):836-50 e10.
135. Fujiwara N, Trepo E, Raman I, Li Q, Degre D, Gustot T, Moreno C, Hoshida Y. Plasma-signature-MELD score to predict survival in severe alcoholic hepatitis. *Clin Gastroenterol Hepatol*. 2021.
136. Juhling F, Hamdane N, Crouchet E, Li S, El Saghire H, Mukherji A, Fujiwara N, Oudot MA, Thumann C, Saviano A, Roca Suarez AA, Goto K, Masia R, Sojoodi M, Arora G, Aikata H, Ono A, Tabrizian P, Schwartz M, Polyak SJ, Davidson I, Schmidl C, Bock C, Schuster C, Chayama K, Pessaux P, Tanabe KK, Hoshida Y, Zeisel MB, Duong FH, Fuchs BC, Baumert TF. Targeting clinical epigenetic reprogramming for chemoprevention of metabolic and viral hepatocellular carcinoma. **Gut**. 2021;70(1):157-69.
137. Crouchet E, Li S, Sojoodi M, Bandiera S, Fujiwara N, El Saghire H, Zhu S, Qian T, Rasha FA, Del Zompo F, Barrett SC, Schaeffer E, Oudot MA, Ponsolles C, Durand SC, Ghoshal S, Arora G, Giannone F, Chung RT, Slovic N, Van Renne N, Felli E, Pessaux P, Lupberger J, Pochet N, Schuster C, Tanabe KK, Hoshida Y, Fuchs BC, Baumert TF. Hepatocellular carcinoma chemoprevention by targeting the angiotensin-converting enzyme and EGFR transactivation. **JCI Insight**. 2022;7(13).
138. Desert R, Ge X, Song Z, Han H, Lantvit D, Chen W, Das S, Athavale D, Abraham-Enachescu I,

- Blajszczak C, Chen Y, Musso O, Guzman G, Hoshida Y, Nieto N. Role of Hepatocyte-Derived Osteopontin in Liver Carcinogenesis. **Hepatol Commun.** 2022;6(4):692-709.
139. Fujiwara N, Fobar AJ, Raman I, Li QZ, Marrero JA, Parikh ND, Singal AG, Hoshida Y. A Blood-Based Prognostic Liver Secretome Signature Predicts Long-term Risk of Hepatic Decompensation in Cirrhosis. **Clin Gastroenterol Hepatol.** 2022;20(5):e1188-e91.
140. Fujiwara N, Kubota N, Crouch E, Koneru B, Marquez CA, Jajoriya AK, Panda G, Qian T, Zhu S, Goossens N, Wang X, Liang S, Zhong Z, Lewis S, Taouli B, Schwartz ME, Fiel MI, Singal AG, Marrero JA, Fobar AJ, Parikh ND, Raman I, Li QZ, Taguri M, Ono A, Aikata H, Nakahara T, Nakagawa H, Matsushita Y, Tateishi R, Koike K, Kobayashi M, Higashi T, Nakagawa S, Yamashita YI, Beppu T, Baba H, Kumada H, Chayama K, Baumert TF, Hoshida Y. Molecular signatures of long-term hepatocellular carcinoma risk in nonalcoholic fatty liver disease. **Sci Transl Med.** 2022;14(650):eabo4474.
141. Fujiwara N, Trepo E, Raman I, Li QZ, Degre D, Gustot T, Moreno C, Hoshida Y. Plasma-signature-model for end-stage liver disease score to predict survival in severe alcoholic hepatitis. **Clin Gastroenterol Hepatol.** 2022;20(3):651-7.
142. Kawamura S, Matsushita Y, Kurosaki S, Tange M, Fujiwara N, Hayata Y, Hayakawa Y, Suzuki N, Hata M, Tsuboi M, Kishikawa T, Kinoshita H, Nakatsuka T, Sato M, Kudo Y, Hoshida Y, Umemura A, Eguchi A, Ikenoue T, Hirata Y, Uesugi M, Tateishi R, Tateishi K, Fujishiro M, Koike K, Nakagawa H. Inhibiting SCAP/SREBP exacerbates liver injury and carcinogenesis in murine nonalcoholic steatohepatitis. **J Clin Invest.** 2022;132(11).
143. Kim MH, Kim MY, Salloum S, Qian T, Wong LP, Xu M, Lee Y, Shroff SG, Sadreyev RI, Corey KE, Baumert TF, Hoshida Y, Chung RT. Atorvastatin favorably modulates a clinical hepatocellular carcinoma risk gene signature. **Hepatol Commun.** 2022.
144. Lin N, Lin Y, Xu J, Liu D, Li D, Meng H, Gallant MA, Kubota N, Roy D, Li JS, Gorospe EC, Sherman M, Gish RG, Abou-Alfa GK, Nguyen MH, Taggart DJ, Van Etten RA, Hoshida Y, Li W. A multi-analyte cell-free DNA-based blood test for early detection of hepatocellular carcinoma. **Hepatol Commun.** 2022;6(7):1753-63.
145. Qian T, Fujiwara N, Koneru B, Ono A, Kubota N, Jajoriya AK, Tung MG, Crouch E, Song WM, Marquez CA, Panda G, Hoshida A, Raman I, Li QZ, Lewis C, Yopp A, Rich NE, Singal AG, Nakagawa S, Goossens N, Higashi T, Koh AP, Bian CB, Hoshida H, Tabrizian P, Gunasekaran G, Florman S, Schwarz ME, Hiottis SP, Nakahara T, Aikata H, Murakami E, Beppu T, Baba H, Rew W, Bhatia S, Kobayashi M, Kumada H, Fobar AJ, Parikh ND, Marrero JA, Rwema SH, Nair V, Patel M, Kim-Schulze S, Corey K, O'Leary JG, Klintmalm GB, Thomas DL, Dibas M, Rodriguez G, Zhang B, Friedman SL, Baumert TF, Fuchs BC, Chayama K, Zhu S, Chung RT, Hoshida Y. molecular signature predictive of long-term liver fibrosis progression to inform antifibrotic drug development. **Gastroenterology.** 2022;162(4):1210-25.
146. Quintavalle C, Meyer-Schaller N, Roessler S, Calabrese D, Marone R, Riedl T, Picco-Rey S, Panagiotou OA, Uzun S, Piscuoglio S, Boldanova T, Bian CB, Semela D, Jochum W, Cathomas G, Mertz KD, Diebold J, Mazzucchelli L, Koelzer VH, Weber A, Decaens T, Terracciano LM, Heikenwalder M, Hoshida Y, Andersen JB, Thorgeirsson SS, Matter MS. miR-579-3p controls hepatocellular carcinoma formation by regulating the phosphoinositide 3-kinase-protein kinase B pathway in chronically inflamed liver. **Hepatol Commun.** 2022;6(6):1467-81.
147. Rich NE, Parvathaneni A, Sen A, Odewole M, Arroyo A, Mufti AR, Kerr TA, Grant L, Tujios SR, Mayo MJ, Lee WM, Yang JD, Yokoo T, Gopal P, Hoshida Y, Zhu H, Yopp AC, Marrero JA, Singal AG. High neutrophil-lymphocyte ratio and delta neutrophil-lymphocyte ratio are associated with increased mortality in patients with hepatocellular cancer. **Dig Dis Sci.** 2022;67(6):2666-76.
148. Singal AG, Zhang E, Narasimman M, Rich NE, Waljee AK, Hoshida Y, Yang JD, Reig M, Cabibbo G, Nahon P, Parikh ND, Marrero JA. HCC surveillance improves early detection, curative treatment

- receipt, and survival in patients with cirrhosis: A meta-analysis. **J Hepatol.** 2022;77(1):128-39.
149. Sojoodi M, Erstad DJ, Barrett SC, Salloum S, Zhu S, Qian T, Colon S, Gale EM, Jordan VC, Wang Y, Li S, Ataenia B, Jalilifiroozinezhad S, Lanuti M, Zukerberg L, Caravan P, Hoshida Y, Chung RT, Bhavé G, Lauer GM, Fuchs BC, Tanabe KK. Peroxidasin deficiency re-programs macrophages toward pro-fibrosis function and promotes collagen resolution in liver. **Cell Mol Gastroenterol Hepatol.** 2022;13(5):1483-509.
  150. Filliol A, Saito Y, Nair A, Dapito DH, Yu LX, Ravichandra A, Bhattacharjee S, Affo S, Fujiwara N, Su H, Sun Q, Savage TM, Wilson-Kanamori JR, Caviglia JM, Chin L, Chen D, Wang X, Caruso S, Kang JK, Amin AD, Wallace S, Dobie R, Yin D, Rodriguez-Fiallos OM, Yin C, Mehal A, Izar B, Friedman RA, Wells RG, Pajvani UB, Hoshida Y, Remotti HE, Arpaia N, Zucman-Rossi J, Karin M, Henderson NC, Tabas I, Schwabe RF. Opposing roles of hepatic stellate cell subpopulations in hepatocarcinogenesis. **Nature.** 2022;610(7931):356-65.
  151. Roehlen N, Saviano A, El Saghire H, Crouchet E, Nehme Z, Del Zompo F, Jühling F, Oudot MA, Durand SC, Duong FHT, Cherradi S, Gonzalez Motos V, Almeida N, Ponsolles C, Heydmann L, Ostyn T, Lallement A, Pessaux P, Felli E, Cavalli A, Sgrignani J, Thumann C, Koutsopoulos O, Fuchs BC, Hoshida Y, Hofmann M, Vyberg M, Viuff BM, Galsgaard ED, Elson G, Toso A, Meyer M, Iacone R, Schweighoffer T, Teixeira G, Moll S, De Vito C, Roskams T, Davidson I, Heide D, Heikenwälder M, Zeisel MB, Lupberger J, Mailly L, Schuster C, Baumert TF. A monoclonal antibody targeting nonjunctional claudin-1 inhibits fibrosis in patient-derived models by modulating cell plasticity. **Sci Transl Med.** 2022 Dec 21;14(676):eabj4221.
  152. Verrier ER, Ligat G, Heydmann L, Doernbrack K, Miller J, Maglott-Roth A, Juhling F, El Saghire H, Heuschkel MJ, Fujiwara N, Hsieh SY, Hoshida Y, Root DE, Felli E, Pessaux P, Mukherji A, Mailly L, Schuster C, Brino L, Nassal M, Baumert TF. Cell-based cccDNA reporter assay combined with functional genomics identifies YBX1 as HBV cccDNA host factor and antiviral candidate target. **Gut.** 2022.
  153. Mender I, Siteni S, Barron S, Flusche AM, Kubota N, Yu C, Cornelius C, Tedone E, Maziveyi M, Grichuk A, Venkateswaran N, Conacci-Sorrell M, Hoshida Y, Kang R, Tang D, Gryaznov S, Shay JW. Activating an Adaptive Immune Response with a Telomerase-Mediated Telomere Targeting Therapeutic in Hepatocellular Carcinoma. **Mol Cancer Ther.** 2023;22(6):737-50.
  154. Rocha C, Doyle EH, Bowman CA, Fiel MI, Stueck AE, Goossens N, Bichoupan K, Patel N, Crismale JF, Makkar J, Lewis S, Perumalswami PV, Schiano TD, Hoshida Y, Schwartz M, Branch AD. Hepatocellular carcinoma in patients cured of chronic hepatitis C: Minimal steatosis. **Cancer Med.** 2023;12(9):10175-86.
  155. Roehlen N, Muller M, Nehme Z, Crouchet E, Juhling F, Del Zompo F, Cherradi S, Duong FHT, Almeida N, Saviano A, Fernandez-Vaquero M, Riedl T, El Saghire H, Durand SC, Ponsolles C, Oudot MA, Martin R, Brignon N, Felli E, Pessaux P, Lallement A, Davidson I, Bandiera S, Thumann C, Marchand P, Moll S, Nicolay B, Bardeesy N, Hoshida Y, Heikenwälder M, Iacone R, Toso A, Meyer M, Elson G, Schweighoffer T, Teixeira G, Zeisel MB, Laquerriere P, Lupberger J, Schuster C, Mailly L, Baumert TF. Treatment of HCC with claudin-1-specific antibodies suppresses carcinogenic signaling and reprograms the tumor microenvironment. **J Hepatol.** 2023;78(2):343-55.
  156. Saito Y, Yin D, Kubota N, Wang X, Filliol A, Remotti H, Nair A, Fazlollahi L, Hoshida Y, Tabas I, Wangenstein KJ, Schwabe RF. A Therapeutically Targetable TAZ-TEAD2 Pathway Drives the Growth of Hepatocellular Carcinoma via ANLN and KIF23. **Gastroenterology.** 2023;164(7):1279-92.
  157. Wang X, He Q, Zhou C, Xu Y, Liu D, Fujiwara N, Kubota N, Click A, Henderson P, Vancil J, Marquez CA, Gunasekaran G, Schwartz ME, Tabrizian P, Sarpel U, Fiel MI, Diao Y, Sun B, Hoshida Y, Liang S, Zhong Z. Prolonged hypernutrition impairs TREM2-dependent efferocytosis to license chronic liver inflammation and NASH development. **Immunity.** 2023;56(1):58-77 e11.

158. Wang Z, Zhu S, Jia Y, Wang Y, Kubota N, Fujiwara N, Gordillo R, Lewis C, Zhu M, Sharma T, Li L, Zeng Q, Lin YH, Hsieh MH, Gopal P, Wang T, Hoare M, Campbell P, Hoshida Y, Zhu H. Positive selection of somatically mutated clones identifies adaptive pathways in metabolic liver disease. **Cell**. 2023;186(9):1968-84 e20.
159. Wen Z, Lin YH, Wang S, Fujiwara N, Rong R, Jin KW, Yang DM, Yao B, Yang S, Wang T, Xie Y, Hoshida Y, Zhu H, Xiao G. Deep-Learning-Based Hepatic Ploidy Quantification Using H&E Histopathology Images. **Genes**. 2023;14(4):154.
160. Fujiwara N, Kubota N, Zhu S, Nakagawa S, Baba H, Hoshida Y. Disseminative Recurrence Signature for hepatocellular carcinoma from non-alcoholic fatty liver disease. **Gastro Hep Adv**. 2023;2(5):681-3.
161. Santasusagna S, Zhu S, Jawalagatti V, Carceles-Cordon M, Ertel A, Garcia-Longarte S, Song WM, Fujiwara N, Li P, Mendizabal I, Petrylak DP, Kelly WK, Reddy EP, Wang L, Schiewer MJ, Lujambio A, Karnes J, Knudsen KE, Cordon-Cardo C, Dong H, Huang H, Carracedo A, Hoshida Y, Rodriguez-Bravo V, Domingo-Domenech J. Master transcription factor reprogramming unleashes selective translation promoting castration resistance and immune evasion in lethal prostate cancer. **Cancer Discov**. 2023;13(12):2584-609.
162. Hsiehchen D, Beg MS, Kainthla R, Lohrey J, Kazmi SM, Khosama L, Maxwell MC, Kline H, Katz C, Hassan A, Kubota N, Siglinsky E, Pillai AK, Youssoufian H, Mockbee C, Culm K, Uhlik M, Benjamin L, Brekken RA, Ahn C, Singal AG, Zhu H, Hoshida Y, Yopp AC. The phosphatidylserine targeting antibody bavituximab plus pembrolizumab in unresectable hepatocellular carcinoma: a phase 2 trial. **Nat Commun**. 2024;15(1):2178.
163. Kao SZ, Sangha K, Fujiwara N, Hoshida Y, Parikh ND, Singal AG. Cost-effectiveness of a precision hepatocellular carcinoma surveillance strategy in patients with cirrhosis. **EClinicalMedicine**. 2024;75:102755.
164. Macdonald JK, Taylor HB, Wang M, Delacourt A, Edge C, Lewin DN, Kubota N, Fujiwara N, Rasha F, Marquez CA, Ono A, Oka S, Chayama K, Lewis S, Taouli B, Schwartz M, Fiel MI, Drake RR, Hoshida Y, Mehta AS, Angel PM. The Spatial Extracellular Proteomic Tumor Microenvironment Distinguishes Molecular Subtypes of Hepatocellular Carcinoma. **J Proteome Res**. 2024;23(9):3791-805.
165. Mukherji A, Juhling F, Simanjuntak Y, Crouchet E, Del Zompo F, Teraoka Y, Haller A, Baltzinger P, Paritala S, Rasha F, Fujiwara N, Gadenne C, Slovic N, Oudot MA, Durand SC, Ponsolles C, Schuster C, Zhuang X, Holmes J, Yeh ML, Abe-Chayama H, Heikenwalder M, Sangiovanni A, Iavarone M, Colombo M, Fong SKH, McKeating JA, Davidson I, Yu ML, Chung RT, Hoshida Y, Chayama K, Lupberger J, Baumert TF. An atlas of the human liver diurnal transcriptome and its perturbation by hepatitis C virus infection. **Nat Commun**. 2024;15(1):7486.
166. Simon TG, Wilechansky RM, Stoyanova S, Grossman A, Dichtel LE, Lauer GM, Miller KK, Hoshida Y, Corey KE, Loomba R, Chung RT, Chan AT. Aspirin for Metabolic Dysfunction-Associated Steatotic Liver Disease Without Cirrhosis: A Randomized Clinical Trial. **JAMA**. 2024;331(11):920-9.
167. Suzuki H, Iwamoto H, Tanaka T, Sakaue T, Imamura Y, Masuda A, Nakamura T, Koga H, Hoshida Y, Kawaguchi T. Fibroblast growth factor inhibition by molecular-targeted agents mitigates immunosuppressive tissue microenvironment in hepatocellular carcinoma. **Hepatol Int**. 2024;18(2):610-22.
168. Tanabe KK, Zahrieh D, Strand CA, Hoshida Y, Flotte TJ, Della'Zanna G, Umar A, Chavin KD, Cleary S, Kubota N, Llovet JM, Patel T, Siegel C, Limburg PJ. Epidermal Growth Factor Receptor Inhibition With Erlotinib in Liver: Dose De-Escalation Pilot Trial as an Initial Step in a Chemoprevention Strategy. **Gastro Hep Adv**. 2024;3(3):426-39.
169. Zhu M, Wang Y, Lu T, Guo J, Li L, Hsieh MH, Gopal P, Han Y, Fujiwara N, Wallace DP, Yu ASL,

- Fang X, Ransom C, Verschleisser S, Hsiehchen D, Hoshida Y, Singal AG, Yopp A, Wang T, Zhu H. PKD1 mutant clones within cirrhotic livers inhibit steatohepatitis without promoting cancer. **Cell Metab.** 2024;36(8):1711-25 e8.
170. Zhu S, Kubota N, Wang S, Wang T, Xiao G, Hoshida Y. STIE: Single-cell level deconvolution, convolution, and clustering in in situ capturing-based spatial transcriptomics. **Nat Commun.** 2024;15(1):7559.
171. Fujiwara N, Lopez C, Marsh TL, Raman I, Marquez CA, Paul S, Mishra SK, Kubota N, Katz C, Kanzaki H, Gonzalez M, Quirk L, Deodhar S, Selvakumar P, Raj P, Parikh ND, Roberts LR, Schwartz ME, Nguyen MH, Befeler AS, Page-Lester S, Srivastava S, Feng Z, Reddy KR, Khaderi S, Asrani SK, Kanwal F, El-Serag HB, Marrero JA, Singal AG, Hoshida Y. Phase 3 Validation of Prognostic Liver Secretome Signature With alpha-Fetoprotein Plus Age, Male Sex, Albumin-Bilirubin, and Platelets for Hepatocellular Carcinoma Risk Stratification in Cirrhosis. **Gastroenterology.** 2024.
172. Gu Z, Wang S, Rong R, Zhao Z, Wu F, Zhou Q, Wen Z, Chi Z, Fang Y, Peng Y, Jia L, Chen M, Yang DM, Hoshida Y, Xie Y, Xiao G. CSGO: A Deep Learning Pipeline for Whole-Cell Segmentation in Hematoxylin and Eosin Stained Tissues. **Lab Invest.** 2024:102184.
173. Lu C, Pankaj A, Raabe M, Nawrocki C, Liu A, Xu N, Patel BK, Emmett MJ, Coley AK, Ferrone CR, Deshpande V, Bhan I, Hoshida Y, Ting DT, Aryee MJ, Franses JW. HCC spatial transcriptomic profiling reveals significant and potentially targetable cancer-endothelial interactions. **Hepatol Commun.** 2024;8(10).
174. Wang M, Grauzam S, Bayram MF, Dressman J, DelaCourt A, Blaschke C, Liang H, Scott D, Huffman G, Black A, Ochoa-Rios S, Lewin D, Angel PM, Drake RR, Ball L, Bethard J, Castellino S, Kono Y, Kubota N, Hoshida Y, Quirk L, Yopp A, Gopal P, Singal A, Mehta AS. Spatial omics-based machine learning algorithms for the early detection of hepatocellular carcinoma. **Commun Med.** 2024;4(1):258.

#### Reviews, Chapters, Monographs and Editorials

1. Hoshida Y, Shiratori Y, Omata M. Difficulties in conducting controlled trials in radical therapies for nonadvanced hepatocellular carcinoma. **Hepatology.** 2000;32(4 Pt 1):877-80.
2. Otsuka M, Hoshida Y, Kato N, Moriyama M, Taniguchi H, Arai M, Mori M, Seki N, Omata M. Liver chip and gene shaving. **J Gastroenterol.** 2003;38 Suppl 15:89-92.
3. Hoshida Y. Risk of recurrence in hepatitis B-related hepatocellular carcinoma: impact of viral load in late recurrence. **J Hepatol.** 2009;51(5):842-4.
4. Hoshida Y. Tumor-derived molecular information and outcome in hepatocellular carcinoma. **J Hepatol.** 2009;51(3):595-6; author reply 6-7.
5. Hoshida Y, Golub TR. Prolonged therapy for hepatitis C with low-dose peginterferon. **N Engl J Med.** 2009;360(11):1152; author reply -3.
6. Hoshida Y, Villanueva A, Llovet JM. Molecular profiling to predict hepatocellular carcinoma outcome. **Expert Rev Gastroenterol Hepatol.** 2009;3(2):101-3.
7. Hoshida Y, Toffanin S, Lachenmayer A, Villanueva A, Minguez B, Llovet JM. Molecular classification and novel targets in hepatocellular carcinoma: recent advancements. **Semin Liver Dis.** 2010;30(1):35-51.
8. Lachenmayer A, Hoshida Y, Llovet JM. Hippo tumor suppressor pathway: novel implications for the treatment of hepatocellular carcinoma. **Gastroenterology.** 2010;139(2):692-4.
9. Villanueva A, Hoshida Y, Toffanin S, Lachenmayer A, Alsinet C, Savic R, Cornella H, Llovet JM. New strategies in hepatocellular carcinoma: genomic prognostic markers. **Clin Cancer Res.** 2010;16(19):4688-94.
10. Villanueva A, Newell P, Hoshida Y. Inherited hepatocellular carcinoma. **Best Pract Res Clin**

- Gastroenterol.** 2010;24(5):725-34.
11. Hoshida Y. Molecular signatures and prognosis of hepatocellular carcinoma. **Minerva Gastroenterol Dietol.** 2011;57(3):311-22.
  12. Villanueva A, Hoshida Y. Depicting the role of TP53 in hepatocellular carcinoma progression. **J Hepatol.** 2011;55(3):724-5.
  13. Villanueva A, Hoshida Y., Llovet JM. Hepatocellular carcinoma enters the sequencing era. **Gastroenterology.** 2011;141(5):1943-5.
  14. Hoshida Y. Molecular Epidemiology of Hepatocellular Carcinoma. **Clin Liver Dis (Hoboken).** 2012;1(6):177-9.
  15. Hoshida Y., Fuchs BC, Tanabe KK. Genomic risk of hepatitis C-related hepatocellular carcinoma. **J Hepatol.** 2012;56(3):729-30.
  16. Hoshida Y., Fuchs BC, Tanabe KK. Prevention of hepatocellular carcinoma: potential targets, experimental models, and clinical challenges. **Curr Cancer Drug Targets.** 2012;12(9):1129-59.
  17. Hoshida Y., Moeini A, Alsinet C, Kojima K, Villanueva A. Gene signatures in the management of hepatocellular carcinoma. **Seminars in oncology.** 2012;39(4):473-85.
  18. Deshmukh M, Hoshida Y. Genomic profiling of cell lines for personalized targeted therapy for hepatocellular carcinoma. **Hepatology.** 2013;58(6):2207.
  19. Tanabe KK, Hoshida Y. Prognostic gene signatures for hepatocellular carcinoma: what are we measuring? **Ann Surg Oncol.** 2013;20(12):3707-8.
  20. Chen X, Sun X, Hoshida Y. Survival analysis tools in genomics research. **Hum Genomics.** 2014;8:21.
  21. Hoshida Y., Fuchs BC, Bardeesy N, Baumert TF, Chung RT. Pathogenesis and prevention of hepatitis C virus-induced hepatocellular carcinoma. **J Hepatol.** 2014;61(1 Suppl):S79-90.
  22. Fuchs BC, Hoshida Y., Tanabe KK. Reply: To PMID 24677197. **Hepatology.** 2015;61(2):729-30.
  23. Goossens N, Hoshida Y. Hepatitis C virus-induced hepatocellular carcinoma. **Clin Mol Hepatol.** 2015;21(2):105-14.
  24. Goossens N, Hoshida Y. Personalized management of hepatocellular carcinoma based on molecular information: future prospects. **Clin Liver Dis (Hoboken).** 2015;5(6):132-5.
  25. Goossens N, Hoshida Y., Aguirre-Ghiso JA. Origin and interpretation of cancer transcriptome profiling: the essential role of the stroma in determining prognosis and drug resistance. **EMBO Mol Med.** 2015;7(11):1385-7.
  26. Goossens N, Nakagawa S, Hoshida Y. Molecular prognostic prediction in liver cirrhosis. **World J Gastroenterol.** 2015;21(36):10262-73.
  27. Goossens N, Nakagawa S, Sun X, Hoshida Y. Cancer biomarker discovery and validation. **Transl Cancer Res.** 2015;4(3):256-69.
  28. Goossens N, Sun X, Hoshida Y. Molecular classification of hepatocellular carcinoma: potential therapeutic implications. **Hepat Oncol.** 2015;2(4):371-9.
  29. Bandiera S, Billie Bian C, Hoshida Y., Baumert TF, Zeisel MB. Chronic hepatitis C virus infection and pathogenesis of hepatocellular carcinoma. **Curr Opin Virol.** 2016;20:99-105.
  30. Goossens N, Hoshida Y. Is Hepatocellular Cancer the Same Disease in Alcoholic and Nonalcoholic Fatty Liver Diseases? **Gastroenterology.** 2016;150(8):1710-7.
  31. Kim RS, Goossens N, Hoshida Y. Use of big data in drug development for precision medicine. **Expert Rev Precis Med Drug Dev.** 2016;1(3):245-53.
  32. McMahon B, Block J, Block T, Cohen C, Evans AA, Hosangadi A, London WT, Sherman M, Princeton HCCWp. Hepatitis-Associated Liver Cancer: Gaps and Opportunities to Improve Care. **J Natl Cancer Inst.** 2016;108(4).
  33. Baumert TF, Juhling F, Ono A, Hoshida Y. Hepatitis C-related hepatocellular carcinoma in the era of new generation antivirals. **BMC Med.** 2017;15(1):52.
  34. Erstad DJ, Tager AM, Hoshida Y., Fuchs BC. The autotaxin-lysophosphatidic acid pathway emerges as

- a therapeutic target to prevent liver cancer. **Mol Cell Oncol.** 2017;4(3):e1311827.
35. Goossens N, Bian CB, Hoshida Y. Tailored algorithms for hepatocellular carcinoma surveillance: Is one-size-fits-all strategy outdated? **Curr Hepatol Rep.** 2017;16(1):64-71.
  36. Higashi T, Friedman SL, Hoshida Y. Hepatic stellate cells as key target in liver fibrosis. **Adv Drug Deliv Rev.** 2017;121:27-42.
  37. Rodriguez-Bravo V, Carceles-Cordon M, Hoshida Y, Cordon-Cardo C, Galsky MD, Domingo-Domenech J. The role of GATA2 in lethal prostate cancer aggressiveness. **Nat Rev Urol.** 2017;14(1):38-48.
  38. Wooden B, Goossens N, Hoshida Y, Friedman SL. Using Big Data to Discover Diagnostics and Therapeutics for Gastrointestinal and Liver Diseases. **Gastroenterology.** 2017;152(1):53-67 e3.
  39. Alter H, Block T, Brown N, Brownstein A, Brosgart C, Chang KM, Chen PJ, Chisari FV, Cohen C, El-Serag H, Feld J, Gish R, Glenn J, Greten T, Guo H, Guo JT, Hoshida Y, Hu J, Kowdley KV, Li W, Liang J, Locarnini S, Lok AS, Mason W, McMahon B, Mehta A, Perrillo R, Revill P, Rice CM, Rinaudo J, Schinazi R, Seeger C, Shetty K, Tavis J, Zoulim F. A research agenda for curing chronic hepatitis B virus infection. **Hepatology.** 2018;67(3):1127-31.
  40. Block TM, Alter H, Brown N, Brownstein A, Brosgart C, Chang KM, Chen PJ, Cohen C, El-Serag H, Feld J, Gish R, Glenn J, Greten TF, Guo JT, Hoshida Y, Kowdley KV, Li W, Lok AS, McMahon B, Mehta A, Perrillo R, Rice CM, Rinaudo J, Schinazi RF, Shetty K. Research priorities for the discovery of a cure for chronic hepatitis B: Report of a workshop. **Antiviral Res.** 2018;150:93-100.
  41. Fujiwara N, Friedman SL, Goossens N, Hoshida Y. Risk factors and prevention of hepatocellular carcinoma in the era of precision medicine. **J Hepatol.** 2018;68(3):526-49.
  42. Zhu S, Hoshida Y. Molecular heterogeneity in hepatocellular carcinoma. **Hepat Oncol.** 2018;5(1):HEP10.
  43. Athuluri-Divakar SK, Hoshida Y. Generic chemoprevention of hepatocellular carcinoma. **Ann N Y Acad Sci.** 2019;1440(1):23-35.
  44. Baumert TF, Hoshida Y. Addressing the Challenges of Hepatitis C Cure and Persistent Risk of Hepatocellular Carcinoma. **Viruses.** 2019;11(5).
  45. Fujiwara N, Hoshida Y. Hepatocellular Carcinoma Risk Stratification by Genetic Profiling in Patients with Cirrhosis. **Semin Liver Dis.** 2019;39(2):153-62.
  46. Fujiwara N, Singal AG, Hoshida Y. Dose and Duration of Aspirin Use to Reduce Incident Hepatocellular Carcinoma. **Hepatology.** 2019;70(6):2216-7.
  47. Marquardt P, Hoshida Y, Singal AG. Aspirin: Does it Have a Role for Chemoprevention of Hepatocellular Carcinoma? **Gastroenterology.** 2019;156(5):1530-1.
  48. Qian T, Zhu S, Hoshida Y. Use of big data in drug development for precision medicine: an update. **Expert Rev Precis Med Drug Dev.** 2019;4(3):189-200.
  49. Yarchoan M, Agarwal P, Villanueva A, Rao S, Dawson LA, Llovet JM, Finn RS, Groopman JD, El-Serag HB, Monga SP, Wang XW, Karin M, Schwartz RE, Tanabe KK, Roberts LR, Gunaratne PH, Tsung A, Brown KA, Lawrence TS, Salem R, Singal AG, Kim AK, Rabiee A, Resar L, Hoshida Y, He AR, Ghoshal K, Ryan PB, Jaffee EM, Guha C, Mishra L, Coleman CN, Ahmed MM. Recent Developments and Therapeutic Strategies against Hepatocellular Carcinoma. **Cancer Res.** 2019;79(17):4326-30.
  50. Fujiwara N, Hoshida Y. Viral Exposure Signature Associated with Liver Cancer Risk. **Trends Mol Med.** 2020;26(8):711-3.
  51. Fujiwara N, Qian T, Koneru B, Hoshida Y. Omics-derived hepatocellular carcinoma risk biomarkers for precision care of chronic liver diseases. **Hepatol Res.** 2020;50(7):817-30.
  52. Kubota N, Fujiwara N, Hoshida Y. Clinical and Molecular Prediction of Hepatocellular Carcinoma Risk. **J Clin Med.** 2020;9(12).
  53. Li S, Saviano A, Erstad DJ, Hoshida Y, Fuchs BC, Baumert T, Tanabe KK. Risk Factors, Pathogenesis,

- and Strategies for Hepatocellular Carcinoma Prevention: Emphasis on Secondary Prevention and Its Translational Challenges. **J Clin Med.** 2020;9(12).
54. Hoshida Y. Current Status of the Use of Statins and Aspirin in the Chemoprevention of Hepatocellular Carcinoma. **Gastroenterol Hepatol.** 2020 Jun;16(6):319-321.
  55. Klionsky DJ, Abdel-Aziz AK, Abdelfatah S, ..., Hoshida Y, ..., Sluimer JC, Stallings CL, Tong CK. Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition). **Autophagy.** 2021;17(1):1-382.
  56. Zhu S, Kubota N, Hoshida Y. Transcriptome-Guided Design of Physiological Multilineage Liver Organoids. **Trends Genet.** 2021;37(5):403-404.
  57. Singal AG, Hoshida Y, Pinato DJ, Marrero J, Nault JC, Paradis V, Tayob N, Sherman M, Lim YS, Feng Z, Lok AS, Rinaudo JA, Srivastava S, Llovet JM, Villanueva A. International Liver Cancer Association (ILCA) White Paper on Biomarker Development for Hepatocellular Carcinoma. **Gastroenterology.** 2021;160(7):2572-2584.
  58. Dana J, Venkatasamy A, Saviano A, Lupberger J, Hoshida Y, Vilgrain V, Nahon P, Reinhold C, Gallix B, Baumert TF. Conventional and artificial intelligence-based imaging for biomarker discovery in chronic liver disease. **Hepatol Int.** 2022;16(3):509-22.
  59. Rasha F, Paul S, Simon TG, Hoshida Y. Hepatocellular Carcinoma Chemoprevention with Generic Agents. **Semin Liver Dis.** 2022;42(4):501-13.
  60. Lee YT, Fujiwara N, Yang JD, Hoshida Y. Risk stratification and early detection biomarkers for precision HCC screening. **Hepatology.** 2023;78(1):319-62.
  61. Dhanasekaran R, Suzuki H, Lemaitre L, Kubota N, Hoshida Y. Molecular and immune landscape of hepatocellular carcinoma to guide therapeutic decision making. **Hepatology.** 2023.
  62. Kanzaki H, Katz C, Hoshida Y. Matrisomic characterization of hepatocellular carcinoma to inform individualized patient management. **Hepatology.** 2023;78(3):691-3.
  63. Singal AG, Parikh ND, Hoshida Y. Precision HCC Surveillance: It Is All in the Number (Needed). **Dig Dis Sci.** 2023;68(3):720-2.62.
  64. Suzuki H, Singal AG, Baumert TF, Chung RT, Kawaguchi T, Hoshida Y. Prevention of liver cancer in the era of next-generation antivirals and obesity epidemic. **Hepatology.** 2024, in press.
  65. Rezaee-Zavareh MS, Koltsova EK, Hoshida Y, Yang JD. Primary liver cancer spectrum: current knowledge and the next steps. **Hepatobiliary Surg Nutr.** 2024 Feb 1;13(1):157-160.
  66. Kanzaki H, Hoshida Y. Transcriptomic signature in advanced hepatocellular carcinoma tissue to predict combination immunotherapy response. **Clin Mol Hepatol.** 2024.
  67. Macias RIR, Kanzaki H, Berasain C, Avila MA, Marin JIG, Hoshida Y. The Search for Risk, Diagnostic, and Prognostic Biomarkers of Cholangiocarcinoma and Their Biological and Clinicopathologic Significance. **Am J Pathol.** 2024.
  68. Kanzaki H, Hoshida Y. Reply: Correspondence: "Transcriptomic signature in hepatocellular carcinoma to predict immunotherapy response.". **Clin Mol Hepatol.** 2024.
  69. Suzuki H, Mishra S, Paul S, Hoshida Y. Molecular and immune landscape of hepatocellular carcinoma for therapeutic development. **J Liver Cancer.** 2024.

#### Books/Textbooks

1. Villanueva A, Hoshida Y, Chiang DY, Llovet JM. Hepatocellular Carcinoma. In: Gelmann E, Sawyers C, Rauscher F, III (Eds.). *Molecular Oncology: Causes of Cancer and Targets for Treatment*. New York: Cambridge University Press; 2014.
2. Athuluri-Divakar SK, Hoshida Y. Molecular prognostic prediction in liver cirrhosis. In: Ginsburg G, Willard H (Eds.), *Genomic and Precision Medicine: vol.4, Infectious and Inflammatory Diseases*. Springer; 2019.

3. Hoshida Y (Ed.). Hepatocellular Carcinoma - Translational Precision Medicine Approach. Humana Press/Springer, 2019.
4. Fujiwara N, Liu PH, Athuluri-Divakar SK, Zhu S, Hoshida Y. Risk factors of hepatocellular carcinoma for precision personalized care. In: Hoshida Y, editor. Hepatocellular Carcinoma - Translational Precision Medicine Approaches. Humana Press/Springer; 2019.
5. Saviano A, Roehlen N, Virzi A, Suarez AAR, Hoshida Y, Lupberger J, Baumert TF. Stromal and immune drivers of hepatocarcinogenesis. In: Hoshida Y (Ed.). Hepatocellular Carcinoma - Translational Precision Medicine Approaches. Humana Press/Springer; 2019.
6. Bian CB, Hoshida Y, Song WM. Molecular subtyping of hepatocellular carcinoma tumors. In: Chen X (Ed.). Methods in Molecular Biology. Springer; 2021 in press.
7. Jajoriya A, Kubota N, Fujiwara N, Hoshida Y. Prevention of liver diseases with natural products. In: Natural Products for Disease Chemoprevention, The Royal Society of Chemistry 2022, in press.
8. Kubota N, Fujiwara N, Hoshida Y. Liver cancer risk-predictive molecular biomarkers specific to clinico-epidemiological contexts. In: Sirica (Ed.), Advances in Cancer Research - Hepatobiliary cancers: Translational advances and precision medicine. 2022;156:1-37.