

The Liver Week 2019

June 20-22, 2019 | BEXCO, Busan, South Korea

The 25th Annual Meeting of the Korean Association for the Study of the Liver
The Korean Association of HBP Surgery Symposium
The 22nd General Symposium of the Korean Liver Cancer Association
The Korean Liver Transplantation Society Symposium

DAY 1 Thursday, June 20, 2019

Basic Forum 1. Hepatitis Virus (*K)

Molecular Basis for Cure of Hepatitis B Virus Infection	2
<i>Kyun-Hwan Kim</i>	
Drug Development for Hepatitis B Virus Treatment	5
<i>Sung-Gyoo Park</i>	
Identification and Validation of Druggable Targets in the Hepatitis C Virus Life Cycle	7
<i>Soon Bong Hwang</i>	
Hepatitis C Virus Vaccine Development.....	8
<i>Eui-Cheol Shin</i>	

Basic Forum 2. Hepatocellular Carcinoma and Steatohepatitis (*K)

Understanding of Immune Checkpoint Inhibitors in Hepatocellular Carcinoma	10
<i>Su-Hyung Park</i>	
Hepatocarcinogenesis and Animal Model.....	11
<i>Weonsang Ro</i>	
Hepatic mGluR5 Signaling in Endocannabinoid-Mediated Alcoholic Steatosis	13
<i>Won-il Jeong</i>	
Pathogenesis of Non-Alcoholic Steatohepatitis	15
<i>Sang Geon Kim</i>	

DAY 2 Friday, June 21, 2019

Symposium 1. Non-Alcoholic Fatty Liver Disease and Alcohol-Related Liver Disease

Fecal Microbiota Transplant in Alcoholic Hepatitis	20
<i>SM Shasthry</i>	
Systemic Manifestation in Non-Alcoholic Fatty Liver Disease.....	21
<i>Donghee Kim</i>	
Update on the Management of Non-Alcoholic Fatty Liver Disease.....	22
<i>Vincent Wong</i>	

Special Lectures with Debates: Can We Discontinue Hepatitis B Virus Therapy? Pros. vs. Cons.

Nucleoside Analogue (NUC) Treatment Can Be Discontinued.....	24
<i>Chun-Jen Liu</i>	
NUC Treatment Should Be Continued.....	25
<i>Young-Suk Lim</i>	

State-of-the-Art Lecture 1

Hepatitis B Virus: From Control to Cure	30
<i>Jia-Hong Kao</i>	

Symposium 2. Hepatitis B Virus

Viral Factors for Hepatitis B Virus-Related Hepatocellular Carcinoma	32
<i>Jeong Won Jang</i>	

Novel Biomarkers in Management of Chronic Hepatitis B <i>Yasuhiro Tanaka</i>	33
Current Treatment Strategy: Towards Hepatitis B Virus Cure <i>Seng Gee Lim</i>	35
Future Treatment Strategy: Towards Hepatitis B Virus Cure <i>Henry LY Chan</i>	36

Clinical Hepatology Update. Clinical Trials of Management in Chronic Liver Diseases (*K)

Chronic Hepatitis B: Where Are We Now for Functional Cure? <i>Hyun Woong Lee</i>	38
Non-Alcoholic Steatohepatitis: Key Targets and Endpoints <i>Byoung Kuk Jang</i>	41
Cirrhosis: Effort against Fibrosis and Portal Hypertension <i>Kyung-Ah Kim</i>	42
Hepatocellular Carcinoma Treatment Showdown: Mono vs. Combination Therapy <i>Ju Hyun Shim</i>	46

Hepatology Associates Course (*K)

Treatment of Chronic Hepatitis B and C Virus <i>Eileen L. Yoon</i>	50
Management of Acute Variceal Bleeding <i>Seung Kak Shin</i>	55
Liver Transplantation: When and How? <i>Bum-Soo Kim</i>	60
Hepatocellular Carcinoma: Diagnosis and Tumor Staging <i>Woo Jin Chung</i>	65

The Liver Week Satellite Symposium for Regeneration Medicine

Comparison of Bone Marrow-Derived Mesenchymal Stem Cells Isolated from Normal and Cirrhotic Patients <i>Young Woo Eom</i>	72
Feasibility of Enhanced PRL-1 in Placenta-derived Mesenchymal Stem Cells by Gene Modification on a Rat Model with Hepatic Failure <i>Gi Jin Kim</i>	74
Vascularized Liver Tissue with Different Types of Endothelial Cells and Recovery Aids for Acute Liver Failure <i>Jaeseo Lee, DoYeon Park, Soo Hyun Kim</i>	75
MicroRNA Profile Analysis in Liver Fibrotic Tissue and Hepatic Differentiated Human Bone Marrow-Derived Mesenchymal Stem Cells <i>Jung Hoon Cha</i>	76
Proteomics Approach for Translational Research, Focusing on Liver Disease <i>Kyunggon Kim</i>	77

KLTS Symposium 1. Conundrum: Transplanted Liver Pathology

Liver Allograft Pathology: Developments in Antibody-Mediated Rejection <i>Christopher Bellamy</i>	80
Is a Protocol Biopsy Needed in a Liver Recipient? <i>Suk Kyun Hong</i>	81

KAHBPS-KLTS Joint Symposium. Diagnosis and Management of Combined Hepatocellular Carcinoma (HCC) and Cholangiocellular Carcinoma (CCC)

Pathological Point of View of Combined HCC and CCA: What Is the Origin and Diagnostic Criteria of Combined HCC and CCA? <i>Young Nyun Park</i>	84
---	----

Imaging Features of Combined HCC and CCC: What Is the Difference Compared with HCC or CCC?	85
<i>Chang-Hee Lee</i>	
Surgical Treatment and Prognosis of Combined HCC and CCC	87
<i>Ryusei Matsuyama, Yasuhiro Yabushita, Yuki Homma, Tkaumi Kumamoto, Itaru Endo</i>	
Issues of Combined HCC and CCC in Liver Transplantation	88
<i>Young Seok Han</i>	

KLTS Special Lecture

Donation after Circulatory Death Liver Procurement in Real Practice	90
<i>Koji Hashimoto</i>	

KLTS Symposium 2. Use of Donation after Circulatory Death to Overcome the Decrease of Brain Death Donor (*K)

Current Status and Problems of Organ Donation in Korea	92
<i>Won-Hyun Cho</i>	
Current Status of Liver Allocation System	93
<i>Jae Geun Lee</i>	
Institutional Issue and Limit of Donation after Cardiac Death	94
<i>Dong-Sik Kim</i>	

KASL-KLTS Joint Symposium: Hepatorenal Syndrome (HRS) (*K)

HRS: Definition, Pathophysiology, and Medical Management	96
<i>Yeon Seok Seo</i>	
When to Consider Simultaneous Liver Kidney and How to Prevent Adverse Renal Outcome after Liver Transplantation	100
<i>Jae Min Chun</i>	
MELD Purgatory in HRS and Allocation Policy: When to Start Renal Replacement Therapy?	102
<i>Shin Hwang</i>	
When to Start Renal Replacement Therapy for Hepatorenal Syndrome	103
<i>Hye Ryoun Jang</i>	

KLTS Coordinator Session (*K)

Recovery Management for Old Age Recipient	106
<i>Man Ki Ju</i>	
Transplantation Counseling for an Elderly Liver Transplantation Patient	107
<i>Hyung Sook Kim</i>	
Acute Liver Failure	108
<i>Dong Jin Joo</i>	
Patient Management after Liver Transplantation	110
<i>Seung Heui Hong</i>	

KLCA Symposium 1. A Developing Strategy to Improve Diagnosis of HCC

Surveillances for HCC in Patients with Non-Alcoholic Fatty Liver Disease	114
<i>Vincent Wong</i>	
Are Emerging Biomarkers and Imaging Tools Better than Routine Abdominal Sonography for HCC Surveillance?	115
<i>Do Young Kim</i>	
Is LI-RADS Better for Diagnosis of HCC?	117
<i>Jeong Min Lee</i>	

KLCA General Meeting (*K)

0202 Liver Cancer Day Special Lecture	120
<i>Hyun Woong Lee</i>	

LCSGJ-KLCA Joint Symposium 1. One Step Forward for Understanding Basic Knowledge

Potential of Exosome-Carrying microRNAs in Liquid Biopsy	124
<i>Takahiro Ochiya</i>	
T Cell Based Adoptive Cell Therapy for Solid Cancers	125
<i>Yutaka Kawakami</i>	
Oncolytic Virus-Based Therapy for HCC	126
<i>Jeong Heo</i>	

LCSGJ-KLCA Joint Symposium 2. Similarities and Differences in Treatment of HCC

Recent Trends of Treatment for Intermediate Stage HCC: Japanese Experience	128
<i>Masatoshi Kudo</i>	
Recent Trends of Treatment for Intermediate Stage HCC: Korean Experience	129
<i>Ji Hoon Kim</i>	
Recent Trends of Treatment for Advanced Stage HCC: Japanese Experience	130
<i>Kazuomi Ueshima</i>	
Recent Trends of Treatment for Advanced Stage HCC: Korean Experience	131
<i>Won Young Tak</i>	

KLCA Symposium 2. New and Emerging Systemic Therapies in Advanced HCC

First Line Treatments for HCC	134
<i>Arndt Vogel</i>	
Second Line Treatments for HCC	135
<i>Stephen L. Chan</i>	
A Future of Systemic Agents: Emerging Therapies and Strategies	136
<i>Baek-Yeol Rhyoo</i>	
Combination of Interventional and Systemic Therapies for HCC: Current Status and Future Direction	137
<i>Joong-Won Park</i>	

DAY 3 Saturday, June 22, 2019

Symposium 3. Hepatitis C Virus

Long-Term Outcome of Direct-Acting Antiviral Treatment	140
<i>Jung Il Lee</i>	
Follow-Up Strategies Following Cure of Hepatitis C Virus Infection	142
<i>Naoya Sakamoto</i>	
Unmet Needs in the Era of Direct-Acting Antiviral Therapy	143
<i>Ming-Lung Yu</i>	

State-of-the-Art Lecture 2

Current Understanding of Autoimmune Liver Diseases	146
<i>Atsushi Tanaka</i>	

Symposium 4. Cirrhosis

Mesenchymal Stem Cell Therapy for Liver Cirrhosis - Basic Study and Clinical Application	150
<i>Shuji Terai</i>	
The Role of Albumin Related with Systemic Inflammation in Cirrhosis.....	151
<i>Paolo Angeli</i>	
Role of Cytoglobin, a Novel Radical Scavenger in Stellate Cell Activation and Hepatic Fibrosis	152
<i>Norifumi Kawada</i>	

KAHBPS Symposium 1. Surgical Research in HBP Field – Challenges and Barriers

Surgeon-Scientists: An Endangered Species?	154
<i>Sundeep G. Keswani</i>	
Basic/Translational Research: How to Start and Grow?	155
<i>Say-June Kim</i>	
Clinical Research to Reduce Pancreatic Fistula after Distal Pancreatectomy	156
<i>Manabu Kawaj, Seiko Hirono, Kenichi Okada, Motoki Miyazawa, Yuji Kitahata, Ryohei Kobayashi, Masaki Ueno, Shinya Hayami, Hiroki Yamaue</i>	

KAHBPS Symposium 2. Clinical Issues in Non-Hepatic Abdominal Surgery in Patients with Liver Cirrhosis

Management of Gallstones and Acute Cholecystitis in Patient with Liver Cirrhosis - Medical Treatment: Indication and Result of Medical Treatment	158
<i>Ki Tae Suk</i>	
Management of Gallstones and Acute Cholecystitis in Patient with Liver Cirrhosis - Surgical Treatment: What Should We Caution to Consider Surgery?	161
<i>Shang Yu Wang</i>	
Clinical Outcomes and Prognosis of Emergency Surgery in Liver Cirrhosis Patient	162
<i>Fausto Catena</i>	
Elective Cancer Surgery in Patients with Liver Cirrhosis.....	163
<i>Sae Byeol Choi</i>	

KAHBPS Special Lecture

The Journey from Scientific Idea to Funded Grant: A Surgeon's Approach	166
<i>Sundeep G. Keswani</i>	

KAHBPS Symposium 3. Focus Review of Advanced Gallbladder Cancer Treatment (*K)

The Operative Indication of Advanced Gallbladder Cancer: How Much Advance Is the Limitation?	168
<i>Masayuki Ohtsuka, Hideyuki Yoshitomi, Katsunori Furukawa, Tsukasa Takayashiki, Satoshi Kuboki, Shigetsugu Takano</i>	
Recent Advances in the Chemotherapy in Advanced Gallbladder Cancer: Palliative vs. Neoadjuvant Chemotherapy	169
<i>Hei-Cheul Jeung</i>	
Case Presentation	170
<i>Chi-Young Jeong</i>	

Special Session. National Health Insurance Big Data Research (*K)

National Health Insurance Big Data Analysis: Process and Example.....	172
<i>Seong Yong Park</i>	
National Health Insurance Big Data Research: HCC Surveillance.....	173
<i>Yong-Han Paik</i>	
Role of Statins on Development and Progression of Non-Alcoholic Fatty Liver Disease: A Nationwide Nested Case-Control Study	174
<i>Jung Il Lee, Hyun Woong Lee, Kwan Sik Lee, Hye Sun Lee, Ju-Young Park</i>	

National Health Insurance Big Data Research: Liver Cirrhosis.....	175
<i>Dae Won Jun</i>	

Common Concerns: Hapatologists and Surgeons (*K)

Assessment of Surgical Risk in Patients with Cirrhosis	180
<i>Ki Tae Yoon</i>	
Determination of Preoperative Liver Function and Extent of Resection.....	183
<i>Bong-Wan Kim</i>	
Prophylaxis of Hepatitis B Virus Reactivation after Liver Transplantation	184
<i>Jae Hyun Han</i>	
Optimal Hepatitis C Virus Treatment Strategy for Patients Waiting for Liver Transplantation	185
<i>In Hee Kim</i>	

KAHBPS-KLTS-KLCA Joint Symposium 1. Unresolved Issues in HCC: Medical and Interventional Radiology

Adjuvant Therapy after Curative Treatment: Enough or Still Lacking?	196
<i>Su Jong Yu, Yun Bin Lee, Eun Ju Cho, Jeong-Hoon Lee, Yoon Jun Kim, Jung-Hwan Yoon</i>	
Direct Acting Antiviral and HCC in Chronic Hepatitis C: Friend or Foe?	197
<i>Hyung Joon Kim</i>	
How to Overcome Long-Term Decline in Survival of HCC Patients Treated with Ablation	199
<i>Shuichiro Shiina</i>	

KAHBPS-KLTS-KLCA Joint Symposium 2. Unresolved Issues in HCC: Surgical and Radiation Oncology

Will Laparoscopic Approach Be Almighty Weapon in Surgery of HCC?.....	202
<i>Jong Man Kim</i>	
Priority Policy for Patients with HCC Awaiting Liver Transplantation: Unresolved Issue?	204
<i>Dorry L. Segev</i>	
Radiation Therapy for Early HCC: Will It Be a Good Option in Practice?.....	205
<i>Sang Min Yoon</i>	

Asian Forum: Korea-Japan-Taiwan

Current Status and Emerging Issues in Liver Diseases in Japan	208
<i>Hayato Hikita</i>	
Current Status and Emerging Issues in Liver Diseases in Taiwan.....	210
<i>Chun-Jen Liu</i>	
Current Status and Emerging Issues in Liver Diseases in Korea.....	211
<i>Yoon Jun Kim</i>	
Cirrhotic Portal Hypertension: From Arterial Vasodilatation to Systemic Inflammation	212
<i>Han-Chieh Lin</i>	

USG Session 1. Upgrading the USG Education (*K)

Current Status of Ultrasonography Education Program and Ultrasonography Specialist Certificates of KASL	214
<i>Hyung Joon Yim</i>	
How Do I Teach Abdominal USG for Trainee?	215
<i>Yun Soo Kim</i>	
How to Perform Contrast-Enhanced USG: Experiences in Japan	219
<i>Fuminori Moriyasu</i>	

USG Session 2. Diversifying the Field of USG for Training (*K)

Setting-Up an Abdominal USG Facility and Training Program	222
<i>In Hee Kim</i>	
Tips for Selection and Maintenance of USG Machines	227
<i>Hyun Joo Kim, Han Jong Yu</i>	
Assessment of Hepatic Fibrosis with 2-dimensional Real-Time Shear Wave Elastography (SWE).....	228
<i>Joo Hyun Sohn</i>	
How to Improve Precision in Targeting Focal Lesion	236
<i>Shuichiro Shiina</i>	
New Insight for Lower Abdomen and Kidney USG	237
<i>Seong Sook Hong</i>	
Present and Future of National Health Insurance System for USG: What Do We Need to Prepare for?	241
<i>Hong Soo Kim</i>	

USG Trainee Session (*K)

How to Utilize the Various Functions of USG Machine.....	244
<i>Moon Young Kim</i>	
Basic Liver Scanning and Key Findings.....	254
<i>Jeong Eun Song</i>	
Pancreatobiliary USG Scanning Made Easy	260
<i>Soon Sun Kim</i>	

Plenary Session 1

PS 1-1	The Discontinuation of Nucleos(t)ide Analogue Treatment Is Not Associated with Higher Risk of HBsAg-Seroreversion after Antiviral-Induced HBsAg-Seroclearance: A Multicenter Cohort Study	270
	<i>Minseok Albert Kim, Jeong-Hoon Lee, Young-Suk Lim, Dong Hyun Sinn, Yewan Park, Seung Up Kim, Sang Gyune Kim, Yang Hyun Baek, Jae-Jun Shim, Heejoon Jang, Sun Woong Kim, Cheol-Hyung Lee, Yun Bin Lee, Eun Ju Cho, Su Jong Yu, Yoon Jun Kim, Jung-Hwan Yoon</i>	
PS 1-2	Gender Differences in the Association of Adipose Tissue and Sarcopenia in Patients with Cirrhosis.....	270
	<i>Seong Hee Kang, Soon Koo Baik, Moon Young Kim</i>	
PS 1-3	Ephrin-A3 (EFNA3) Is a Key Player in Hypoxic Microenvironment of Hepatocellular Carcinoma.....	271
	<i>Abdullah Husain, Elley Yung-Tuen Chiu, Daniel Wai-Hung Ho, Karen Man-Fong Sze, Lo-Kong Chan, Yu-Man Tsui, Carmen Chak-Lui Wong, and Irene Oi-Lin Ng</i>	
PS 1-4	Individualized Optimization of Posttransplant Hepatitis B Prophylaxis with Hepatitis B Immunoglobulin Using Half-Life Simulation	271
	<i>Shin Hwang, Gi-Won Song, Chul-Soo Ahn, Ki-Hun Kim, Deok-Bog Moon, Tae-Yong Ha, Dong-Hwan Jung, Gil-Chun Park, Yong-Gyu Chung, Hwui-Dong Cho, Jae-Hyun Kwon, Sung-Gyu Lee</i>	

Plenary Session 2

PS 2-1	Novel SNPs for Screening of Nonalcoholic Fatty Liver Disease: A Korean Population-Based Study.....	274
	<i>Min-Su Park</i>	
PS 2-2	Statin Use and the Risk of Hepatocellular Carcinoma in Patients with Chronic Hepatitis B.....	274
	<i>Myung Ji Goh, Dong Hyun Sinn, Wonseok Kang, Geum-Youn Gwak, Yong-Han Paik, Moon Seok Choi, Joon Hyeok Lee, Kwang Cheol Koh, Seung Woon Paik</i>	
PS 2-3	Robotic Major Liver Resections: Surgical Outcomes Compared with Open Major Liver Resections.....	275
	<i>Hye Yeon Yang, Seoung Yoon Rho, Dai Hoon Han, Jin Sub Choi, Gi Hong Choi</i>	
PS 2-4	Early Reduction of Regulatory T Cells by Calcineurin Inhibitor Is Associated with Acute Rejection in Liver Transplantation	277
	<i>Ji Won Han, Dong Jin Joo, Jong Hoon Kim, Min-Seok Rha, June Young Koh, Hye Jung Park, Jae Geun Lee, Myoung Soo Kim, Soon Il Kim, Eui-Cheol Shin, Jun Yong Park, Su-Hyung Park</i>	

Free Paper Session

1. HBV

O-001	Regular Follow-Up and Mortality in Patients with Chronic Hepatitis B: A National Health Insurance Cohort Study.....	280
	<i>Jae-Jun Shim, Gi-Ae Kim, Eunhye Kang, Jisun Myung, In-Hwan Oh, Byung-Ho Kim</i>	
O-002	Bone and Renal Safety Improvements in CHB Patients Switched to Tenofovir Alafenamide (TAF) after Tenofovir Disoproxil Fumarate (TDF) Treatment	280
	<i>Wai Kay Walter Seto, Maria Buti, Namiki Izumi, Young-Suk Lim, Jia-Hong Kao, Adrian Streinu-Cercel, Elena Nurmukhametova, Xiaoli Ma, Fehmi Tabak, Maciej Jablkowski, Vithika Suri, John F. Flaherty, Audrey H. La, Anuj Gaggar, Shuyuan Mo, Abhijit Chowdhury, Scott K. Fung, Wan-LONG Chuang, Edward J. Gane</i>	
O-003	A Phase 3, Stable Switching from Tenofovir Disoproxil Fumarate (TDF) to Tenofovir Alafenamide (TAF) in Chronic Hepatitis B (CHB) Patients: 48w Results.....	281
	<i>Sang Hoon Ahn, Won Young Tak, Seung-Kew Yoon, Young-Suk Lim, Kwan Soo Byun, June Sung Lee, Yoon Jun Kim, Hyung Joon Kim, Seung Woon Paik, Henry LY Chan</i>	
O-004	Tenofovir Disoproxil Fumarate Directly Regresses Liver Fibrosis by Inducing Hepatic Stellate Cell Apoptosis.....	282
	<i>Sung Won Lee, Sung Min Kim, Byung-Yoon Kang, Wonhee Hur, Hee Chul Nam, Jeong Won Jang, Seung Kew Yoon</i>	
O-005	Risk of Hepatocellular Carcinoma in Patients with Immune-Tolerant Chronic Hepatitis B	282
	<i>Gyeol Seong, Dong Hyun Sinn, Wonseok Kang, Geum-Youn Gwak, Moon Seok Choi, Joon Hyeok Lee, Kwang Cheol Koh, Seung Woon Paik, Yong-Han Paik</i>	
O-006	Detection of HBV Integration in the Human Genome Using High-Throughput Targeted Sequencing	283
	<i>Jeong Won Jang, Jin Seoub Kim, Hye Seon Kim, Hee Chul Nam, Pil Soo Sung, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon</i>	

2. ALD & NAFLD

O-007	Incidence and Risk Factors Analysis of Liver Cancer in Patients with Alcoholic Liver Disease: Retrospective Cohort Analysis of 5,160 Patients.....	283
	<i>Kyunghan Lee, Jin-Wook Kim, Si Ho Kim, Boo-Ok Jang, Jae Kyun Choi, Gwang Hyeon Choi, Eun Sun Jang, Sook-Hyang Jeong</i>	
O-008	Algorithms Using Noninvasive Tests Can Accurately Identify Patients with Advanced Fibrosis Due to NASH: Data from the STELLAR Clinical Trials.....	284
	<i>Vincent Wai-Sun Wong, Zobair M. Younossi, Stephen A. Harrison, Eric J. Lawitz, Naim Alkhouri, Manuel Romero-Gomez, Michael Trauner, Kathryn Kersey, Georgia Li, G. Mani Subramanian, Robert P. Myers, C. Stephen Djedjos, Ling Han, Guang Chen, Sooj Lee, Tuan Nguyen, Anita Kohli, Natalie Bzowej, Ziad Younes, Raj Vuppalanchi, Anita Kohli, Shiv Sarin, Naim Alkhouri, Mitchell L. Shiffman, Stephen A. Harrison, Zachary Goodman, Nezam H. Afzal, Maria Stepanova, T Okanou, Quentin M. Anstee</i>	

O-009	Development of Diagnostic Marker for NASH and Evaluation of Hepatic Steatosis and Fibrosis Using Biochemical Marker, TE, and MRI in Biopsy-Proven NAFLD Patients	285
	<i>Young-Sun Lee, Sung Won Chang, Ha Seok Lee, Ji Hoon Kim, Hee Sun Park, In Hee Kim, Baek-hui Kim, Chang Hee Lee, Jong Eun Yeon, So Young Kwon, and Kwan Soo Byun</i>	
O-010	The Impact of Controlled Attenuation Parameter on Liver Stiffness Measurement Using Transient Elastography in Patients with Nonalcoholic Fatty Liver Disease.....	286
	<i>Dong Hyeon Lee, Won Kim, Sae Kyung Joo, Yong Jin Jung, Kook Lae Lee, Byeong Gwan Kim</i>	
O-011	Serial Liver Stiffness and Controlled Attenuation Parameter Measurements by Transient Elastography in Patients with Type 2 Diabetes.....	286
	<i>Hye Won Lee, Grace Lai-Hung Wong, Raymond Kwok, Henry Lik-Yuen Chan, Juliana Chung-Ngor Chan, Alice Pik-Shan Kong, Vincent Wai-Sun Wong</i>	
O-012	Relationship between Incident Nonalcoholic Fatty Liver Disease and Body Composition Parameters at Baseline and during Follow-Up: A 8-Year Longitudinal Study	286
	<i>Hwi Young Kim, Su Jung Baik, Hye Ah Lee, Byoung Kwon Lee, Hye Sun Lee, Tae Hun Kim, and Kwon Yoo</i>	

3. Liver Cancer, Basic

O-013	MicroRNA-148a-5p Attenuates the Expression of CD44 and Suppresses Epithelial-Mesenchymal Transitions in Hepatocellular Carcinoma	287
	<i>Na Ri Park, Jung Hoon Cha, Sung Woo Cho, Jeong Won Jang, Jong Young Choi, Seung Kew Yoon, Si Hyun Bae</i>	
O-014	MAGE-1-Targeting Aptamer Inhibits Hepatocellular Carcinoma Cell Growth via PFKFB4 Suppression and ROS Overproduction	288
	<i>Yun Bin Lee, Eun Ju Cho, Jeong-Hoon Lee, Su Jong Yu, Yoon Jun Kim, Eun Ju Oh, Jong In Kim, Jong Hun Im, Jung Hwan Lee, Jung-Hwan Yoon</i>	
O-015	Kinase Suppressor of Ras 1 Promotes Development of TAZ-Mediated Intrahepatic Cholangiocarcinoma.....	288
	<i>Hyuk Moon, Kyungjoo Cho, Soonyoung Shin, Simon W. Ro, Beom Kyung Kim, Seung Up Kim, Jun Yong Park, Sang Hoon Ahn, Do Young Kim, Kwang-Hyub Han</i>	
O-016	Loss of ARID1A Serves as Prognostic Biomarker for Hepatocellular Carcinoma and Has Synthetic Lethality with PI3K/mTOR Inhibition.....	289
	<i>Sun Young Yim, Yun Seong Jeong, Ji-Hyun Shin, Tae Hyung Kim, Yeon Seok Seo, Ji Hoon Kim, Hyung Joon Yim, Ju-Seog Lee, Soon Ho Um</i>	
O-017	Identification of the Novel Exosomal Protein Markers of Hepatocellular Carcinoma	289
	<i>Hyo Jung Cho, Jung Woo Eun, Baek Geum Ok, Chul Won Seo, Hye Ri Ahn, Young-hwan Ahn, Jinhee Jung, Soon Sun Kim, Sung Won Cho, and Jae Youn Cheong</i>	
O-018	Establishment of Tyrosine Kinase Inhibitors-Resistant Murine Hepatocellular Carcinoma <i>in Vivo</i> Models and Identification of Resistance-Associated Pathways.....	290
	<i>Minseok Albert Kim, Su Jong Yu, Hyojin Noh, Heejeon Jang, Sun Woong Kim, Cheol-Hyung Lee, Yun Bin Lee, Eun Ju Cho, Jeong-Hoon Lee, Yoon Jun Kim, Jung-Hwan Yoon</i>	

4. Cirrhosis & Liver Failure

O-019	Generation of Induced Secretome from Adipose-Derived Stem Cells Specialized for Disease-Specific Treatment: An Experimental Mouse Model	290
	<i>Say-June Kim, Kee Hwan Kim</i>	
O-020	Clinical Impact of Circulating Exosomal microRNA as a Novel Biomarker of Liver Fibrosis	291
	<i>Young Chang, Jae Young Jang, Tom Ryu, Han Seul Park, Soung Won Jeong, Jeong-Ju Yoo, Sae Hwan Lee, Sang Gyune Kim, Young Seok Kim, Hong Soo Kim, So Young Jin, Seongho Ryu</i>	
O-021	New Therapeutic Strategies for Hepatic Fibrosis Using Stem Cell Printing Three-Dimensional Liver Patch	291
	<i>Sung Min Kim, Wonil Han, Wonhee Hur, Gil Won Lee, DongJun Park, Byung-Yoon Kang, Narendra K. Singh, Hyungseok Lee, Jinah Jang, Dong-woo Cho, Seung Kew Yoon</i>	
O-022	Development of a Prognostic Score to Predict Mortality in Patients with Pediatric Acute Liver Failure	292
	<i>Eun Joo Lee, Ju Whi Kim, Jin Soo Moon, Yu Bin Kim, Seok Hee Oh, Kyung Mo Kim, and Jae Sung Ko</i>	
O-023	Postoperative Hepatic Decompensation in Patients with Cirrhosis Undergoing Major Surgery: Prognostic Value of Liver Stiffness.....	292
	<i>Hana Park, Joo Ho Lee, Yeonjung Ha, Mi Na Kim, Seong Kyu Hwang, and Young Eun Chon</i>	
O-024	Clinical Application of New EASL Clinical Practice Guideline for Malnutrition in Cirrhosis Patients.....	293
	<i>Jin Hwa Park, Dae Won Jun, Dae Hyun Lim, Won Woo Seo, Ji Hyun Yeo, Na Ryung Choi, Jai Hoon Yoon, Kang Nyeong Lee, Hang Lak Lee, Oh Young Lee, Byung Chul Yoon, and Ho Soon Choi</i>	

5. HCV

O-025	Cost-Effectiveness of Screening and Treatment of All Korean Chronic Hepatitis C Patients	293
	<i>Do Young Kim, Gabriel Wong, Janet Lee, Nate Smith, Rob Blissett, Hyung Joon Kim</i>	
O-026	Preliminary Efficacy and Safety of 8-Week Glecaprevir/Pibrentasvir in Patients with HCV Genotype 1-6 Infection and Compensated Cirrhosis: The EXPEDITION-8 Study	294
	<i>Robert S Brown Jr, Christophe Hezode, Stanley Wang, Maria Buti, Wan-Long Chuang, Humberto Aguilar, Gábor Horváth, Barbara Rosado Carrion, Federico Rodriguez-Perez, Eric Cohen, Yiran B Hu, Gretja Schnell, Chih-Wei Lin, Lino Rodrigues, Roger Trinh, Federico J Mensa, Franco Felizarta, Yongkyun Won</i>	

O-027	Ledipasvir/Sofosbuvir for 12 Weeks Is Effective in HCV-Infected Asian Patients with Difference Liver Fibrosis Stages: Integrated Analysis of Clinical Studies	294
	<i>Chun-Jen Liu, Masashi Mizokami, Lai Wei, Young-Suk Lim, Sang Hoon Ahn, Seung Woon Paik, Ju-Hyun Kim, Qing Xie, Jin Youn, Chen-Yu Wang, Joe Llewellyn, Anu Osinusi, Gerald Grans, Wan-Long Chuang, Nobuyuki Enomoto</i>	
O-028	Real World Efficacy and Safety of DAA in Chronic Hepatitis C Patients with Genotype 2 in Korean Population	295
	<i>Myeong Seok Koh, Jae Joon Lee, Yang Hyon Baek, Sung Wook Lee, Sung Jae Park, Nae Yun Heo, Ki Tae Yoon, Young Mi Hong, Sang Soo Lee, Hyun Chin Cho, Kwang Il Seo</i>	
O-029	Use of Ribavirin for Chronic Hepatitis C Treatment on Direct-Acting Antiviral Era: Real World Practice	296
	<i>Hoon Gil Jo, Jung Hwan Yu, In Hee Kim, Dae-Ghon Kim, Gum Mo Jung, Yong Keun Cho, Tae Hee Lee, Myeong Jun Song, Sung-Bum Cho, Eun Young Cho</i>	
O-030	Design and Validation of Risk Prediction Model for Hepatocellular Carcinoma Development after Sustained Virological Response in Patients with Chronic Hepatitis C	297
	<i>Ho Soo Chun, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Cheol-Hyung Lee, Yun Bin Lee, Eun Ju Cho, Su Jong Yu, Yoon Jun Kim, Jung-Hwan Yoon, Jeong-Hoon Lee, and Seung Up Kim</i>	

6. Liver Cancer

O-031	Tumor Marker-Based Characterization of Patients with Intermediate-Stage Hepatocellular Carcinoma Deemed to Have a Grave Prognosis	298
	<i>Jun Sik Yoon, Dong-Hyun Sinn, Jeong-Hoon Lee, Hwi Young Kim, Cheol-Hyung Lee, Sun Woong Kim, Hyo Young Lee, Jun Yeol Nam, Young Chang, Yun Bin Lee, Eun Ju Cho, Su Jong Yu, Hyo-Cheol Kim, Jin Wook Chung, Yoon Jun Kim, Jung-Hwan Yoon</i>	
O-032	Hepatocyte-Specific MRI-Based Assessment of Indeterminate Hepatic Nodules in the Liver Transplant Evaluation of Cirrhotic Patients	298
	<i>Ha Il Kim, Jong Keon Jang, Jihye Lim, Seheon Chang, Jihyun An, Hyo Jeong Kang, Gi-Won Song, Sung-Gyu Lee, So Yeon Kim, Ju Hyun Shim</i>	
O-033	Response to Sorafenib in Patients with Advanced Hepatocellular Carcinoma: Predictive Analytics Using Machine Learning with a Neighborhood-Group Detection Method	299
	<i>Jun Hyuk Kang, Joong-Won Park, Minjong Lee, Bo Hyun Kim</i>	
O-034	A Multi-National, Multi-Institutional Study of Comparing an Efficacy of Stereotactic Body Radiation Therapy and Radiofrequency Ablation for Hepatocellular Carcinoma	299
	<i>Nalee Kim, Jason Cheng, Wen-Yen Huang, Tomoki Kimura, Victor HF Lee, Zhao Chong Zeng, Chul Seung Kay, Jinsil Seong</i>	
O-035	Practice Patterns, Radiologic Tumor Response, and Deterioration of Liver Function after Transarterial Chemoembolization (TACE): Final Analysis of OPTIMIS in Korea and Rest of Asia	300
	<i>Jeong Heo, Ann-Li Cheng, Jean-Luc Raoul, Markus Peck-Radosavljevic, Masatoshi Kudo, Keiko Nakajima, Inga Bayh, Shi-Ming Lin, Han Chu Lee</i>	
O-036	Distinct Mutational and Molecular Patterns Associated with Family History in Hepatocellular Carcinoma	301
	<i>Jihyun An, Ji-Hye Oh, Ha Il Kim, Seheon Chang, Chang Ohk Sung, Han Chu Lee, Ju Hyun Shim</i>	

7. Surgery, Biliary

O-037	Management of Pancreaticojejunostomy Stricture after Pancreaticoduodenectomy	301
	<i>Xu'an WANG, Wenguang WU, Hao WENG, Xueping ZHOU, Litian CHEN, Xuefeng WANG, Yingbin LIU</i>	
O-038	A Inverted Mattress Technique of Pancreaticojejunostomy for Laparoscopic Pancreatoduodenectomy	301
	<i>Hyung Jun KWON, Sang Geol KIM, Yun Jin HWANG</i>	
O-039	New Onset Diabetes and Reduction of Pancreatic Volume in Laparoscopic versus and Open Pancreaticoduodenectomy	302
	<i>Sung Hoon Choi</i>	
O-040	Preoperative Serum Glucose to Lymphocyte Ratio as an Independent Prognostic Factor: Developing 3-Scored Survival Estimating System in Resected Pancreatic Ductal Adenocarcinoma	302
	<i>Incheon KANG, Chang Moo KANG</i>	
O-041	Development and Validation of a Novel Topical Agent for Gallstone Dissolution	303
	<i>Say-June KIM, Kee Hwan KIM</i>	
O-042	Robotic Surgery for Gall Bladder Cancer: Operative Technique and Early Outcomes	303
	<i>Shraddha Patkar, Krupal Khobragade, Sagar Kurunkar, Mahesh Goel, Rajgopal Acharya</i>	
O-043	Laparoscopic Pancreaticoduodenectomy: CUSUM Analysis in a Developing Single Surgeon	303
	<i>Jung Woo LEE, Dong hyun KIM, Jung il KIM, Hyun ryung KIM, Jung ho PARK</i>	
O-044	Upfront vs. Delayed Laparoscopic Assisted Necrosectomy for Infected Pancreatic Necrosis	304
	<i>Feng CAO, Fei LI</i>	

8. Surgery, Technical Issues

- O-045 Parietal Peritoneum as an Autologous Substitute for Middle Hepatic Vein Reconstruction during Living-Donor Liver Transplantation 304
Suk Kyun Hong, Kyung-Suk Suh, Jae-Hyung Cho, Jeong-Moo Lee, Nam-Joon Yi, Kwang-Woong Lee
- O-046 Prospective Multicenter Study for Robotic Anatomic Major Liver Resection 304
Dai Hoon HAN, Sung Hoon CHOI, Jin Ho LEE, Gi Hong CHOI, Yong Rok CHOI, Jae Hoon LEE
- O-047 Selective Occlusion of the Hepatic Artery and Portal Vein Improves Liver Hypertrophy for Staged Hepatectomy 305
Changku JIA
- O-048 The Anatomical Characteristics of Patients with Posterior Bile Duct Stricture after a Liver Resection Including Anterior Section 305
Kyung Chul YOON, Woo-Hyoung KANG, Hye-Sung JO, Young-Dong YU, Dong-Sik KIM
- O-049 Clinical Outcomes of Laparoscopic Living Donor Right Hepatectomy without Pringle's and Hanging Maneuver 305
Young Seok HAN, Ja Ryung HAN, Heon Tak HA, Jae Min CHUN, Yoon Jin HWANG
- O-050 Right and Ventral Margins of Paracaval Portion of Caudate Lobe: Studies from Cadaveric Dissection and 3D Reconstruction Analysis Using Synapse 3D Software 306
Xue-Yin Shen, Sung-Yeon Hong, Xu-Guang Hu, Mi-Na Kim, Bong-Wan Kim, Hee-Jung Wang
- O-051 Short Term Result of Parenchymal Sparing Anatomical Liver Resection Based on Portal Ramification of the Right Anterior Section: A Single Center Experience 306
Giang NGUYEN, Anh PHAM, Ha NGHIEM, Hung NGUYEN, Duc PHAM
- O-052 Improved Outcomes of Laparoscopic Liver Resection for Hepatocellular Carcinoma Located in Posterosuperior Segments of the Liver ... 307
Yujin Kwon, Jai Young Cho, Ho-Seong Han, Yoo-Seok Yoon, Young Rok Choi, Boram Lee

9. ALD & NAFLD

- O-053 Combinatorial Effect of Ezetimibe and Empagliflozin on NAFLD in Choline Deficient High Fat Diet-Induced Murine Model 307
Dong Yun Kim, Kyu Sik Chung, Kyung Joo Cho, Heon Yung Gee, Jun Yong Park
- O-054 Nicotinamide Riboside Does Not Attenuate Steatosis but Improve Inflammation in Non-Alcoholic Steatohepatitis Induced by Methionine-Choline Deficient Diet 308
Soon Sun Kim, Hye Eun Byun, Jung Mi Kim, Eun Jung Woo, Chul Won Suh, Keum Ok Baek, Jin Hee Cheong, Young Hwan Ahn, Hyo Jung Cho, Jae Youn Cheong, and Sung Won Cho
- O-055 PNPLA3 Genetic Polymorphisms Associated with the Development of Non Alcoholic Fatty Liver Disease in Korea Biobank Network 308
Sooyeon Oh, Keong Won Hong, Eun-Ji Kim, Young-Eun Chon, Seong-Gyu Hwang, Joo-Ho Lee, Sang Woon Choi
- O-056 Gut-Microbiome Taxonomic Profiling as Non-Invasive Biomarkers for the Early Detection in Alcoholic Hepatocellular Carcinoma 309
Haripriya Gupta, Min Jea Shin, Gi Soo Youn, Sang Jun Yoon, Dae Hee Han, Nayoung Lee, Dong Joon Kim, Ki Tae Suk
- O-057 Serum MFG-E8 Level as a Potential Biomarker for the Evaluation and Prediction of the Metabolic Syndrome 310
Han Ah Lee, Hyung Joon Joo, Yeon Seok Seo, Hyun Gil Goh, Tae Hyung Kim, Sun Young Yim, Young-Sun Lee, Sang Jun Suh, Young Kul Jung, Ji Hoon Kim, Hyung Joon Yim, Jong Eun Yeon, Do-Sun Lim, Kwan Soo Byun, Soon Ho Um
- O-058 Long-Term Risk of a Nonalcoholic Fatty Liver after Tamoxifen Use in Breast Cancer: Propensity Score Matching Analysis 310
Jeong-Ju Yoo, Sang Gyune Kim, Young Seok Kim, Soung Won Jeong, Jae Young Jang, Sae Hwan Lee, Hong Soo Kim, Baek Gyu Jun, Young Don Kim, Gab Jin Cheon
- O-059 Combined Use of Rosuvastatin and Ezetimibe Improves Hepatic Steatosis in Patients with Dyslipidemia 310
Won Dong Lee, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang Hyub Han, Seung Up Kim
- O-060 Weight Change and Resolution of Fatty Liver in Normal Weight Individuals with Non-Alcoholic Fatty Liver Disease 311
Joo Hyun Oh, Tae Jin Kwon, Dong Hyun Sinn, Danbee Kang, Soo Jin Cho, Seung Woon Paik, Eliseo Guallar, Juhee Cho, Geum-Youn Gwak

10. Liver Transplantation

- O-061 Risk Factors for Long-Term Mortality in Live Liver Donors 312
Suk Kyun HONG, Sunho CHOE, Nam-Joon Yi, Aesun SHIN, Eun Kyung CHOE, Kyung Chul YOON, Jae-Hyung CHO, Jeong-Moo LEE, Kwang-Woong LEE, Kyung-Suk SUH
- O-062 Gene Expression of STAT3 and IL-17/Th-17 Pathway Decrease in Tolerance Patients Compared to Non-Tolerance after Tapering Immunosuppressants in Liver Transplantation 312
Soon Kyu Lee, Jong Young Choi, Jung Hyun Kwon, Jung Won Jang, Chang Wook Kim, Si Hyun Bae, Seung Kew Yoon, Ho Joong Choi, Young Kyoung You, Dong Goo Kim, Mi-La Cho
- O-063 Silent Allograft Fibrosis in 10-Year Post-Transplantation Histology of Pediatric Liver Transplantation: Is It Really Silent? 313
Jinsoo RHU, Suk-Koo LEE, Sanghoon LEE, Jong Man KIM, Gyu-Seong CHOI, Jae-Won JOH
- O-064 Clinical Features and Prognosis of DIHBS (Diffuse Intrahepatic Biliary Stricture) after Adult ABO-Incompatible Living Donor Liver Transplantation 313
Jae Hyun KWON, Gi-Won SONG, Shin HWANG, Ki-Hun KIM, Chul-Soo AHN, Deok-Bog MOON, Tae-Yong HA, Dong-Hwan JUNG, Gil-Chun PARK, Young In YOON, Hwui-Dong CHO, Yongkyu CHUNG, Sang-Hyun KANG, I-Ji JEONG, Jin Uk CHOI, Sung-Gyu LEE

- O-065 Impact of the Baseline Anti-A/B IgG Titer on the Clinical Outcome in ABO-Incompatible Liver Transplantation 313
Juhan Lee, Deok Gie Kim, Jee Youn Lee, Seok Jeong Yang, Jae Geun Lee, Myoung Soo Kim, Soon Il Kim, and Dong Jin Joo
- O-066 Comparative Analysis of Bile Microbiology and Antibiotic Susceptibilities between Liver Transplant Recipients and Normal Population: Multicenter Cohort Study 314
Suk-Won Suh, Seung Eun Lee, Yoo-Shin Choi, YoungRok Choi, Jaehong Jeong

11. HBV

- O-067 Dynamics of Transient Elastography-Based Risk Prediction Model for Hepatocellular Carcinoma during Antiviral Therapy in Patients with Chronic Hepatitis B: A Nation-Wide Multi-Center Retrospective Cohort Study 314
Hye Yeon Chon, Yeon Seok Seo, Jung il Lee, Byung Seok Kim, Byoung Kuk Jang, Sang Gyune Kim, Ki Tae Suk, In Hee Kim, Jin-Woo Lee, Moon Young Kim, Soung Won Jeong, Han Ah Lee, Sun Young Yim, Soon Ho Um, Hyun Woong Lee, Kwan Sik Lee, Jeong Eun Song, Chang Hyeong Lee, Woo Jin Chung, Jae Seok Hwang, Jeong-Ju Yoo, Young Seok Kim, Dong Joon Kim, Chang Hun Lee, Jung Hwan Yu, Young Eun Chon, Yeon Jung Ha, Mi Na Kim, Joo Ho Lee, Seong Gyu Hwang, Seong Hee Kang, Soon Koo Baik, Jae Young Jang, Sang Jun Suh, Young Kul Jung, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Hyung Joon Yim, and Seung Up Kim
- O-068 Increased Clinical and Economic Burden of Chronic Hepatitis B (CHB) Patients Compared to Non-CHB from 2007 to 2016 in Korea 315
Dae Won Jun, Hyunwoo Oh, Hyun Jung Ahn, Bo Ok Kim, Mindie H. Nguyen
- O-069 Comparison of Tenofovir and Entecavir on the Risk of Hepatocellular Carcinoma and Liver-Related Events in Patients with Chronic Hepatitis B: A Propensity Score Analysis 316
Sung Won Lee, Jung Hyun Kwon, Hae Lim Lee, Sun Hong Yoo, Hee Chul Nam, Pil Soo Sung, Soon Woo Nam, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon, Nam Ik Han, Jeong Won Jang
- O-070 The Risk of Hepatocellular Carcinoma in Patients with Chronic Hepatitis B Who Received Tenofovir vs. Entecavir Treatment 316
Terry Cheuk-Fung Yip, Vincent Wai-Sun Wong, Henry Lik-Yuen Chan, Yee-Kit Tse, Grace Lai-Hung Wong
- O-071 Hepatitis B Immunology 317
Ashish Kumar Vyas, Pooja Negi, Sharda Patra, Jaswinder Singh Maras, Shiv Kumar Sarin, Nirupma Trehanpati
- O-072 Sustained Response without Nucleos(t)ides after Pegylated Interferon Represent Favorable Outcome: Up to 13 Years Follow-Up 317
Soon Kyu Lee, Jung Hyun Kwon, Jeong Won Jang, Hee Chul Nam, Yoon-Jung Kim, Sun Hong Yoo, Soon Woo Nam, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon

12. Liver Cancer, Clinical

- O-073 Novel Deep Neural Network-Based Liver Transplantation Criteria for Hepatocellular Carcinoma: A Multicenter Study 318
Joon Yeul Nam, Jeong-Hoon Lee, Junho Bae, Young Chang, Yuri Cho, Hwi Young Kim, Dong Hyun Sinn, Bo Hyun Kim, Seoung Hoon Kim, Nam-Joon Yi, Kwang-Woong Lee, Jong Man Kim, Joong-Won Park, Tae Hun Kim, Yoon Jun Kim, Jung-Hwan Yoon, Jae-Wan Joh, Kyung-Suk Suh, and Kwon Yoo
- O-074 Bioelectrical Impedance Analysis for Predicting Postoperative Complications and Survival after Liver Resection for Hepatocellular Carcinoma 319
Gil Ho Lee, Hyo Jung Cho, Garam Lee, Han Gyeol Kim, Hee Jung Wang, Bong Wan Kim, Mi Young Lee, Jin Hee Cheong, Young Hwan Ahn, So Young Yoon, Choong Kyun Nah, Chul Won Suh, Jung Woo Eun, Jae Youn Cheong, Sung Won Cho, and Soon Sun Kim
- O-075 Laparoscopic Resection vs. Percutaneous Radiofrequency Ablation for Small Single HCC: Comparison of Clinical Outcome 319
Dong Ho Lee, Jin Woong Kim, Jeong Min Lee, Jong Man Kim, Min Woo Lee, Hyun-chul Rhim, Young Hoe Hur, Kyung-Suk Suh
- O-076 Factors and Models for Predicting Liver-Related Morbidity in Patients Undergoing Hepatic Resection for Hepatocellular Carcinoma 320
Jonggi Choi, So-hyun Kim, Seungbong Han, Danbi Lee, Ju Hyun Shim, Young-Suk Lim, Han Chu Lee, Young-Hwa Chung, Yung-Sang Lee, Sung-Gyu Lee, Ki-Hun Kim, and Kang Mo Kim
- O-077 Regorafenib versus Nivolumab for Hepatocellular Carcinoma Patients Who Experienced Sorafenib Treatment Failure: A Propensity Score Analysis 320
Cheol-Hyung Lee, Yun Bin Lee, Minseok Albert Kim, Heejoon Jang, Sun Woong Kim, Eun Ju Cho, Kyung-Hun Lee, Jeong-Hoon Lee, Su Jong Yu, Jung-Hwan Yoon, Tae-You Kim, Yoon Jun Kim
- O-078 The Effect of Urea Cream on Sorafenib-Associated Hand-Foot Skin Reaction in Patients with Hepatocellular Carcinoma: Multicenter, Prospective Randomized Double-Blind Controlled Study 321
Young-Sun Lee, Ji Hoon Kim, Do Young Kim, Moon Young Kim, Hyung Joon Kim, Yeon Seok Seo, Ki Tae Yoon, Jeong-Hoon Lee, Hyun Woong Lee, Young Kul Jung, Hyung Joon Yim, Byoung Kuk Jang, Eun Sun Jang, Jae Young Jang, Sung Bum Cho, Sang Youn Hwang

13. Cirrhosis & Liver Failure

- O-079 Validation of the Updated Version of Korean Stroop Test in the Screening of Minimal Hepatic Encephalopathy 322
Eileen L. Yoon, Dae Won Jun, Eun-Chul Jang, Jae Yoon Jeong, Do Seon Song, Sang Bong Ahn, Hee Yeon Kim, Sung Eun Kim, Hyoung Su Kim, Soung Won Jeong, Sang Gyune Kim, Tae Hee Lee, Yong Kyun Cho
- O-080 Validation of Asian Pacific Association for the Study of the Liver Acute-on-Chronic Liver Failure (ACLF) Research Consortium (AARC) ACLF Score in Korean ACLF Cohort 322
Do Seon Song, Hee Yeon Kim, Young Joo Jin, Dong Hyun Sinn, Eileen L. Yoon, Chang Wook Kim, Young Kul Jung, Ki Tae Suk, Sang Soo Lee, Hyun Chin Cho, Chang Hyeong Lee, Hwi Young Kim, Tae Hun Kim, Baek Gyu Jun, Hyung Joon Yim, Sung Eun Kim, Sung Won Lee, Jung Hyun Kwon, Seong Hee Kang, Soon Koo Baik, Byung Seok Lee, Jae Young Jang, Jeong Ill Suh, Hyoung Su Kim, Seong Woo Nam, Hyeok Choon Kwon, Young Seok Kim, Sang Gyune Kim, Hee Bok Chae, Jin Mo Yang, Joo Hyun Sohn, Jung Gil Park, Heon Ju Lee, Yoon Jun Kim, In Hee Kim, Ju Yeon Cho, Man Woo Kim, Sang young Han, Won Kim, Dong Joon Kim, on behalf of the Korean Acute-on-Chronic Liver Failure (KACLIF) Study Group

O-081	Empirical Carbapenem Treatment for Spontaneous Bacterial Peritonitis Reduced in-Hospital Mortality in Cirrhotic Patients with High CLIF-SOFA Score.....	323
	<i>Sun Woong Kim, Jeong-Hoon Lee, Minseok Albert Kim, Hee Joon Jang, Yun Bin Lee, Eun Ju Cho, Su Jong Yu, Yoon Jun Kim, Jung-Hwan Yoon</i>	
O-082	Estimating Renal Function and Predicting Prognosis of Patients with Decompensated Cirrhosis Using Serum and Urine Markers: Multicenter Prospective Observational Study.....	324
	<i>Yeon Seok Seo, Moon Young Kim, Tae Hyung Kim, Han Ah Lee, Ki Tae Suk, Jeong-Hoon Lee, Sang Gyune Kim, Ji Hoon Kim, Hyung Joon Yim, Soung Won Jung, Jae Young Jang, Young Seok Kim, Soon Koo Baik, Soon Ho Um; The Korean Study Group of Portal Hypertension</i>	
O-083	The Correlation between Spleen Stiffness and Portal Hypertension in Patients with Liver Cirrhosis.....	324
	<i>Hae Won Yoo, Sang Gyune Kim, Jeong-Ju Yoo, Young Seok Kim, Moon Young Kim, Ki Tae Suk, Boo Sung Kim</i>	
O-084	Clinical Characteristics of Portal Hypertension in Korean Patients with Myeloproliferative Neoplasms.....	325
	<i>Jaeiun Lee, Pil Soo Sung, Ki-Seong Eom, Keungmo Yang Hyun Yang, Kwon Yong Tak, Jeong Won Jang, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon</i>	

14. Liver Cancer, Clinical

O-085	A Significant Diagnostic Role for Discrimination of Malignancy of Contrast Enhanced Ultrasound for Portal Vein Thrombosis in HCC Patients.....	325
	<i>Yu Ri Shin, Jung Hyun Kwon, Yoon-Jung Kim, Sun Hong Yoo, Soon Woo Nam</i>	
O-086	Comparison between Stereotactic Body Radiotherapy and Radiofrequency Ablation as First Therapy for Small Hepatocellular Carcinoma.....	326
	<i>Soo Yong Choi, Baek Gyu Jun, Young Don Kim, Gab Jin Cheon, Jeong-Ju Yoo, Sang Gyune Kim, Young Seok Kim, Soung Won Jeong, Jae Young Jang, Hong Soo Kim, Sae Hwan Lee</i>	
O-087	Prognostic Factors for Survival in Patients with Hepatocellular Carcinoma Treated by Trans-Arterial Radioembolization.....	327
	<i>Hee Chul Nam, Pil Soo Sung, Jeong Won Jang, Ho Jong Chun, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon</i>	
O-088	Prediction of Overall Survival after Resection or Radiofrequency Ablation Using Surrogates for Clinically Significant Portal Hypertension in Patients with Early Hepatocellular Carcinoma.....	327
	<i>Jae Seok Bae, Dong Ho Lee, Joon Koo Han</i>	
O-089	Clinical Significance of the Thioredoxin System and Thioredoxin Domain Containing Protein Family in Hepatocellular Carcinoma.....	328
	<i>Sang Yeon Cho, Sungha Kim, Milu Son, Woo Sun Rou, Seok Hyun Kim, Hyuk Soo Eun, Byung Seok Lee</i>	
O-090	Contrast-Enhanced Ultrasound with Perfluorobutane for Hepatocellular Carcinoma Surveillance: A Multicenter Diagnostic Trial (SCAN).....	328
	<i>Ji Hoon Park, Mi-Suk Park, So Jung Lee, Woo Kyoung Jeong, Jae Young Lee, Min Jung Park, Sung Soo Lee, Kyunghwa Han, Chung Mo Nam, Seong Ho Park, Kyoung Ho Lee</i>	

15. Liver Cancer, Clinical

O-091	Reclassification of Microvascular Invasion in Hepatocellular Carcinoma According to Its Anatomical Location.....	329
	<i>Incheon Kang, Gi Hong Choi</i>	
O-092	The Clinical Impact of Applying BCLC Guideline for the Treatment of Recurrent Intrahepatic Single and Small Sized Hepatocellular Carcinoma.....	329
	<i>Hyo-Sin KIM, Nam-Joon Yi</i>	
O-093	Chronological Improvement in Long-Term Outcomes of Surgical Resection for Patients with Hepatocellular Carcinoma: Two Large-Volume Center Study.....	330
	<i>Yun Bin Lee, Jeong-Hoon Lee, Hyo Young Lee, Cheol-Hyung Lee, Minseok Albert Kim, Heejoon Jang, Sun Woong Kim, Suk Kyun Hong, Eun Ju Cho, Su Jong Yu, Nam-Joon Yi, Kwang-Woong Lee, Jong Man Kim, Jae-Won Joh, Yoon Jun Kim, Kyung-Suk Suh, Jung-Hwan Yoon</i>	
O-094	Is Liver Resection Justified for Multinodular Hepatocellular Carcinoma in Patients with Cirrhosis? A Multicenter Analysis of 1,066 Patients.....	330
	<i>Zhen-Li LI, Xian-Hai MAO, Ting-Hao CHEN, Jun-Wu GUO, Wei-Min GU, Ya-Hao ZHOU, Hong WANG, Wan-Guang ZHANG, Timothy M. PAWLIK, Wan Yee LAU, Lei LIANG, Feng SHEN, Tian YANG</i>	
O-095	Change in the Recurrence Pattern and Risk Factors over Time after the Complete Cure of Hepatocellular Carcinoma: Ten-Year Follow-Up Study.....	331
	<i>Han Ah Lee, Seung Up Kim, Hyun Gil Goh, Tae Hyung Kim, Sun Young Yim, Young-Sun Lee, Sang Jun Suh, Young Kul Jung, Ji Hoon Kim, Yeon Seok Seo, Hyung Joon Yim, Jong Eun Yeon, Kwan Soo Byun, Soon Ho Um</i>	
O-096	Surgical Resection Should Be Considered in Resectable Solitary Hepatocellular Carcinoma with Portal Vein Tumor Thrombosis of Patients with Child A.....	332
	<i>Jong Man Kim, Sangjin Kim, Seo Hee Lee, Gyu-Seong Choi, Jae-Won Joh</i>	

16. Basic & Others

O-097	Serine Protease HtrA2/Omi Deficiency Impairs Mitochondrial Homeostasis and Promotes Liver Fibrosis.....	332
	<i>Wonhee Hur, Byung-Yoon Kang, Sung Min Kim, Gil Won Lee, Min-Kyung Nam, Hyangshuk Rhim, and Seung Kew Yoon</i>	

O-098	Glutamate/mGluR5 Signaling in Stellate Cells Drives Endocannabinoid-Mediated Alcoholic Steatosis.....	332
	<i>Won-Mook Choi, Myung-Ho Kim, Resat Cinar, Bin Gao, Hyuk Soo Eun, Young-Sun Lee, Won Kim, George Kunos, and Won-Il Jeong</i>	
O-099	Src Inhibition Attenuates Liver Fibrosis by Downregulating CTGF and Phospho-Smad3.....	333
	<i>Hye-Young Seo, So-Hee Lee, Ji-Ha Lee, Jae Seok Hwang, Mi-Kyung Kim, Byoung Kuk Jang</i>	
O-100	Correlation of Infiltration by T Cells and Macrophages with the Severity of Liver Damage in Drug-Induced Liver Injury: Implications in Responsiveness to Steroid Therapy.....	334
	<i>Hyun Yang, Pil Soo Sung, Kwon Yong Tak, Jae Jun Lee, Hee Chul Nam, Jeong Won Jang, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon, Eun Sun Jung, Sang Wook Choi</i>	
O-101	Liver Enzyme Variability and the Risk of Heart Diseases and Mortality: A Nationwide Population-Based Study of 6.5 Million Subjects	334
	<i>Eun Ju Cho, Kyungdo Han, Dong Wook Shin, Su Jong Yu, Yunbin Lee, Jeong-Hoon Lee, Seung-Pyo Lee, Yoon Jun Kim, Jung-Hwan Yoon</i>	
O-102	Increased Annual Incidence of Pyogenic Liver Abscess and Its Risk Factors: An Analysis from HIRA-NPS of South Korea, 2012–2016.....	335
	<i>Jeong-Ju Yoo, Sang Gyune Kim, Young Seok Kim, Soung Won Jeong, Jae Young Jang, Sae Hwan Lee, Hong Soo Kim, Baek Gyu Jun, Young Don Kim, Gab Jin Cheon</i>	

Oral Poster Presentation

ALD & NAFLD

OP-001	Exosomal Double-Stranded RNA Promotes Interleukin-1 β Production in Kupffer Cells via Toll-Like Receptor 3 in Alcoholic Liver Injury	338
	<i>Jun-Hee Lee, Young-Ri Shim, Wonhyo Seo, Won-Il Jeong, Myung-Ho Kim, Ye-eun Kim, Tom Ryu, Keungmo Yang</i>	
OP-002	Gut-Microbiome Composition and Diversity According to the Progression of Alcoholic Liver Disease	338
	<i>Gi Soo Youn, Min Jea Shin, Haripriya Gupta, Dae Hee Han, Sang Jun Yoon, Na Young Lee, Dong Joon Kim, Ki Tae Suk</i>	
OP-003	Prospective Association of Soybean Products on the Risk of Non Alcoholic Fatty Liver Disease: A Nationwide Population-Based Study ...	339
	<i>Youn I Choi, Yun Soo Kim, Oh Sang Kwon, Ju Hyun Kim, Seung Kak Shin, and Dong Kyun Park</i>	
OP-004	Evolution of Hepatic Fibrosis and Steatosis during the Long-Term Use of Metformin in Patients with Type 2 Diabetes	339
	<i>Ji Hye Kim, Hye Won Lee, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, and Seung Up Kim</i>	
OP-005	Low Psoas Muscle Mass Is Associated with Advanced Fibrosis in Patients with Biopsy-Proven Non-Alcoholic Fatty Liver Disease.....	340
	<i>Min Kyu Kang, Jung Hun Baek, Jung Gil Park, Soo Young Park, Won Young Tak, Young Oh Kweon, Se Young Jang, Yu Rim Lee, Keun Hur</i>	
OP-006	Non-Alcoholic Fatty Liver Disease Is an Early Predictor of Metabolic Disease in Metabolically Healthy Population: A Nationwide Claim Data Study	340
	<i>Heejeon Jang, Jeong-Hoon Lee, Seokhun Yang, Soongu Kwak, Shinae Kang, Seung-Pyo Lee, Minseok Albert Kim, Sun Woong Kim, Cheol-Hyung Lee, Yun Bin Lee, Eun Ju Cho, Su Jong Yu, Yoon Jun Kim, Jung-Hwan Yoon</i>	

Basic

OP-007	Valine and Leucine Suppresses Hepatic Stellate Cells Activation via TGF- β Signaling Inhibition.....	341
	<i>Sung Woo Cho, Jung Hoon Cha, Na Ri Park, Hae Lim Lee, Jong Young Choi, Seung Kew Yoon, Si Hyun Bae</i>	
OP-008	Molecular Diagnosis of Glycogen Storage Disease Type IX Using GSD Gene Panel	342
	<i>Tae Hyeong Kim, Kwang Yeon Kim, Moon-Woo Seong, Sung Sup Park, Jin Soo Moon, Jae Sung Ko</i>	
OP-009	A Coagulation Factor IX-Deficient Rat as a Translational Pre-Clinical Model of Severe Hemophilia B	342
	<i>Jae Young Lee, Hee Sook Bae, Yun-Kyeong Jin, Hee Kyoung Kim, Kyoeng-Min Kim, Dong Woo Song, Ungi Kim Goo Jang, Jung Min Lee</i>	
OP-010	MicroRNA-101-3p Suppresses Hepatic Stellate Cell Activation and Promotes the Hepatic Differentiation of Human Bone Marrow-Derived Mesenchymal Stem Cells.....	342
	<i>Jung Hoon Cha, Na Ri Park, Sung Woo Cho, Jong Young Choi, Seung Kew Yoon, Si Hyun Bae</i>	
OP-011	Effect of Sericin Peptide in Animal Models of Non-Alcoholic Steatohepatitis (NASH)	343
	<i>Hyeon Tae Kang, Na Ryung Choi, Dae Won Jun, Jin Hwa Park, Dae Hyun Lim, Won Wu Seo, Ji Hyun Yea, Jai Hoon Yoon, Kang Nyeong Lee, Hang Lak Lee, Oh Young Lee, Byung Chul Yoon, and Ho Soon Choi</i>	
OP-012	Amoxicillin Induced Histopathological Changes in the Liver and Other Organs of Albino Rats	343
	<i>Sabita Paudel, Bijay Aryal, Sunita Ranabhat, Bindu Malla</i>	

HBV

OP-013	Comparative <i>Ex Vivo</i> Analyses of Hepatitis B Virus-Specific CD8+ T Response between Patients Considered Immune Tolerant and Patients on Antiviral Treatment.....	344
	<i>Pil Soo Sung, Dong Jun Park, Jung-Hee Kim, Ji Won Han, Eun Byul Lee, Gil Won Lee, Hee Chul Nam, Jeong Won Jang, Si Hyun Bae, Jong Young Choi, Eui-Cheol Shin, Su-Hyung Park, Seung Kew Yoon</i>	

OP-014	Extremely Low Risk of Hepatocellular Carcinoma Development in Chronic Hepatitis B Patients with Immune Tolerant Phase: A Multicenter Retrospective Cohort Study	344
	<i>Soo Young Park, Hyun Woong Lee, Dong Hyun Sinn, In Hee Kim, Hyung Joon Lim, Jung Hwan Yu, Won Young Tak, Young Oh Kweon, Jung Il Lee, Kwan Sik Lee, Wonseok Kang, Yong Han Baik, Chang Hun Lee, Sang Jun Suh, Young Kul Jung, Jin-Woo Lee, Han Ah Lee, Sun Young Yim, Soon Ho Um, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Youn Seok Seo, Seung Up Kim</i>	
OP-015	Three Year Efficacy and Safety of Tenofovir Alafenamide (TAF) Compared to Tenofovir Disoproxil Fumarate (TDF) in Chronic Hepatitis B (CHB) Patients	345
	<i>Hyung Joon Kim, Henry Lik Yuen Chan, Young-Suk Lim, Wai Kay Walter Seto, Kosh Agarwal, Maurizia R. Brunetto, Harry L. A. Janssen, Florin Caruntu, Tatjana Stepanova, Owen Tsang, Hiroshi Yatsushashi, Won Young Tak, Chi-Yi Chen, Mustafa Celen, Vithika Suri, John F. Flaherty, Lanjia Lin, Andrea Cathcart, Anuj Gaggar, Calvin Q. Pan, Shalimar, Maria Buti</i>	
OP-016	Predictive Score for Hepatocellular Carcinoma after Hepatitis B E Antigen Loss in Patients Treated with Entecavir or Tenofovir Disoproxil Fumarate	346
	<i>Tae Seop Lim, Hyun Woong Lee, Kwan Sik Lee, Jung Il Lee, In Hee Kim, Chang Hun Lee, Byoung Kuk Jang, Woo Jin Chung, Jae Seok Hwang, Hyung Joon Yim, Young Kul Jung, Sang Jun Suh, Yeon Seok Seo, Soon Ho Um, Sun Young Yim, Han Ah Lee, Jung Hwan Yu, Jin-Woo Lee, Young-Joo Jin, Young Seok Kim, Sang Gyune Kim, Jeong-Ju Yoo, Soo Young Park, Young Oh Kweon, Won Young Tak, Se Young Jang, Soon Sun Kim, Sung Won Cho, Jae Youn Cheong, Hyo Jung Cho, Soung Won Jeong, Jae Young Jang, Seok Hyun Kim, Hyuk Soo Eun, Woo Sun Rou, Byung Seok Lee, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, and Seung Up Kim</i>	
OP-017	Establishment of HBV-Replicating Mice Model from a Korean HBV Genome with Defective HBV-Specific T Cell Responses	346
	<i>Dong Jun Park, Pil Soo Sung, Jung-Hee Kim, Gil Won Lee, and Seung Kew Yoon</i>	
OP-018	Entecavir versus Lamivudine as Antiviral Prophylaxis for Patients with Hepatitis B Infection Undergoing Anticancer Cytotoxic Chemotherapy: A Randomized, Multicenter Clinical Trial	347
	<i>Won Kim, Jeong Hoon Lee, Bo Hyun Kim, Young Seok Kim, Hwi Young Kim, Sohee Oh, Sook-Hyang Jeong</i>	

Cirrhosis & Liver Failure

OP-019	Low Apoprotein A1 as an Indicator of Poor Prognosis in Patients with Liver Cirrhosis	348
	<i>Chang Hun Lee, Hee Chan Yang, Sung Kyun Yim, Seung Young Seo, Sung Hun Kim, Sang Wook Kim, Seung Ok Lee, Soo Teik Lee, and In Hee Kim</i>	
OP-020	Adipose Tissue Distribution in Relation to Insulin Resistance in Patients with Cirrhosis	348
	<i>Seong Hee Kang, Hyunil Kim, Jin Sook Lee, Soon Koo Baik, Moon Young Kim</i>	
OP-021	Efficacy of Thromboelastography for Predicting Prognosis of Korean Patients with Cirrhosis	349
	<i>Tae Hyung Kim, Soon Ho Um, Hyun Gil Goh, Han Ah Lee, Sun Young Yim, Young Sun Lee, Sang Jun Suh, Young Kul Jung, Yeon Seok Seo, Ji Hoon Kim, Hyung Joon Yim, Jong Eun Yeon, Kwan Soo Byun</i>	
OP-022	Validation of the Animal Naming Test in the Screening of Minimal Hepatic Encephalopathy	349
	<i>Eileen L. Yoon, Dae Won Jun, Jang Eun-Chul, Jae Yoon Jeong, Do Seon Song, Sang Bong Ahn, Hee Yeon Kim, Sung Eun Kim, Hyoung Su Kim, Soung Won Jeong, Sang Gyune Kim, Tae Hee Lee, Yong Kyun Cho</i>	
OP-023	Direct Bilirubin Is More Valuable for Predicting Prognosis in Patients with Liver Cirrhosis	350
	<i>Joon Young Jung, Hyun Gil Goh, Han Ah Lee, Tae Hyung Kim, Sun Young Yim, Young-Sun Lee, Sang Jun Suh, Young Kul Jung, Ji Hoon Kim, Yeon Seok Seo, Hyung Joon Yim, Jong Eun Yeon, Kwan Soo Byun, Soon Ho Um</i>	
OP-024	Impact of Relative Adrenal Insufficiency in Alcoholic Hepatitis (RAIAH)	350
	<i>Hyunil Kim, Seong Hee Kang, Soon Koo Baik, Moon Young Kim</i>	

HCV

OP-025	Regression of Liver Fibrosis Assessed by Transient Elastography after Daclatasvir and Asunaprevir Combined Treatment in Patients with Chronic Hepatitis C with Genotype 1b Infection: Prospective Cohort Study (RELIF-C)	351
	<i>Hae Won Yoo, Jun Yong Park, Sang Gyune Kim, Se Hwan Lee, Young Kul Jung, Moon Young Kim, Dae Won Jeon, Jae Young Jang, Jin Woo Lee, Oh Sang Kwon</i>	
OP-026	SVR Following Treatment with Direct Acting Antiviral Regimens Is Durable in More than 6,600 Patients: The Gilead SVR Registry Study	351
	<i>Jordan J. Feld, Christian Schwabe, Eric J. Lawitz, Stanislas Pol, Stephen David Shafra, Robert Hyland, Frances Chen, Hadas Dvory-Sobol, Anu O. Osinusi, Diana Brainard, Jin Yoon, Christophe Moreno, Alessio Aghemo, Simone I. Strasser, Stefan Zeuzem</i>	
OP-027	Treatment with Sofosbuvir-Ledipasvir for Patients with HCV Genotype 2 Infection: A Real-World Experience of Six Hospitals in Taiwan	352
	<i>Po-Yueh Chen, Ching-Chu Lo, Jyh-Joy Chen, Chao-Hung Hung, Chi-Yi Chen, Shih-Jer Hsu, Kuo-Chih Tseng</i>	
OP-028	Substitution Mutations at Cys 316 of NS5B Affect Treatment with Sofosbuvir by Enhancing Replication of Genotype 1b Hepatitis C Virus	353
	<i>Yechan Jeong, Bora Jin, Hye Jung Park, Hye Won Lee, Kwang-Hyub Han, Sang Hoon Ahn, and Seungtaek Kim</i>	
OP-029	Efficacy and Safety of 8-Weeks of Glecaprevir/Pibrentasvir in Treatment-Naïve Adults with HCV Genotype 1-6 and Aspartate Aminotransferase to Platelet Ratio Index (APRI) ≤ 1	353
	<i>Robert J. Fontana, Sabela Lens, Stuart McPherson, Magdy Elkhashab, Krum Katzarov, Ana Gabriela Pires dos Santos, Zhenyi Xue, Roger Trinh, Lino Rodrigues Junior, Ariel Porcalla, Stefan Zeuzem, Hyung Joon Yim, Yong Kyun Won</i>	
OP-030	Efficacy and Safety of Grazoprevir/Elbasvir for Korean Patients with Chronic Hepatitis C Virus Infection: A Retrospective, Nationwide, Real-World Study	354
	<i>Eun Sun Jang, Kyung-Ah Kim, Young Seok Kim, In Hee Kim, Byung Seok Lee, Youn Jae Lee, Woo Jin Chung, Sook-Hyang Jeong</i>	

Others

OP-031	Identification of Liver Injury by Fimasartan, a Novel Angiotensin II Receptor Blocker: Analysis of National Health Insurance Service Data	354
	<i>Eunhye Kang, Jae-Jun Shim, Gi-Ae Kim, Jisun Myung, In-Hwan Oh, Byung-Ho Kim</i>	
OP-032	Clinical Indication and Safety of Liver Biopsy in the Era of Noninvasive Assessment of Liver Fibrosis.....	355
	<i>Jun Il Kim, Chun Beom Lee, Jeong-Ju Yoo, Sang Gyune Kim, Young Seok Kim, Soung Won Jeong, Jae Young Jang, Sae Hwan Lee, Hong Soo Kim, Baek Gyu Jun, Young Don Kim, Gab Jin Cheon</i>	
OP-033	Plasma Levels of Soluble Programmed Death-1 and Programmed Death-Ligand 1 in the Patients with Autoimmune Hepatitis and Primary Biliary Cholangitis.....	355
	<i>Boo-ok Jang, Gwang Hyeon Choi, Yun Suk Choi, Da woon Jeong, Jae kyun Choi, Si Ho Kim, Kyunghan Lee, Eun Sun Jang, Jin-Wook Kim, Sook-Hyang Jeong</i>	
OP-034	Clinical Characteristics of Liver Cirrhosis and Hepatocellular Carcinoma Occurring after Fontan Operation.....	356
	<i>Jun Sik Yoon, Dong Ho Lee, Eun Ju Cho, Mi Kyoung Song, Young Hun Choi, Gi Beom Kim, Yun Bin Lee, Jeong-Hoon Lee, Su Jong Yu, Yoon Jun Kim, Jung-Hwan Yoon, Eun Jung Bae</i>	
OP-035	The Validity of Two-Dimensional Shear Wave Ultrasound for Assessing Fibrosis Stage in Patients with Chronic Liver Disease: Comparison with Transient Elastography	356
	<i>Hae Won Yoo, Sang Gyune Kim, Jeong-Ju Yoo, Young Seok Kim, Soung Won Jeong, Jae Young Jang, Sae Hwan Lee, Hong Soo Kim, Young Don Kim, Gab Jin Cheon, Boo Sung Kim</i>	
OP-036	Proposal of a Cutoff for the Computed Tomography-Assessed Lumbar Skeletal Muscle Index for Diagnosing Sarcopenia in Asian Populations	357
	<i>Seo Yeon Gwak, Min Je Sung, Tae Seop Lim, Mi Young Jeon, Hye Won Lee, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Seung Up Kim</i>	

HBV & Others

OP-037	Treatment Response of Noninvasive Fibrosis Markers Predicts Hepatocellular Carcinoma Development in Chronic Hepatitis B Patients ...	357
	<i>Hee Chul Nam, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon, Jeong Won Jang</i>	
OP-038	Anti-HBc IgG Level in Prediction of HBsAg Seroclearance in Chronic Hepatitis B Patients with Nucleos(t)ide Analogue induced HBeAg Seroclearance.....	358
	<i>Hyun Woong Lee, Saein Kim, Seung Up Kim, Jung Il Lee, Sora Kim, Hye Young Chang, Dokyun Kim, Seok Hoon Jeong, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Kwan Sik Lee</i>	
OP-039	Maximal Diameter of Hepatic Abscess Independently Predicts Prolonged Hospitalization and Poor Prognosis in Patients with Pyogenic Liver Abscess	359
	<i>Chang Hun Lee, Gyun Seop Lim, Myoung Soo Ha, Seung Yeon Ryu, Hee Chan Yang, Sung Kyun Yim, Seung Young Seo, Sung Hun Kim, Sang Wook Kim, Seung Ok Lee, Soo Teik Lee, and In Hee Kim</i>	
OP-040	Comparative Analysis of Intrahepatic Infiltration of Activated T Cells and Macrophages between Autoimmune Hepatitis and Drug-Induced Liver Injury	359
	<i>Pil Soo Sung, Hyun Yang, Jae Jun Lee, Kwon Yong Tak, Hee Chul Nam, Jeong Won Jang, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon, Eun Sun Jung, Sang Wook Choi</i>	
OP-041	Positive Rate of Anti-Mitochondrial M2 Antibody and Anti-Soluble Liver Antigen Antibody in the Patients with Primary Biliary Cholangitis and Autoimmune Hepatitis in South Korea	360
	<i>Jae Kyun Choi, Boo-ok Jang, Yun Suk Choi, Da woon Jeong, Si Ho Kim, Kyunghan Lee, Gwang Hyeon Choi, Eun sun Jang, Jun-Wook Kim, Sook-Hyang Jeong</i>	
OP-042	Prevalence of Antimitochondrial Antibody and Primary Biliary Cholangitis in Korea: A Single Center Study.....	361
	<i>Yang Jae Yoo</i>	

Liver Transplantation

OP-043	Liver Transplantation for Patients with Pre-Existing Portal Vein Thrombosis: A Single-Center Experience.....	361
	<i>Tae-Seok Kim, Keun Soo Ahn, Yong Hoon Kim, Hyoung Tae Kim, Koo Jeong Kang</i>	
OP-044	Accuracy of Noninvasive Methods to Estimate Hepatic Steatosis in Living Liver Donors	361
	<i>Joseph Ahn, Ho Joong Choi, Tae Yun Lee, Bong Jun Kwak, Tae Ho Hong, Young Kyoung You, Dong Goo Kim</i>	
OP-045	Neutrophil-to-Lymphocyte Ratio Predicts Acute Cellular Rejection in Living Donor Liver Transplantation.....	362
	<i>Boram LEE, YoungRok CHOI, Jai Young CHO, Ho-Seong HAN, Yoo-Seok YOON</i>	
OP-046	Hepatitis B Vaccination and Entecavir Monotherapy Following Withdrawal of Hepatitis B Immunoglobulin (HBIG). An Alternative Approach to Prevention of Hepatitis B Reactivation after Liver Transplantation	362
	<i>Johann Faizal KHAN, Youngdong YU, Hye-Sung JO, Kyung-Chul YOON, Woo-Hyoung KANG, Dong-Sik KIM</i>	
OP-047	Living Liver Donor Surgical Complication: Single Center Experience with 512 Cases	362
	<i>Eun-Kyoung JWA, Dong-Lak CHOI, Joo-Dong KIM</i>	
OP-048	Right Anterior Section Graft for Living-Donor Liver Transplantation.....	363
	<i>Jonathan NAVARRO, Gi Hong CHOI, Myoung Soo KIM, Yoon Bin JUUNG, Jae Geun LEE</i>	

Biliary and Pancreatic Disease

- OP-049 Propensity-Score Matching Analysis of Postoperative Outcome Including Quality of Life after Single Incision Versus Multiport Laparoscopic Cholecystectomy: A Nationwide Prospective Multicenter Study in Korea 363
Dae Joon PARK, In Woong HAN, Hyeon Kook LEE, Hui Song LEE, Seog Ki Min, Sun Whe KIM, Jin Young JANG, Kwang Min PARK, Ji Eun CHOI, In Seok CHOI, Jin Seok HEO, Dong Wook CHOI, Seong Ho CHOI, Ho-Seong HAN, Jai Young CHO, Yoo-Seok YOON, Kwang Yeol PAIK, Woo Jung LEE, Dong Sup YOON, Sol Ji CHOI
- OP-050 Laparoscopic Total Pancreatectomy in Benign and Borderline Malignant Tumor of the Pancreas: Perioperative Outcomes and Quality of Life 364
Jin Ho Lee, Chang Moo Kang
- OP-051 BMPR2 Promotes Pancreatic Cancer Proliferation via the GRB2-Mediated PI3K-Akt-mTOR Pathway 364
Huahu GUO, Yazhou WANG, Zhengkui ZHANG, Mingzhe LI, Qi WANG, Kai ZHANG, Xiaodong TIAN, Yinmo YANG
- OP-052 Pre-Drainage and Post-Drainage Prognostic Nomograms to Predict Outcome of Percutaneous Drainage in the “Step-Up Approach” for Necrotizing Pancreatitis 364
Rajesh GUPTA, Aditya KULKARNI, Raghavendra BABU, Sunil SHENVI, Rahul GUPTA, Rohit NIMJE, Gopal SHARMA, Prateek VASWANI, Sriram DEIVASIGAMANI, Mandeep KANG, Harjeet SINGH, Vishal SHARMA, M. Praveen KUMAR, Deepak BHASIN, Surinder RANA
- OP-053 Comparison of the Prognostic Impact and Combination of Preoperative Inflammation-Based and/or Nutritional Markers and 18F-FDG-PETCT-Derived Markers of Tumor Metabolism in Patients with Bile Duct and Pancreatic Cancer 365
Min-Su Park
- OP-054 Risk of Atherosclerotic Cardiovascular Diseases in Patients with Pancreatitis: A Retrospective Cohort Study 365
Yi-Chun Chou, Ta-Liang Chen, Chien-Chang Liao

HBV

- OP-055 The Significance of Early Virological Response in the Patients with Prolonged Antiviral Treatment for Chronic Hepatitis B 366
Sun Hong Yoo, Soon Woo Nam, Yoon Jung Kim, Sung Won Lee, Hae Lim Lee, Jeong Won Jang, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon, Jung Hyun Kwon
- OP-056 No Resistance to Tenofovir Alafenamide (TAF) Detected through 144 Weeks of Treatment in Patients with Chronic Hepatitis B (CHB) 366
Ki Tae Yoon, Young-Suk Lim, Yang Liu, Bandita Parhy, Silvia Chang, Ross Martin, Becket Feierbach, Hongmei Mo, Anuj Gaggar, John F Flaherty, Henry LY Chan
- OP-057 Low-Level Viremia and Cirrhotic Complications in Chronic Hepatitis B Patients with Good Adherence to Entecavir 367
Dahye Kim, Seung Bum Lee, Jae Ho Park, Byung Gyu Kim, Seok Won Jung, In Du Jeong, Sung-Jo Bang, Jung Woo Shin, Bo Ryung Park, Eun Ji Park, and Neung Hwa Park
- OP-058 Tenofovir Disoproxil Fumarate on the Risk of Hepatocellular Carcinoma in Chronic Hepatitis B Patients with Failure to Preceding Treatments 367
Gi-Ae Kim, Young-Suk Lim
- OP-059 Development of a Mathematical Modeling of HBsAg Kinetics during Long-Term Antiviral Treatment: A Pilot Study 368
Hwi Young Kim, Tae Soo Jang, Hee-Dae Kwon, Joo Ho Lee
- OP-060 ALT Normalization after Entecavir and Tenofovir Correlated with Reduction of Development for HCC 368
Sehwa Kim, Sung Won Chang, Ha Seok Lee, Min-jin Lee, Young-Sun Lee, Sang Jun Suh, Ji Hoon Kim, Yeon Seok Seo, Hyung Joon Yim, Jong Eun Yeon, Soon Ho Um, Kwan Soo Byun

Cirrhosis & Liver Failure

- OP-061 Effects of Atorvastatin in Lowering Portal Hypertension in Patients with Cirrhosis 369
Le Thi Thu Hien, Le Quoc Tuan
- OP-062 Low-Dose Propranolol as a Secondary Prophylaxis for Varix Bleeding Decreases Mortality and Rebleeding Rate in Patients with Tense Ascites 369
Jin Hwa Park, Dae Won Jun, Dae Hyun Lim, Won Woo Seo, Ji Hyun Yeo, Na Ryung Choi, Jai Hoon Yoon, Kang Nyeong Lee, Hang Lak Lee, Oh Young Lee, Byung Chul Yoon, and Ho Soon Choi
- OP-063 Endoscopic Variceal Obliteration versus Retrograde Transvenous Obliteration for Fundal Variceal Bleeding 370
Hyun Gil Goh, Han Ah Lee, Tae Hyung Kim, Sun Young Yim, Young-Sun Lee, Sang Jun Suh, Young Kul Jung, Ji Hoon Kim, Yeon Seok Seo, Hyung Joon Yim, Jong Eun Yeon, Kwan Soo Byun, Soon Ho Um
- OP-064 Effect of Acute Kidney Injury on Long-Term Outcomes of Spontaneous Bacterial Peritonitis in Cirrhotics Using ICA-AKI Criteria 370
Won Sohn, Jung Hee Kim, Ju-Yeon Cho
- OP-065 Severity Changes of Cirrhotic Patients during Seven Years Period in South Korea: A Multicenter Retrospective Study from 2008 to 2014 371
Jeong Han Kim, Eileen L. Yoon, Chung Hwan Jun, Jae Hyun Yoon, Byung Seok Kim, Jeong Eun Song, Ki Tae Suk, Moon Young Kim, Seong Hee Kang
- OP-066 Clinical Features and Prognosis of the Patients with Chronic Liver Disease Hospitalized with Variceal Bleeding 371
Jung Hwan Yu, Young-Joo Jin, Jongbeom Shin, Jin-Woo Lee, Young Kul Jung, Hyung Joon Yim, Jin Mo Yang, Do Seon Song, Young Seok Kim, Sang Gyune Kim, Dong Joon Kim, Ki Tae Suk, Eileen Yoon, Sang Soo Lee, Chang Wook Kim, Hee Yeon Kim, Jae Young Jang, On Behalf of the Korean Acute-on-Chronic Liver Failure (KACLIF) Study Group

NAFLD

OP-067 Nonalcoholic Fatty Liver Disease and the Incidence of Myocardial Infarction: A Cohort Study 372
Jieun Na, Dong Hyun Sinn, Danbee Kang, Yoosoo Chang, Seungho Ryu, Soo Jin Cho, Seung Woon Paik, Young Bin Song, Roberto Pastor-Barriuso, Eliseo Guallar, Juhee Cho, Geum-Youn Gwak

OP-068 Association between Body Size-Metabolic Phenotype and Nonalcoholic Steatohepatitis and Significant Fibrosis 372
Saekyung Joo, Donghee Kim, Donghyeon Lee, Yong Jin Jung, Byeong Gwan Kim, Won Kim

OP-069 Development of Machine Learning Model to Predict the 7-Year Risk of the Non-Alcoholic Fatty Liver Disease (NAFLD) among General Korean Population: A Nationwide Population-Based Study 373
Youn I Choi, Yun Soo Kim, Oh Sang Kwon, Ju Hyun Kim, Seung Kak Shin, and Dong Kyun Park

OP-070 Prevalence and Incidence of Tamoxifen-Related Nonalcoholic Fatty Liver Disease: A Systematic Review and Meta-Analysis 373
Cheon Beom Lee, Jeong-Ju Yoo, Sang Gyune Kim, Young Seok Kim, Soung Won Jeong, Jae Young Jang, Sae Hwan Lee, Hong Soo Kim, Baek Gyu Jun, Young Don Kim, Gab Jin Cheon

OP-071 Exosomal miRNA Analysis for Classifying Severity of Disease in Biopsy-Proven NAFLD Patients 374
Young-Sun Lee, Min-jin Lee, Sehwa Kim, Ha Seok Lee, Sung Won Chang, Sang Jun Suh, Ji Hoon Kim, Yeon Seok Seo, Hyung Joon Yim, Jong Eun Yeon, Kwan Soo Byun

Liver Cancer, Basic

OP-072 Updated Study on Action Mechanisms of Cereblon as a Novel Prognostic Biomarker for Hepatocellular Carcinoma 375
Shin Hwang, Kyung Jin Lee, Gi-Won Song, Yun-Gyu Kim

OP-073 HKR3 Regulates Cell Cycle through the Inhibition of hTERT in Hepatocellular Carcinoma Cells 375
Sung Hoon Choi, Sung Ho Yun, Bora Jin, Kyung Joo Cho, Ha Young Lee, Simon W Ra, Do Young Kim, Sang Hoon Ahn, Kwang-hyub Han, Jun Yong Park

OP-074 Circulating Exosomal microRNA-125b Inhibits Metastasis in Hepatocellular Carcinoma 375
Hye Seon Kim, Jin Seoub Kim, Wonhee Hur, Hee Chul Nam, Pil Soo Sung, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon, Jeong Won Jang

OP-075 Gut Microbes May Enhance the Efficacy of Immunotherapy in the Murine Metastatic Liver Cancer Model 376
Hyunwoo Oh, Minseok Albert Kim, Su Jong Yu, Hyojin Nah, Heejoon Jang, Sun Woong Kim, Cheol-Hyung Lee, Yun Bin Lee, Eun Ju Cho, Jeong-Hoon Lee, Yoon Jun Kim, Jung-Hwan Yoon

OP-076 TEAD2 as a Novel Prognostic Factor for Hepatocellular Carcinoma 377
Jong Seok Ju, Woo Sun Rou, Hyuk Soo Eun, Seok Hyun Kim, Byung Seok Lee

OP-077 Hsa_circ_0005986 as a Prognostic Biomarker in Hepatocellular Carcinoma 377
Se Young Jang, Gyeonghwa Kim, Soo Young Park, Young-Oh Kweon, Yu Rim Lee, Jongwon Seo, Young Seok Han, JaRyung Han, Heon Tak Ha, Jae Min Chun, Eunhye Lee, Sumin Im, Jae Kyoung Seo, Jung Gil Park, Hye Won Lee, Won Young Tak, and Keun Hur

Liver Cancer, Clinical

OP-078 Prognostic Value of Alpha-Fetoprotein in Patients Who Achieved Complete Response to Transarterial Chemoembolization for Hepatocellular Carcinoma 378
Jae Seung Lee, Wonseok Kang, Dong-Hyun Sinn, Moon Seok Choi, Geum-Youn Gwak, Yong-Han Paik, Joon Hyeok Lee, Kwang Cheol Koh, Seung Woon Paik, Hwi Young Kim, Tae Hun Kim, Kwon Yoo, Yeonjung Ha, Young Eun Chon, Mi Na Kim, Joo Ho Lee, Seong Gyu Hwang, Soon Sun Kim, Hyo Jung Cho, Jae Yoon Cheong, Sung Won Cho, Seung Ha Park, Nae-Yun Heo, Young Mi Hong, Ki Tae Yoon, Mong Cho, Jung Gil Park, Min Kyu Kang, Soo Young Park, Young Oh Kweon, Won Young Tak, Se Young Jang, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Seung Up Kim: The Korean TACE Study Group

OP-079 Undetectable Viral DNA after Curative Surgery Predicts Favorable Survivals in Patients with Hepatitis B-Related Hepatocellular Carcinoma 379
Pil Soo Sung, Jeong Won Jang, Hyun Yang, Kwon Yong Tak, Hee Chul Nam, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon, Sang Wook Choi, Young Kyoung You, Dong Goo Kim, Sang Wook Choi

OP-080 Prognosis and Survival Outcomes According to Body Mass Index in Hepatocellular Carcinoma Patients: An Analysis of a Nationwide Cancer Registry Database 379
Boram Cha, Jung Hwan Yu, Young Ju Suh, Bo-Hye Song, Young-Joo Jin, Jin-Woo Lee

OP-081 Availability of Tumor Markers in Patients with Pretreatment State of Hepatocellular Carcinoma 380
Saerom Kang, Seongwoo Nam, Hyeokchoon Kwon, Jongkyung Choi, Joowon Chung, Jung Shin, Sieun Kim

OP-082 Validation of AJCC 8th Staging System in Patients with Resected Hepatocellular Carcinoma 380
Sun Young Yim, Yoo Jin Lee, Tae Hyung Kim, Young Sun Lee, Sang Jun Suh, Na Yeon Han, Yeon Seok Seo, Ji Hoon Kim, Hyung Joon Yim, Dong Sik Kim, Soon Ho Um

OP-083 HCV Eradication Using Direct-Acting Antivirals Improve Treatment Outcomes in Patients with HCV-Related HCC Treated with TACE: A Multi-Center Retrospective Cohort Study 381
Seung Up Kim, Eun Ju Cho, Soo Young Park, Young Mi Hong, Soon Sun Kim, Hwi Young Kim, Nae-Yun Heo, Jung Gil Park, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Jeong-Hoon Lee, Su Jong Yu, Yoon Jun Kim, Jung-Hwan Yoon, Won Young Tak, Young Oh Kweon, Ki Tae Yoon, Mong Cho, Jae Yoon Cheong, Seung Ha Park; The Korean TACE Study Group

Liver Cancer, Clinical

OP-084	The Study about Immunologic Markers Predicting Efficacy of Locoregional Therapy for Hepatocellular Carcinoma	382
	<i>Sang Youn Hwang, Seon Mi Lee, Jung Woo Im, Ki Jeong Jeon</i>	
OP-085	Development of a New Nomogram Including Neutrophil-to-Lymphocyte Ratio to Predict Survival in Patients with Hepatocellular Carcinoma Undergoing Transarterial Chemoembolization	382
	<i>Hye Kyung Hyun, Young Eun Chon, Hana Park, Yeonjung Ha, Mi Na Kim, Beom Kyung Kim, Joo Ho Lee, Seung Up Kim, Do Young Kim, Sang Hoon Ahn, Seong Gyu Hwang, Kwang-Hyub Han, Kyu Sung Rim, and Jun Yong Park</i>	
OP-086	Outcome and Safety of Second or Third-Line Nivolumab Treatment in Real Life: A Single Center Experience	383
	<i>Soo Jeong Koh, Ji Hee Park, Joong-Won Park, Bo Hyun Kim, Ju Hee Lee, Young Hwan Koh, Chang-Min Kim</i>	
OP-087	Effectiveness of Dose Reduction of Sorafenib on HCC Treatment: A Real Life Multicenter Data Analysis	383
	<i>Kwon Yong Tak, Jeong Won Jang, Pil Soo Sung, Hee Chul Nam, Jong Young Choi, Seung Kew Yoon, Jin Mo Yang, Chang Wook Kim, Hee Yeon Kim, Seung Won Lee, Hae Rim Lee, U Im Chang, Do Seon Song, Jung Hyun Kwon, Sun Hong Yoo, Sang Wook Choi, Myeong Jun Song, Seok Hwan Kim</i>	
OP-088	Serum Exosomal microRNA-10b-5p as a Potential Biomarker of Early Stage Hepatocellular Carcinoma	384
	<i>Hyo Jung Cho, Jung Woo Eun, Baek Geum Ok, Chul Won Seo, Hye Ri Ahn, Young-hwan Ahn, Jinhee Jung, Soon Sun Kim, Sung Won Cho, and Jae Youn Cheong</i>	
OP-089	Multicenter Retrospective Analysis of the Efficacy of Regorafenib after Progression on Sorafenib with Hepatocellular Carcinoma	385
	<i>Ha Seok Lee, Sung Won Chang, Min jin Lee, Sehwa Kim, Young-Sun Lee, Young Kul Jung1, Sang Jun Suh, Ji Hoon Kim, Yeon Seok Seo, Hyung Joon Yim, Jong Eun Yeon, Kwan Soo Byun SB Cho, SY Hwang, HW Lee, Young Chang, Jae Young Jang</i>	

Liver Cancer, Clinical

OP-090	Appraisal of Transarterial Chemoembolization Refractoriness in Patients with Hepatocellular Carcinoma	385
	<i>Jonggi Choi, Danbi Lee, Ju Hyun Shim, Kang Mo Kim, Young-Suk Lim, Yung Sang Lee, and Han Chu Lee</i>	
OP-091	Validation of Prognostic Impact of ADV Score for Resection of Hepatocellular Carcinoma: An Analysis Using Nationwide Korea Liver Cancer Registry Database	386
	<i>Yohan Park, Shin Hwang</i>	
OP-092	Better Prediction of Outcomes by Response Evaluation Using the Modified RECIST Compared with the RECIST 1.1 in Patients with HCC Treated with Yttrium-90 Radioembolization	386
	<i>Hong Jun Choi, Jae Seung Lee, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Yong Eun Chung, Song-Ee Baek, Mi-Suk Park, Myeong-Jin Kim, Hyungjin Rhee, and Seung Up Kim</i>	
OP-093	Preoperative Transcatheter Arterial Chemoembolization for Surgical Resection of Huge Hepatocellular Carcinoma (≥ 10 cm): A Multicenter Propensity Matching Analysis	387
	<i>Chao LI, Lei LIANG, Ming-Da WANG, Han WU, Jiong-Jie YU, Timothy M. PAWLICK, Wan-Guang ZHANG, Yao-Ming ZHANG, Ya-Hao ZHOU, Wei-Min GU, Hong WANG, Ting-Hao CHEN, Jun HAN, Hao XING, Zhen-Li LI, Wan Yee LAU, Meng-Chao WU, Feng SHEN, Tian YANG</i>	
OP-094	Optimal Timing of Radiotherapy for Incomplete Transarterial Chemoembolization in BCLC Stage B Hepatocellular Carcinoma	387
	<i>Hwa Kyung Byun, Nalee Kim, Jinsil Seong</i>	
OP-095	Validation of ADV Score as a Quantifiable Prognostic Biomarker for Hepatocellular Carcinoma Recurrence after Liver Transplantation	388
	<i>Shin Hwang, Yong-Kyu Chung, Chul-Soo Ahn, Ki-Hun Kim, Deok-Bog Moon, Tae-Yong Ha, Gi-Won Song, Dong-Hwan Jung, Gil-Chun Park, Young-In Yoon, Sung-Gyu Lee</i>	

Liver Transplantation

OP-096	Incidence and Risk Factors for Herpes Zoster after Adult Liver Transplantation	388
	<i>Seohee Lee, Sangjin Kim, Jongwook Oh, Young Jae Jeong, Jinsoo Rhu, Kyung Sik Kim, Jisoo Lee, Gyu-sung Choi, Jong Man Kim, Jae-Won Joh</i>	
OP-097	Dextroplantaion of Left Liver Graft in Infants	388
	<i>Nam-Joon Yi, Suk Kyun HONG, Jeong-Moo LEE, Jae-Hyung CHO, Kwang-Woong LEE, Kyung-Suk SUH</i>	
OP-098	Effect of Everolimus on Hepatocellular Carcinoma Recurrence after Liver Transplantation	389
	<i>Dong Jin JOO, Jae Geun LEE, Dae Hoon HAN, Gi Hong CHOI, Jin Sub CHOI, Myoung Soo KIM, Soon Il KIM</i>	
OP-099	Minimal Invasive Living Donor Right Hepatectomy: An Experience of Consecutive 114 Cases by a Single Surgeon	389
	<i>Sang Hyun KANG, Dong Hwan JUNG, Hwui Dong CHO, Shin HWANG, Ki Hun KIM, Chul Soo AHN, Tae Yong HA, Gi Won SONG, Gil Chun PARK, Young In YOON, Jae Hyun KWON, Yong Kyu CHUNG, Su Min HA, I Ji JUNG, Jin Uk CHOI, Sung Gyu LEE, Deok-Bog MOON</i>	
OP-100	The Protective Effect of Antioxidants against Hepatic Ischemia Reperfusion Injury in Rat	389
	<i>Min-Su Park</i>	
OP-101	Factors Predicting Cholestasis in Post Right Lobe Donor Hepatectomy in the Era of Standardized Donor Selection Protocols: Analysis of 340 Donors over 19 Months	390
	<i>Naganathan SELVAKUMAR, Subash GUPTA</i>	

Surgery, Technical Issues

OP-102	Oncologic Outcome of Two Stage Hepatectomy in Patients with Bilobar Multiple Colorectal Liver Metastases	390
	<i>Jin Hong Lim, Sung Whan Cha, Dai Hoon Han, Gi Hong Choi, Dong Sup Yoon, Jin Sub Choi</i>	
OP-103	Surgical Tips of Pure Laparoscopic Donor Right Hemihepatectomy for Donors with Portal Vein Anatomical Variations	390
	<i>Jeong-Moo LEE, Kwang-Woong LEE, Ahmed SHEHTA, Suk Kyun HONG, Jae-Hyung CHO, Nam-Joon Yi, Kyung-Suk SUH</i>	
OP-104	Subtotal Hepatectomy: Pig Models for the Study of Post-Hepatectomy Liver Failure	391
	<i>Yoon Young Choi, Kyung Chul Yoon, Hye-Sung Jo, Jin-I Seok, Dong-Sik Kim</i>	
OP-105	Choice the Optimal Surgical Treatment Strategy for Liver Alveococcosis.....	391
	<i>Kiselev Nikolai Michailovich, Rykhtik Pavel Ivanovich, Bobrov Nikolay Viktorovich, Zagainov Vladimir Evgenievich</i>	
OP-106	Robotic Hilar Cholangiocarcinoma Radical Resection Compared with Laparotomy in Prognosis	392
	<i>Sai CHOU, Zheng-Yao CHANG, Guo-Dong ZHAO, Rong LIU</i>	
OP-107	Robotic Anatomical Hepatectomies for Difficult Segments	392
	<i>Sung Hoon Choi</i>	

Poster Exhibition

Alcoholic Liver Disease

PE-001	Randomized Controlled Trial of Lactulose and Lactulose with Probiotic in the Treatment of Minimal Hepatic Encephalopathy in Chronic Liver Disease	396
	<i>Durga Bhandari, Denish Peeyush</i>	
PE-002	Peptic Ulcer Disease in Cirrhosis.....	396
	<i>Denish Peeyush</i>	
PE-003	Beneficial Effects of Cisplatin on Liver Fibrosis in a Non-Alcoholic Steatohepatitis (NASH) Rodent Model	396
	<i>B L Gupta, Arun Kumar Rao</i>	
PE-004	Preclinical and Clinical Study in Alcohol Dependence Syndrome Patients with Lipid Profile and Cardiac Markers to Correlate Occurrence of Cardiovascular Disease	397
	<i>Hari Prasad Dulal</i>	
PE-005	Unexpected Improvement of Liver Function by Intravenous Immunoglobulin in a Steroid-Experienced Severe Alcoholic Hepatitis	397
	<i>Kwon Yong Tak, Pil Soo Sung, Hee Chul Nam, Jeong Won Jang, Jong Young Choi, Seung Kew Yoon</i>	
PE-006	A Case of Pneumocystis Pneumonia after Use of Glucocorticoids in Severe Alcoholic Hepatitis.....	398
	<i>Min Woo Chung, Chung Hwan Jun, Sung Bum Cho, Seon Young Park, Chang Hwan Park, Hyun Soo Kim, Sung Kyu Choi, and Jong Sun Rew</i>	
PE-007	CX3CR1-Mediated Differentiation of F4/80low Monocytes into F4/80high Kupffer-Like Cells in Alcoholic Liver Disease.....	398
	<i>Myung-Ho Kim, Jun-Hee Lee, Young-Ri Shim, Hee-Hoon Kim, Ye Eun Kim, Keungmo Yang, Tom Ryu, Won-Il Jeong</i>	
PE-008	Essential Amino Acid Supplementation Decreases Liver Damage Induced by Chronic Ethanol Consumption in Rats.....	399
	<i>Bauyrzhan DARZHIGENOV, Darkhan KOPZHASSARULY</i>	
PE-009	Types and Pattern of Alcoholic Drinks Consumption and the Knowledge of Liver Cirrhosis and Alcohol Related Health Hazards among Selected Nepalese People	399
	<i>Nuwadatta Subedi</i>	
PE-010	Study of Biochemical and Haematological Parameters of Alcoholic Liver Disease Patients	400
	<i>Padam Bahadur Khadka, Mukunda Raj Kalouni</i>	
PE-011	Alcoholic Hepatitis Initial Recovery Is Complicated by Second Hit Drug Induced Liver Injury by Ayurvedic Medicines in India and Is Associated with Bad Prognosis.....	400
	<i>Bhavin VASAVADA, Hardik PATEL</i>	
PE-012	Prevalence and Distribution of Hepatitis and Liver Cirrhosis among Elderly: Evidence from the 2017 National Survey of Older Koreans ...	401
	<i>Bimala Sharma, Bishnu Raj Tiwari, Song Geurum, Eun Woo Nam</i>	

Autoimmune Liver Disease

PE-013	Seroprevalence of Anti-Hepatitis E Virus in the Patients with Autoimmune Hepatitis and Primary Biliary Cholangitis in South Korea	401
	<i>Jae Kyun Choi, Boo-ok Jang, Yun Suk Choi, Da woon Jeong, Si Ho Kim, Kyunghan Lee, Gwang Hyeon Choi, Eun Sun Jang, Jun-Wook Kim, Sook-Hyang Jeong</i>	

- PE-014 Histopathological Analysis and Validation of Different Scoring Systems for Autoimmune Hepatitis: Experience of Two Institutes..... 401
Soomin Ahn, Eun Ju Cho, Sook-Hyang Jeong, Haeryoung Kim
- PE-015 Failing Transplanted Liver from an Unrecognised, Recently Discovered Autoimmunity Following HCV Eradication, What Options Do We Have? 402
Hafiz Abdul Basit SIDDIQUI, Rabeea AZMAT

Cell Biology / Molecular Biology

- PE-016 Role of Momordica Charantia Fruit Extract against Hepatic Fibrosis Induced by Carbon Tetrachloride in Rats..... 402
Pardeep Kumar, SB Sharma
- PE-017 Human Fetal Liver Cells as a Bridge to the Liver Transplantation in Patients Waiting for Donors 403
Aidar Zulkharnay, Serik Zharikov
- PE-018 Beryllium Induced Alterations in Liver Biochemistry and Histopathology: Reversal by Therapy of Aloe Vera with Piperine and Curcumin · 403
Narottam Das Agrawal, Satendra Kumar Nirala
- PE-019 Histogenesis of Human Foetal Liver 404
Rajeev Mukhia, BP Powar, BK Taneja
- PE-020 High Maternal Linoleic Acid Alters Maternal Hepatic Cytokines and Circulating Lipid Profile in Rodent Model..... 404
Nirajan Shrestha, James SM Cuffe, Olivia J Holland, Andrew Bulmer, Anthony V Perkins, Andrew J McAinch, Deanne H Hryciw, Deanne Skelly
- PE-021 Diabetes Associated Liver Toxicity..... 405
Narendra Kumar
- PE-022 Effect of Gymnema Sylvestre on Liver Function Markers in Type II Diabetic Subjects 405
Senthil Kumar Subramani, Sunil Mahajan, Umamaheswari Pakkirisamy, Rohit Sharma, GBKS Prasad
- PE-023 Frequent Promoter Methylation and Gene Silencing of PTEN in Periampullary Carcinoma in Indian Population 406
Asgar Ali, Abhay Kumar Sharma, Nimisha, Sundeeep Singh Saluja
- PE-024 Optimal Time and Condition of Hypoxic Preconditioning to Maximize Mesenchymal Stem Cell Function..... 406
Waqar Khalid Saeed, Dae Won Jun
- PE-025 TRP2, a Prodrug of BMP7 Suppresses Hepatic Fibrosis in Mice Induced by the Treatment with Carbon Tetrachloride..... 406
Kyungjoo Cho, Nam Hee Kim, Hyejung Park, Hyuk Moon, Hyun Sil Kim, Jong In Yook, Kwang-Hyub Han, Sang Hoon Ahn, Simon W. Ro, Seung Up Kim
- PE-026 Development of Doxorubicin-Incorporated Phenylboronic Acid Nanoassembly and Evaluation of Anti-Cancer Effect in Hepatocellular Carcinoma 407
Byung-Yoon Kang, Sung Min Kim, Wonhee Hur, Won Jong Kim, Seung Kew Yoon
- PE-027 The Degree of HCC Differentiation Determines the Drug Diffusion in MCTS..... 407
Kyungjoo Cho, Hyuk Moon, Soonyeong Shin, Simon W. Ro, Jun Yong Park, Do Young Kim, Kwang-Hyub Han
- PE-028 Knockdown of ATG7 Suppresses Tumorigenesis in HCC Mouse Models Induced by HRASG12V and shp53 408
Beom Kyung Kim, Soonyoung Shin, Hyuk Moon, Kyungjoo Cho, Seung Up Kim, Do Young Kim, Simon W. Ro, Kwang-Hyub Han

Drug and Toxic Injury

- PE-029 Effects of Anti-Tubercular Treatment on Liver in Newly Diagnosed Pulmonary Tuberculosis Patient on Intensive Phase of Treatment 408
Abhishek Shrestha, Saroj Pokhrel, Praticchya Ale
- PE-030 Prevalence and Clinical Characteristics of Antibiotics Associated Drug Induced Liver Injury: From a Single Center Experience..... 409
Jin Hwa Park, Dae Won Jun, Dae Hyun Lim, Won Woo Seo, Ji Hyun Yeo, Na Ryung Choi, Jai Hoon Yoon, Kang Nyeong Lee, Hang Lak Lee, Oh Young Lee, Byung Chul Yoon, and Ho Soon Choi
- PE-031 High Levels of Procalcitonin in the Early Phase after Pediatric Liver Transplantation Indicate Poor Postoperative Outcome 409
Samat Issakov, Nursultan Kydyr
- PE-032 Cardiovascular Risk Factors after Conversion from Cyclosporine to Tacrolimus in Children after Liver Transplantation 409
Akmaral Dossanova, Lazzat Dossanova
- PE-033 A Case of Toxic Hepatitis Induced by Noni Powder 410
In Ki Min, Byung Seok Lee, Seok Hyun Kim, Eaum Seok Lee, Jong Seok Joo, Hyuk Soo Eun, Woo Sun Rou, Hee Sung Lee, Min Young Shin, Sung Hun Kang, Sang Ok Jung, Min Ji Cho, Dong Yeon Kim

Genetic

- PE-034 Study on Validity of Biomarkers DKK1 and HBx-LINE1 in Diagnosis and Posttreatment Monitoring of Hepatocellular Carcinoma 410
Hai Trung LE, Hoan Quoc PHAN, Thinh Tien NGUYEN, Son Thanh LE, Thanh Van LE, Trung Tat NGO, Tien Duc DAO, Hieu Trung LE, Giang Phuong DAO, Quang Van VU, Binh Thanh MAI, Lam Ngoc Dai NGUYEN et al

PE-035	Research on PNPLA3 Gene in Patients with Type 2 Diabetes Mellitus and Accompanying Hepatic Pathology in Yakutia.....	411
	<i>Alekandra Diakonova, Dyakonova A.T, Kurtanov Kh.A, Pavlova N.I, Soloveva N.A, Soloveva Y.A, Sydykova L.A, Filippova N.P, Aleksandrova T.N</i>	

HBV, Basic

PE-036	Ciclopirox Inhibits Hepatitis B Virus Secretion by Blocking Capsid Assembly	411
	<i>Jung-Ah Kang, Songwon Kim, Minji Park, Hyun-Jin Park, Jeong-Hyun Kim, Sanghyeok Park, Jeong-Ryul Hwang, Yong-Chul Kim, Yoon Jun Kim, Mi Sun Jin, Sung-Gyoo Park, Yuri Cho</i>	
PE-037	cccDNA-Induced Hepatocarcinogenesis Is Regulated by HBx-Stimulated Interaction between MSL2 and cccDNA	412
	<i>Xue-Li Jin, Suk-kyun Hong, Hwa-jung Kim, Sun-Kyung Lee, Nam-Joon Yi, Kwang-Woong Lee, and Kyung-Suk Suh</i>	
PE-038	The Effect of Living Donor Liver Transplantation on the Treatment of Severe Hepatitis	413
	<i>Daulet AZIM, Bauyrzhan DARZHIGENOV</i>	
PE-039	Costs of Viral Hepatitis B in the Republic of Korea, 2002–2015.....	414
	<i>Dahye Baik, Byung-Woo Kim, Jin-Kyoung Oh, Kyung-Ah Kim, Moran Ki</i>	
PE-040	Knowledge and Practice of Hepatitis B and C among Medical and Health Science Students in Nepal.....	414
	<i>Mani Neupane, Bimala Sharma, Bishnu Raj Tiwari</i>	

HBV, Clinical

PE-041	Prevalence of Hepatitis Delta Virus Infection in Patients with Chronic Hepatitis B in Eastern Province Mongolia.....	415
	<i>Bayarmaa Nyamaa, Nyam Biziya, Shinebayar Narantuya, Borkhuukhen Derem</i>	
PE-042	Cases of the Influence of Mare's Milk on the Course of Viral Hepatitis B + D	415
	<i>Gulshat Daribayeva, Erbol Dghapakov</i>	
PE-043	A Large-Scale, Multi-Center Study of Entecavir vs. Tenofovir on Long-Term Prognosis for Treatment-Naïve Chronic Hepatitis B in the Republic of Korea.....	415
	<i>Seung Up Kim, Yeon Seok Seo, Han Ah Lee, Mi Na Kim, Yu Rim Lee, Hye Won Lee, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Seong Gyu Hwang, Kyu Sung Rim, Soon Ho Um, Won Young Tak, Young Oh Kweon, Beom Kyung Kim, and Soo Young Park</i>	
PE-044	Establishment of a Korean Chronic Hepatitis B Cohort Study.....	416
	<i>Mi Young Jeon, Tae Seop Lim, Jae Seung Lee, Hye Won Lee, Sang Gyune Kim, Eun Young Cho, Young Mi Hong, Yeon Seok Seo, Ki Tae Yoon, Beom Kyung Kim, Jun Yong Park, and Sang Hoon Ahn</i>	
PE-045	Projection of Health Outcomes over 5-Year and 10-Year Using Tenofovir Alafenamide for the Management of Chronic Hepatitis B in China	417
	<i>Ying Han, Bin Wu, Ming Hu, Fengqin Hou, Yida Yang, Lei Wang</i>	
PE-046	Lower Risk of Hepatocellular Carcinoma Development in Chronic Hepatitis B Patients with Immune Tolerant Phase Than Those with Antiviral Therapy	417
	<i>Mi Young Jeon, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Beom Kyung Kim, and Seung Up Kim</i>	
PE-047	Real-Life Indication and Efficacy of Tenofovir Alafenamide, Tenofovir Disoproxil Fumarate, and Entecavir for Treatment Naïve Chronic Hepatitis B Patients	418
	<i>Si Ho Kim, Boo-ok Jang, Kyunghan Lee, Jae kyun Choi, Jin-Wook Kim, Sook-Hyang Jeong, Gwang hyeon Choi, Eun Sun Jang</i>	
PE-048	Association between Hepatitis B Virus Infection and Agent Orange in Non-Hodgkin's Lymphoma	418
	<i>Wonhyeong Park, Sung Hoon Kim, Ji Sun Jang, Seung Whan Kim, Tae gyoon Kim</i>	
PE-049	Comparable Incidence of Hepatocellular Carcinoma in Chronic Hepatitis B Patients Treated with Entecavir or Tenofovir	418
	<i>Dahye Kim, Jung Woo Shin, Seok Won Jung, Seung Bum Lee, Bo Ryung Park, Min-Ju Kim, Eun Ji Park, and Neung Hwa Park</i>	
PE-050	Frequent Radiological Assessment Using Computed Tomography Deteriorates Renal Function in Patients with HBV-Related Hepatocellular Carcinoma that Is Treated with Entecavir and Tenofovir	419
	<i>Mi Young Jeon, Tae Seop Lim, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Kwang-Hyub Han, Sang Hoon Ahn, and Seung Up Kim</i>	
PE-051	Low Incidence of Hepatitis B Reactivation after Kidney Transplantation in Hepatitis B Surface Antigen-Negative and Core Antibody-Positive Recipients.....	420
	<i>Jihye Kim, Se jin Chung, Kyo Won Lee, Jae Berm Park, Wonseok Kang, Dong-Hyun Sinn, Geum-Youn Gwak, Yong-Han Paik, Moon Seok Choi, Joon Hyeok Lee, Kwang Cheol Koh, Seung Woon Paik</i>	
PE-052	Estimation of Hepatocellular Carcinoma Risk after Hepatitis B Surface Antigen Seroclearance.....	420
	<i>Yewan Park, Minseok Albert Kim, Dong Hyun Sinn, Jeong-Hoon Lee, Wonseok Kang, Geum-Youn Gwak, Yong-Han Paik, Moon Seok Choi, Joon Hyeok Lee, Kwang Cheol Koh, Seung Woon Paik</i>	
PE-053	Real-Life Efficacy of Glecaprevir and Pibrentasvir for Genotype 2 Chronic Hepatitis C.....	421
	<i>Sang Jun Suh, Hyung Joon Yim, Young Gul Jung, Han Ah Lee, Tae Hyung Kim, Sun Young Yim, Young-Sun Lee, Jong Jin Hyun, Yeon Suk Seo, Ji Hoon Kim, Jong Eun Yeon, Kwan Soo Byun, Sun Ho Um</i>	

PE-054	Comparison of the Effect Tenofovir and Entecavir on Renal Function in Patients with Chronic Hepatitis B.....	421
	<i>Hong Joo Kim, Won Sohn, Yong Kyun Cho, Byung Ik Kim</i>	
PE-055	Comparison of Efficacy between Entecavir and Tenofovir in Treatment-Naïve Chronic Hepatitis B Patients with High Viraemia: Results from SAINT Cohort	421
	<i>Ji Won Park, Kang Hyun Um, Sung Eun Kim, Jae Yoon Jeong, Ji Hyun An, Dae Won Jun, Hyun-Woo Oh, Eileen L. Yoon, Jae-Jun Shim, Sang Bong Ahn, Yong Kyun Cho, Soung Won Jeong, Young Seok Doh, Hyun Chin Cho, Hyoung Su Kim ; SAINT cohort study group</i>	
PE-056	Fractures Related to Tenofovir Treatment in Patients with Chronic Hepatitis B: A Comparative Study in the National Database.....	422
	<i>In Hye Lee, Bo Hyun Kim, Hwa Young Choi, Moran Ki, Joong-Won Park</i>	
PE-057	Persistent Viremia after Entecavir Treatment and the Risk of Hepatocellular Carcinoma in Patients with HBV-Associated Cirrhosis.....	422
	<i>Seung Kak Shin, Oh Sang Kwon, Jeong Han Kim, Chan Uk Lee, Jong Eun Yeon, Sang Jun Suh, Young Kul Jung, Hyung Joon Yim, Yun Soo Kim, Ju Hyun Kim</i>	
PE-058	External Validation of the Modified PAGE-B Score in Asian Chronic Hepatitis B Patients Receiving Antiviral Therapy	423
	<i>Hye Won Lee, Seung Up Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, and Beom Kyung Kim</i>	
PE-059	Tenofovir Disoproxil Fumarate versus Tenofovir Disoproxil for the Treatment of Patients with Chronic Hepatitis B Virus Infection.....	423
	<i>Min Young Shin, Hee Sung Lee, Sung Hoon Kang, Sang Ok Jung, Min Ji Cho, Woo Sun Rou, Hyuk Soo Eun, Seok Hyun Kim, and Byung Seok Lee</i>	
PE-060	Efficacy and Safety of 3-Year Entecavir and Tenofovir Therapy in Chronic Hepatitis B Patients with Chronic Kidney Disease: A Multicenter, Retrospective Cohort Study	424
	<i>Ji Won Park, Hyun-Woo Oh, Dae Won Jun, Jae Yoon Jeong, Ji Hyun An, Eileen L. Yoon, Jae-Jun Shim, Hyo Young Lee, Sang Bong Ahn, Yong Kyun Cho, Soung Won Jeong, Hyoung Su Kim, Sung-Eun Kim; SAINT Study Group</i>	
PE-061	Real World Data of Tenofovir Alafenamide versus Tenofovir Disoproxil Fumarate for the Treatment of Patients with Chronic Hepatitis B ...	425
	<i>Saein Kim, Hyun Woong Lee, Seung Up Kim, Jung Il Lee, Sora Kim, Hye Young Chang, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Kwang-Hyub Han, Kwan Sik Lee, Sang Hoon Ahn</i>	
PE-062	The Effectiveness of Tenofovir and Hepatitis B Immunoglobulin in Preventing HBV Vertical Transmission for Pregnancy.....	425
	<i>Khishigmaa Lkhagvadorj, Nyam Biziya</i>	
PE-063	Cumulative Incidence of Hepatocellular Carcinoma and Hepatitis B Surface Antigen Seroclearance after Nucleos(t)ide Analogue Induced Hepatitis B e Antigen Seroclearance.....	426
	<i>Hyun Woong Lee, Saein Kim, Sora Kim, Hye Young Chang, Jung Il Lee, Kwan Sik Lee</i>	
PE-064	Clinical Impact and Correlation of Serum HBV DNA and HBcrAg Titer in Patients with Chronic Hepatitis B during Antiviral Therapy	426
	<i>Nguyen Van Thai, Hyun Woong Lee, Saein Kim, Sora Kim, Hye Young Chang, Jung Il Lee, Kwan Sik Lee</i>	
PE-065	Determination of Liver Fibrosis Stage by Fib-4 in Patients with Chronic Viral Hepatitis.....	427
	<i>O. Baatarkhuu, Z. Bolortuya, G. Ulmaa</i>	
PE-066	HCV/HBV Co-Infection: Epidemiology, Clinical Characteristics, Viral Interactions and Mortality.....	427
	<i>O. Baatarkhuu, R. Bayasgalan, D. Munkh-Oshikh</i>	

HCV, Basic

PE-067	MicroRNA-99a Restricts Hepatitis C Virus Replication by Blocking mTORC1-Mediated de novo Lipogenesis	427
	<i>Eun Byul Lee, Pil Soo Sung, Keungmo Yang, Dong Jun Park, Jung-Hee Kim, Gil Won Lee, Seung Kew Yoon</i>	
PE-068	Change of Incidence of Hepatitis C Virus Infection after Transfusion by Introduction of Nucleic Acid Testing: A Big Data Analysis.....	428
	<i>Hwa Young Choi, Moran Ki</i>	

HCV, Clinical

PE-069	Pharmacokinetics, Safety, and Efficacy of Glecaprevir/Pibrentasvir in Pediatric Patients with Genotypes 1-6 Chronic HCV Infection: Part 1 of the DORA Study.....	429
	<i>Maureen M Jonas, Robert H Squires, Susan M Rhee, Chih-Wei Lin, Kazuhiko Bessho, Cornelia Feiterna-Sperling, Loreto Hierro, Deirdre Kelly, Simon C Ling, Tatiana Strokova, Antonio del Valle-Segarra, Li Liu, Teresa I Ng, Ariel Porcalla, Margaret Burroughs, Etienne Sokal, Yong Kyun Won</i>	
PE-070	Long-Term Hepatic and Extra-Hepatic Outcomes of CHC Patients Post Sofosbuvir-Based IFN-Free Treatment (LONGHEAD Study)-Interim Report	429
	<i>Ming-Lung Yu, Ting-Tsung Chang, Jia-Hong Kao, Ting-Tsung Chang, Chih-Chou Chen, Tsung-Hui Hu, Cheng-Yuan Peng, Horng-Yuan Wang, Chi-Jen Chu, I-Shyan Sheen, Yu-Chun Hsu, Jeong Heo, Young-Suk Lim, Hyung Joon Yim, Youn-Jae Lee, Kwan Soo Byun, Won Young Tak, Yoon Jun Kim, Sang Hoon Ahn, Seung Woon Paik, Sook-Hyang Jeong, Young Seok Kim, Seung-Kew Yoon, Ju-Hyun Kim, Yang-Hyun Baek</i>	
PE-071	An Open-Label, Randomized, Active Control Trial of 8 Versus 12 Weeks of Elbasvir/Grazoprevir for Treatment-Naïve Chronic Hepatitis C Genotype 1b Patients with Mild Fibrosis (EGALITE): Impact of Baseline Viral Loads and NS5A Resistance-Associated Substitut	430
	<i>Ming-Lung Yu, Chung-Fen Huang, Ming-Lun Yeh, Chia-Yen Dai, Jee-Fu Huang, Wan-Long Chuang</i>	
PE-072	Decreased of Alpha-Fetoprotein Level among Patients with Liver Cirrhosis That Related to HCV Treated with Combination Therapy with Ledipasvir and Sofosbuvir	430
	<i>Batsukh Dashnyam, Bayarmaa Nyamaa, Nyam Biziya, Oyundelger Munkhtuvshin</i>	

PE-073	Changing Cascade of Care for Hepatitis C in the Era of Direct-Acting Antivirals (DAAs) 431 <i>Jag Chhatwal, Qiushi Chen, Emily Bethea, Turgay Ayer, Yueran Zhuo, Chin Hur, Anne Spaulding, and Fasiha Kanwal</i>	431
PE-074	Ledipasvir/Sofosbuvir for 8, 12, or 24 Weeks Is Safe and Effective in Patients Undergoing Dialysis 431 <i>Wan-Long Chuang, Tsung-Hui Hu, Peter Buggisch, Christophe Moreno, Wei-Wen Su, Luigi Biancone, Robert Hyland, Sophia Lu, Svetlana Markova, Hadas Dvory-Sobel, Anu Osinusi, Anuj Gaggar, Jin Youn, Cheng-Yuan Peng, Chen-Hua Liu, Meghan Sise, Alessandra Mangia</i>	431
PE-075	Safety and Effectiveness of HARVONI® (Ledipasvir/Sofosbuvir, LDV/SOF) from the 3rd Year Post-Marketing Surveillance (PMS) Data in Korea 432 <i>Tae Hun Kim, Won Young Tak, Sae Hwan Lee, Neung Hwa Park, Yang Hyun Baek, Young Mi Hong, Tae Hyo Kim, Chang Hyeong Lee, Youn Jae Lee, Yong Kyun Cho, Jeong Ill Suh, Byung Hoon Han, Jae Seok Hwang, Hyun Ji Lee, Jin Youn, Yan Zhong</i>	432
PE-076	A Case Report of Glecaprevir/pibrentasvir-induced Severe Hyperbilirubinemia in a Patient with Compensated Liver Cirrhosis 432 <i>Jae Hyun Yoon, Gaeun Kang, Chung Hwan Jun, and Sung Kyu Choi</i>	432
PE-077	Real Life Data of Daclatasvir and Asunaprevir Combination Therapy for Korean Patients Infected with HCV G1b without NS5A Resistance: Retrospective Multicenter Study 433 <i>Jung Hee Kim, Hyoung Su Kim, Myoung Kuk Jang, Ki Tae Suk, Dong Joon Kim, Sang Hoon Park, Myung Seok Lee, Ji Won Park, Sung Eun Kim, Choong Kee Park, Jae Jun Shim, Sang Bong Ahn, Dae Won Jun, Soung Won Jeong, Young Joo Jin, Eun Young Jo, Moon Young Kim, Seung Ha Park</i>	433
PE-078	The Efficacy and Safety of Glecaprevir and Pibrentasvir Treatment for Patients with Genotype 2 Hepatitis C Virus Infection in Real-World Experience: Interim Analysis of a Single Center 434 <i>Woo Jin Yi, Sang Hoon Park, Myung Seok Lee</i>	434
PE-079	Efficacy and Safety of Ledipasvir/Sofosbuvir for Treatment of Chronic Hepatitis C Patients 434 <i>Doljinsuren Enkhbayar, Bayarmaa Nyamaa, Bat-Erdene Dashnyam, Nyam Bizija</i>	434
PE-080	Clinical Characteristics of Foreign Chronic Hepatitis C Patients in Daejeon-Chungcheong Area: Multi-Institutional Study 435 <i>Hyun Jae Lee, Min Ho Jeon, Suk Bae Kim, Il Han Song, Sae Hwan Lee, Hong Soo Kim, Tae Hee Lee, Young Woo Kang, Seok Hyun Kim, Byung Seok Lee, Hee Bok Chae, Seok Hwan Kim</i>	435
PE-081	LDL-Cholesterol Level Was Elevated after Direct Acting Antivirals (DAAs) Administration in Genotype 2 HCV-Infected Patients: Real World Data from a Single Center Experience 435 <i>Joon Ho Jeong, Sang Wook Lee, Kwang Il Seo, Byung Cheol Yoon, Byung Hoon Han, Eun Taek Park, Jin Wook Lee</i>	435
PE-082	Successful Treatment of Chronic Hepatitis C with a Combination of Glecaprevir and Pibrentasvir in a Patient Who Failed Previous Daclatasvir and Asunaprevir Treatment: A Case Report 436 <i>Dong Hoon Lee, Soo Hyung Ryu, Yun Jae Shin, Bo Kyung Lee, Tae Young Park, Jeong Seop Moon</i>	436
PE-083	Prevalence and Geographical Distribution of HCV among Arkhangai Provinces in Mongolia 436 <i>M. Batzaya, E. Byambatsogt, G. Buyankhishig, B. Amgalan, and O. Baatarkhuu</i>	436
PE-084	Study of Alteration of Iron Metabolism in Chronic Hepatitis C in Mongolia 437 <i>Baatarkhuu O, Bold Sharav, Uugantsetseg G, Tserendagva D, and Odgerel Ts</i>	437
PE-085	Direct Antiviral Agent (DAA) Treatment of Chronic Hepatitis C Results by APRI and FIB-4 Score in Mongolia 437 <i>Amgalan B, Bat-Erdene Zorigt, Byambatsogt E, Buyankhishig G, Tserendejid Ts, Munkhbayer D, and Naranzul N, and Baatarkhuu O</i>	437
PE-086	SVR 12 Weeks after Therapy with Sofosbuvir/Ledipasvir Patients with HCV Genotype 1B: Real World Mongolian Experience 437 <i>Baatarkhuu O, Oyun-Erdene Mijid, Enkhtuya. D, Saruul. B, Gantuul. Ch, Geegebadakh. B, Tuvshinbayer, Badamsuren. D, Ulzmaa. G, and Amarsanaa. J</i>	437
PE-087	Risk Assessment Tool for HCV Screening in Mongolia 438 <i>Munkhchuluun Tsevelmaa, Amgalan B, Byambatsogt E, Buyankhishig G, Tserendejid Ts, Munkhbayer D, Naranzul N, and Baatarkhuu O</i>	438
PE-088	Extended Virological Response after Sustained Virological Response in Patients with Sofosbuvir and Ribavirin Therapy 438 <i>Sin Hyeok Kang, Sae Hwan Lee, and Hong Soo Kim</i>	438
PE-089	Treatment Failure Rates of Direct-Acting Antiviral Agents for Chronic Hepatitis C: A Single-Center Study 439 <i>Hee Sung Lee, Dong Yeon Kim, Min In Ki, Min Young Shin, Min Ji Cho, Sang Ok Jung, Woo Sun Rou, Hyuk Soo Eun, Jong Seok Joo, Eaum Seok Lee, Seok Hyun Kim, Byung Seok Lee</i>	439
PE-090	Direct-Acting Antivirals about Diminishment of Liver Fibrosis after Chronic Hepatitis C Treatment 439 <i>Hyun Phil Shin, Joung Il Lee</i>	439
PE-091	Non-Invasive Test for Estimation of Liver Fibrosis 440 <i>O. Baatarkhuu, S. Ariunaa, Badamsuren D.</i>	440
PE-092	Treatment Effectiveness of Tenofovir Disoproxil Fumarate in Chronic Hepatitis B among Mongolian Patients 440 <i>O. Baatarkhuu, O. Otgonbayer, D. Munkh-Orshikh</i>	440
PE-093	HCV Treatment after Curative Liver Resection or RFA in Hepatocellular Carcinoma Patients in Mongolia 441 <i>O. Baatarkhuu, O. Tsevelmaa, J. Chinburen</i>	441
PE-094	Comparison of Methods That Evaluate the Prognosis of Liver Cirrhosis 441 <i>O. Baatarkhuu, B. Enkhtuvshin, D. Badamsuren</i>	441

Liver Cirrhosis, Portal Hypertension with Cx., Basic

- PE-095 Human Adipose Derived Stem Cells Promote Liver Regeneration in Hepatic Fibrosis Model by Controlled Releasing Hepatocyte Growth Factor 442
Ja Sung Choi, Sangheun Lee, Ki Jun Han, Sung-Whan Kim
- PE-096 Novel Self Nano Emulsifying Formulation of Furosemide: A Drug Used in Portal Hypertension 442
Pankajkumar Yadav
- PE-097 The Expression of TSLP in Liver Fibrosis: Rat Bile Duct Ligation Model 442
Jung Hee Kim, Ji Seon Lee, Seung Eun Kim
- PE-098 Enhanced Production of Steroid Drugs Intermediate Used in Treatment of Liver Cirrhosis 443
Jayesh Vaishnav, Girish Pendharkar, Vaishali Mourya, Danish Anjum

Liver Cirrhosis, Portal Hypertension with Cx., Clinical

- PE-099 *Helicobacter Pylori* Infection in Patients with Liver Cirrhosis: Prevalence with Portal Hypertensive Gastropathy 443
Nyam Biziya, Bayarmaa Nyamaa, Shinebayar Narantuya, Borkhuukhen Derem
- PE-100 Assessment of Liver Fibrosis and Cirrhosis by Fibroscan in Patients with Chronic Liver Disease 444
Le Thi Hoang Yen
- PE-101 Intra & Extrahepatic Portosystemic Shunt Embolization Procedure in Two Patients with Recurrent Hepatic Encephalopathy 444
Seung Kyu Choi, Seong Woo Nam, Hyeok Choon Kwon, Jong Kyung Choi, Joo Won Chung, Si Eun Kim, Sae Rom Kang, Jung Shin
- PE-102 Low Serum Creatinine Level and Acute Kidney Injury Can Predict Long-Term Mortality in Cirrhotic Patients with Ascites 445
Jaehyung Bae, Nan Young Choi, Ji Won Park, Jwa-Kyung Kim, Sung Gyun Kim, Hyung Jik Kim, Choong Kee Park, Young Rim Song, Sung-Eun Kim
- PE-103 Repeated versus Single Treatment of Esophageal Variceal Ligation after Esophageal Variceal Bleeding: Multicenter Retrospective Study 445
Young Youn Cho, Jeong-Hoon Lee, Su Jong Yu, Yoon Jun Kim, Hyung Jun Kim, Jung-Hwan Yoon
- PE-104 Comparison of Gross Inspection by Surgeon or Pathologist, Ultrasonography, CT, MRI, Transient Elastography, APRI and FIB-4 for Prediction of Liver Cirrhosis 446
Hyun Yang, Pil Soo Sung, Kwon Yong Tak, Jae Jun Lee, Hee Chul Nam, Jeong Won Jang, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon, Sang Wook Choi
- PE-105 Clinical Spectrum of Precipitating Factors of Hepatic Encephalopathy in Cirrhosis of Liver: Experience in Western Part of Nepal 446
Saroj Pokhrel, Mukunda Raj Kalouni
- PE-106 Comparison between Sandostatin Alone and Combined with Band Ligation for Hemostasis of Acute Variceal Bleeding 447
Tran Ngoc Thuy
- PE-107 Relationship of Symptom-Onset-To-Hospital Arrival with Hospital Course in Patients with Variceal Bleeding 447
Tae Suk Kim, Min Jong Lee, Dae Hee Choi
- PE-108 Platelet Count Spleen Diameter Ratio to Predict Esophageal Varices in Patients with Liver Cirrhosis, in the Eastern Province Mongolia 447
Uranbaigal Dashnyam, Nyam Biziya, Badam Bunuuzzei
- PE-109 The Diameter of Esophageal Varices Evaluated by Computed Tomography May Be an Important Predictor of Early Post-Endoscopic Variceal Ligation Bleeding 448
Young Mi Hong, Ki Tae Yoon, Mong Cho, Hwaseong Ryu, Tae Un Kim
- PE-110 Prognosis of Surgical Hernia Repair in Cirrhotic Patients with Refractory Ascites 448
Sun Woong Kim¹, Minseok Albert Kim¹, Hee Jun Jang¹, Yun Bin Lee¹, Eun Ju Cho¹, Jeong-Hoon Lee¹, Su Jong Yu¹, Jung-Hwan Yoon¹, Kyu joo Park², Yoon Jun Kim¹
- PE-111 The Impact of Liver Cirrhosis on the Mortality in Intensive Care Unit Patients 449
Chien-Chang Liao, Ta-Liang Chen
- PE-112 Changing Trends in Epidemiology and Clinical Outcomes in Liver Cirrhosis in Korea: Eight Years Data in Single Center Study 449
Sunmin Kim, Jae Hyun Yoon, Chung Hwan Jun, Sung Bum Cho, Sung Kyu Choi, Hee Joon Kim
- PE-113 Laparoscopic Management of Cholelithiasis in Patients with Chronic Liver Disease: A 10-Year Experience 450
Saurabh Galodha, Puneet Mahajan, Satinder P S Bains, Shivani Rao, V. Lekha, H. Ramesh
- PE-114 *Helicobacter Pylori* Infection in Cirrhotic Patients with Portal Hypertensive Gastropathy 451
Phyu Sin Aye, Yarzar Tun, Naing Lin, Yan Lynn Myint, Nwe Ni

Liver Failure, Acute

- PE-115 Biofabricated Silver Nanoparticles of Aqueous Extract of *Bassia Longifolia* L Leaves Mitigates Diethylnitrosamine Induced Hepatocellular Carcinoma in Wistar Rats: A Novel Approach for Liver Therapy 451
Deepika Singh, Manvendra Singh, Pradeep Kumar

PE-116	Downregulation of PGC-1 Leads to Decreased Expression of Mitochondrial Antioxidant Enzymes in the Mouse Model of Obstructive Cholestasis	452
	<i>Say-June Kim, Jung Hyun Park</i>	
PE-117	The Role of P-JNK Expression on Hepatocyte Necrosis and Autophagy in the Cholestatic Liver	452
	<i>Say-June Kim, Bong Jun Kwak</i>	
PE-118	Antioxidant Action of Hypoxic Conditioned Media from Adipose-Derived Stem Cells in the Hepatic Injury of Expressing Higher Reactive Oxygen Species	452
	<i>Say-June Kim, Kee Hwan Kim</i>	
PE-119	Effect of Extracorporeal Bioartificial Liver Support System on Fulminant Hepatic Failure Rabbits	453
	<i>Nursultan Kydyr, Samat Issakov</i>	
PE-120	Immunocorrecting Action of Roncoleukin in Patients with Acute Cholangitis in Various Ways of Application	453
	<i>Talgat Beisenbayev, Rysmakhanov M.S., Mussin N.M.</i>	
PE-121	Acute Liver Failure in Kazakhstan	453
	<i>Zhanna Kozybayeva, Yermakhan Assylkhanuly</i>	
PE-122	Acute Liver Rejection Values of Doppler US Measurements	454
	<i>Yermakhan Assylkhanuly, Nurmakhan Assylkhanuly</i>	
PE-123	Organs Failure Prevention for Patients with Hepatorenal Syndrome	454
	<i>Aisulu Rysmakhanova</i>	
PE-124	The Characteristics of Acute-on-Chronic Liver Failure Patients Based on Two Different Definitions: Prospective Korean Acute-on-Chronic Liver Failure Study	454
	<i>Do Seon Song, Hee Yeon Kim, Young Joo Jin, Dong Hyun Sinn, Eileen L. Yoon, Chang Wook Kim, Young Kul Jung, Ki Tae Suk, Sang Soo Lee, Hyun Chin Cho, Chang Hyeong Lee, Hwi Young Kim, Tae Hun Kim, Baek Gyu Jun, Hyung Joon Yim, Sung Eun Kim, Sung Won Lee, Jung Hyun Kwon, Seong Hee Kang, Soon Koo Baik, Byung Seok Lee, Jae Young Jang, Jeong Ill Suh, Hyoung Su Kim, Seong Woo Nam, Hyeok Choon Kwon, Young Seok Kim, Sang Gyune Kim, Hee Bok Chae, Jin Mo Yang, Joo Hyun Sohn, Jung Gil Park, Heon Ju Lee, Yoon Jun Kim, In Hee Kim, Ju Yeon Cho, Man Woo Kim, Sang young Han, Won Kim, Dong Joon Kim, on behalf of the Korean Acute-on-Chronic Liver Failure (KACLIF) Study Group</i>	
PE-125	Production of Steroid Drug Precursor Used in Treatment of Chronic Liver Diseases	455
	<i>Girish Pendharkar, Anjum Syed Danish, Patil Shridhar</i>	

Liver, Infectious Disease

PE-126	Pattern of Liver Disease at Tertiary Level Care in Nepal: Hospital Based Retrospective Study	456
	<i>Satya Narayan Yadav, Sanjit Karki</i>	
PE-127	Possibilities of Application of Endoscopic Techniques in the Diagnosis and Treatment of Echinococcosis of the Liver	456
	<i>Askhat Seitzhanov, B. Kuanyshbaev, Baurzhan</i>	
PE-128	Atypical Liver Resections in Liver Alveococcosis	457
	<i>Rokija Surova</i>	
PE-129	Surgical Aspects Treatment of Liver Echinococcosis	457
	<i>Baurzhan Kuanyshbayev, M. Altay</i>	
PE-130	A Case of Acute Hepatitis E Mimicking Autoimmune Hepatitis	457
	<i>Kideok Yoo, Youngnam Kim</i>	
PE-131	HIV-HCV Coinfection: Prevalence and Associated Risk Factors in the Western Region of Nepal	458
	<i>Bhoopendra Sharma, Sanjib Mani Regmi, Suresh Jaiswal, Krishna Gurung, Mamita Khaling Rai</i>	
PE-132	Seroprevalence of Hepatitis C Virus and Tuberculosis Co-Infection among HIV Infected Individuals	458
	<i>Sabina Rana Bhujel, Manisha Shrestha, Srijana Sapkota, Sujana Sharma, Sunita Lamsal, Urusha Maharjan, Ashok Kumar Sah, and Suresh Jaiswal</i>	
PE-133	Morphology and Histopathological Study of a Liver, Having Inflamed Left and Quadrate Lobe	459
	<i>Pooja Garg, Surajit Ghatak</i>	
PE-134	The Urinary Tract Infection with Liver Cirrhosis Patient	459
	<i>Bat-Erdene Dashnyam, Bolortsetseg Sergelen</i>	
PE-135	Acute Cholestatic Hepatitis Induced by Epstein-Barr Virus Infection in an Adult	459
	<i>Kyoung Min Sohn</i>	
PE-136	Laparoscopic Liver Echinococcectomy	460
	<i>Yerlan Umirbekov, Asset Yelemessov</i>	
PE-137	A Beneficial and Protective Effect of Carica Papaya Leaves Extract on Rat Peritonitis Model	460
	<i>Nitin Kumar, RK Khanna</i>	

PE-138	Hepatological Profile during Visceral Leishmaniasis <i>Sukrat Sinha</i>	461
PE-139	Assessment of Liver Function among Dengue Patients <i>Padmavathi Parthasarathy, I. Samiya Begam, Sathiya Priya Brindha, Pregna B Dolla</i>	461
PE-140	HDV Viral Load Related Liver Fibrosis Patients Clinical Evaluation Based on M2BPGI Level in Serum <i>Lkhagva-Ochir TOVUU, Enkhjargal BAYARSAIKHAN</i>	461
PE-141	Liver Tuberculosis <i>Muhammad ZAKRIA</i>	462

NAFLD, Basic

PE-142	Hepatocyte-Targeted shNLRP3 Nanobiologics Facilitated Local Suppression of NLRP3 Inflammasome in the Liver and Reduced Nonalcoholic Steatohepatitis <i>Jingyun Luan, Wei Chen, Dianwen Ju</i>	462
PE-143	NAFLD Screening among Newly Diagnosed Diabetics in Dornod Province, Mongolia <i>Tsetsegmaa Damdinsuren, Ryenchindorj Erkhembayar</i>	462
PE-144	Ameliorating Liver Fibrosis Using the Secretome Released from miR-122 Transfected Adipose-Derived Stem Cells in an Animal Model <i>Kee-Hwan Kim, Say-June Kim</i>	463
PE-145	Association of Coffee and Caffeine Consumption with Fatty Liver Disease, Nonalcoholic Steatohepatitis, and Degree of Hepatic Fibrosis <i>Darkhan KOPZHASSARULY, Bauyrzhan DARZHIGENOV</i>	463
PE-146	Chorionic-Plate-Derived Mesenchymal Stem Cells Attenuate Hepatic Steatosis via Restoration of Mitochondrial Function <i>Yun Bin Lee, Se-Mi Jung, Jae Yeon Kim, Gi Jin Kim, Jung-Hwan Yoon</i>	464
PE-147	Oxidized Lipoproteins Induce Accumulation of Oxidized Triglycerides and Cholesteryl Ester in Lipid Droplets of Liver Cell <i>Rojeet Shrestha, Zhen Chen, Hitoshi Chiba, Shu-Ping Hui</i>	464
PE-148	Could Cholecystectomy Facilitate or Augment Non-Alcoholic Fatty Liver Disease? Association or Causal Relationship? <i>Waqar Khalid Saeed</i>	465
PE-149	Nonalcoholic Fatty Liver Disease in Severely Obese Adolescent and Adult Patients <i>Nauryzgul Zhangabai, Akmaral Dossanova</i>	465
PE-150	Effects of Lactobacillus and Bifidobacterium Strains on Gut Liver Axis in NAFLD Mouse <i>Sang Jun Yoon, Gi Soo Youn, Min Jea Shin, Dae Hee Han, Haripriya Gupta, Na Young Lee, Ki Tae Suk, Dong Joon Kim</i>	465
PE-151	Modulation of Gut-Microbiome by Probiotics Ameliorates Progression of Non-Alcoholic Fatty Liver Disease <i>Na Young Lee, Sang Jun Yoon, Dae Hee Han, Haripriya Gupta, Gi Soo Youn, Min Jea Shin, Ki Tae Suk, Dong Joon Kim, Sang Hak Han</i>	466
PE-152	Self-Management of Patients with Non-Alcoholic Fatty Liver Disease: A Focus Group Interview Study <i>Yeonsoo Jang, Jiyea Lee, Seung Up Kim, Beom Kyung Kim</i>	466
PE-153	Dipeptidyl Peptidase-IV Inhibitors and Antioxidant Properties of Alkaloids Rich Fraction of <i>Withania Somnifera</i> Improve Liver Dysfunction in Type 2 Diabetic Mellitus <i>Anand Krishna</i>	467
PE-154	Probiotics Affect Adipose Tissue to Reduce NAFLD <i>Dae Hee Han, Gi Soo Youn, Min Jea Shin, Haripriya Gupta, Sang Jun Yoon, Na Young Lee, Dong Joon Kim, Ki Tae Suk</i>	467
PE-155	The Effect of Orange Water Kefir on Malondialdehyde Level in Liver Tissue of the Hyperlipidemic Rat <i>Mochamad Afifudin, Rafik Prabowo, Miranti Dewi Pramaningtyas</i>	467
PE-156	Lipid Fraction Area of Liver Histology after Intervention with Probiotic Beverage from Date Palm and Kefir Milk in the Hyperlipidemic Rats (<i>Rattus Norvegicus</i>) <i>Hilmi Ardian Sudiarjo, Rafik Prabowo, Miranti Dewi Pramaningtyas</i>	468
PE-157	EWSR1, a Potential Therapeutic Target in Non-Alcoholic Fatty Liver Disease <i>Gil Won Lee, Wonhee Hur, Sung Min Kim, Dong Jun Park, Byung-Yoon Kang, Jaegyoon Ahn, Sean Bong Lee, and Seung Kew Yoon</i>	469
PE-158	CJ-14199, a Novel Ileal Bile Acid Transporter Inhibitor for Non-Alcoholic Steatohepatitis <i>Jim Woo Jung, Hyungjin Jun, Dong-Hyun Kim, Keun-Ho Lee, Byoung Soo Kim, Dong-Kyu Kim, Soo-Jin Kim, Byoung-Seok Moon, Shin-Young Ryu</i>	469

NAFLD, Clinical

PE-159	Comparison of the Efficacy of Ursodeoxycholic Acid (UDCA) versus Vitamin E plus Vitamin C in Non-Diabetic Patients with Nonalcoholic Steatohepatitis (NASH) <i>Tatia Khachide, Gocha Barbakadze, Manana Jebashvili, Gela Sulaberidze, Koba Burnadze</i>	470
--------	--	-----

PE-160	Study of Biochemical and Oxidative Stress Markers in the First-Degree Relatives of Persons with Type 2 Diabetes Stratified by Glucose Tolerance Test	470
	<i>Dhananjay Yadav, Meerambika Mishra, Seema Rana, GBKS Prasad</i>	
PE-161	Association with Low Psoas Muscle Area and Non-Alcoholic Fatty Liver Disease in Patients with Inflammatory Bowel Disease	471
	<i>Min Kyu Kang, Jung Gil Park, Kyeong Ok Kim, Byung Ik Jang</i>	
PE-162	Nonalcoholic Fatty Liver Disease and Sarcopenia Are Independently Associated with Cardiovascular Risk	471
	<i>Eugene Han, Yong-ho Lee, Young Dae Kim, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Byung-Wan Lee, Eun Seok Kang, Bong-Soo Cha, Kwang-Hyub Han, Hyo Suk Nam, Ji Hoe Heo, and Seung Up Kim</i>	
PE-163	Sarcopenia Is Independently Associated with the Degree of Liver Fibrosis in Patients with Type 2 Diabetes Mellitus	472
	<i>Min Je Sung, Tae Seop Lim, Mi Young Jeon, Hye Won Lee, Beom Kyung Kim, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Jun Yong Park, and Seung Up Kim</i>	
PE-164	Lean Nonalcoholic Fatty Liver Disease and Development of Diabetes Mellitus: A Cohort Study	472
	<i>Dong Hyun Sinn, Joo Hyun Oh, Danbee Kang, Soo Jin Cho, Seung Woon Paik, Eliseo Guallar, Juhee Cho, Geum-Youn Gwak</i>	
PE-165	Routinely Available Noninvasive Tests Discriminate Advanced Fibrosis Due to NASH in the Phase 3 STELLAR Trials of the ASK1 Inhibitor Selonsertib	473
	<i>Vincent Wai-Sun Wong, Quentin M. Anstee, Eric J. Lawitz, Naim Alkhouri, Manuel Romero-Gomez, Takeshi Okanou, Michael Trauner, Kathryn Kersey, Georgia Li, G. Mani Subramanian, Robert P. Myers, C. Stephen Djedjos, Ling Han, Yao Li, Tuan Nguyen, Anita Kohli, Natalie Bzowje, Ziad Younes, Shiv Sarin, Mitchell L. Shiffman, Stephen A. Harrison, Zachary Goodman, Zobair M. Younossi, Sooji Lee</i>	
PE-166	Clinical Utility and Application of Noninvasive Tests in Selecting Patients with Advanced Fibrosis Due to NASH in the Phase 2 ATLAS Trial	473
	<i>Vincent Wai-Sun Wong, Rohit Loomba, Naim Alkhouri, Simone Strasser, Raul Aguilar Schall, Bryan J. McColgan, G. Mani Subramanian, C. Stephen Djedjos, Robert P. Myers, Zachary Goodman, Aasim Sheikh, Guy Neff, Bal Bhandari, Nadege Gunn, Kris Kowdley, Sooji Lee</i>	
PE-167	Atrial Fibrillation Is Associated with Advanced Liver Fibrosis in Patients with Non-Alcoholic Fatty Liver Disease	474
	<i>Min Kyu Kang, Jung Gil Park</i>	
PE-168	Prevalence of Pre-Diabetes, Diabetes, Abdominal Obesity and Hypertension among the Service Communities of Bhlai City of India	474
	<i>Nutan Yadav, Deepak Kumar</i>	
PE-169	Nonalcoholic Steatohepatitis Is Associated with a Higher Risk of Advanced Colorectal Neoplasm	475
	<i>Sungwoo Ryu, Jimin Han, Dong Hyeon Lee, Sae Kyung Joo, Yong Jin Jung, Byeong Gwan Kim, Won Kim</i>	
PE-170	Weight Loss Significantly Reduces the Risk of Chronic Kidney Disease Development	475
	<i>Young Eun Chon, Seong Gyu Hwang, Kyu Sung Rim, Mi Na Kim, Joo Ho Lee, Yeonjung Ha, Shin-Wook Kang, Hyung Jong Kim, Yu Bum Choi, and Mi Jung Lee</i>	
PE-171	The Invasive and Noninvasive Assessments for Liver Fibrosis in Korean Nonalcoholic Fatty Liver Disease Patients	476
	<i>So Yeon Kim, Sang Young Han, Sang Yi Moon, Yang-Hyun Baek, Sung Wook Lee, and Jin Sook Jeong</i>	
PE-172	The Grade of Nonalcoholic Fatty Liver Disease Is an Independent Risk Factor for Gallstone Disease	476
	<i>Young-Kyu Kim, Kyu Hee Her</i>	
PE-173	Appropriateness of Liver Biopsy for Nonalcoholic Fatty Liver Disease during Laparoscopic Cholecystectomy for Gallstone Disease	477
	<i>Kyung Sik Kim, Sang-Hyub Han, Ji Hae Nahm, Do Young Kim, Seung Woo Park, Young Nyun Park</i>	
PE-174	Risk Factors for Incident Nonalcoholic Fatty Liver Disease and Liver Fibrosis in Breast Cancer Survivors	477
	<i>Hwi Young Kim, Woosung Lim, Byung-In Moon, Hye Ah Lee</i>	
PE-175	Features of the Prevalence of Risk Factors for Non-Alcoholic Fatty Liver Disease among Residents of the City of Bishkek (Kyrgyzstan)	478
	<i>Sabirov Ibragim, Bebezov Bakhadyr, Surov Edir</i>	
PE-176	Serum Biomarkers to Differentiate Non-Alcoholic Steatohepatitis, Advanced Fibrosis, and Severe Steatosis from Mild Form of Non-Alcoholic Fatty Liver Disease	478
	<i>Ha Seok Lee, Sung Won Chang, Sehwa Kim, Min-jin Lee, Young-Sun Lee, Sang Jun Suh, Ji Hoon Kim, Yeon Seok Seo, Hyung Joon Yim, Jong Eun Yeon, Soon Ho Um, Kwan Soo Byun</i>	
PE-177	The High Occurrence of Non-Alcoholic Steatohepatitis with Fibrosis in Patients with Moderate Fatty Liver Accompanied by Metabolic Syndrome	478
	<i>Dong Hoon Lee, Soo Hyung Ryu, Yun Jae Shin, Bo Kyung Lee, Young Sun Na, Boeun Kim, Onhwa An, Tae Young Park, Jeong Seop Moon</i>	
PE-178	The Value of Controlled Attenuation Parameter in Fibrosis Prediction by Liver Stiffness in Nonalcoholic Steatohepatitis	479
	<i>Saein Kim, Jung Il Lee, Hyun Woong Lee, Kwan Sik Lee</i>	
PE-179	Predictors of Sarcopenia in Obese Korean Population	479
	<i>Min Je Sung, Hye Won Lee, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, and Seung Up Kim</i>	
PE-180	Putative Relationship between Changes in Body Composition and Metabolic Characteristics under Lifestyle Intervention in Patients with Nonalcoholic Fatty Liver Disease	480
	<i>Jiyoung Lim, Hwi Young Kim, Hye Ah Lee, Joon Yeul Nam, Tae Hun Kim, and Kwon Yoo</i>	

Liver Cancer, Basic

PE-181	Dickkopf-1 from Hepatocellular Carcinoma Cells Promotes the Angiogenic Potential of Endothelial Cells by Activating the VEGFR-2 Signaling Pathway	480
	<i>Bora Jin, Yechan Jeong, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Kwang-Hyub Han, Simon W. Ro, Sang Hoon Ahn, and Seung Up Kim</i>	
PE-182	Protective Effect of Bioengineered Silver Nanoparticles against Diethylnitrosamine Induced Hepatocarcinogenesis via Knockdown of Oxidative Stress and Inflammation by Regulating NF- κ B Pathway	481
	<i>Ekta Yadav</i>	
PE-183	Effect of Virtual Reality and Training on Liver Operation Planning	481
	<i>Azamat Nurmagambetov, Yerlan Makhambetov</i>	
PE-184	Alpha-Fetoprotein Inhibition Enhances the <i>in Vitro</i> and <i>in Vivo</i> Anti-Tumor Effects of Sorafenib on Hepatocellular Carcinoma	482
	<i>Jin Sook Kim, Kyung-Tae Kim, Joong-Won Park</i>	
PE-185	Successful Single-Stage Extended Right Hemihepatectomy with Low Anterior Resection of the Rectum in Patients with Colorectal Cancer with Liver Metastases	482
	<i>A. Smagulov, Shahmarat Ospanov, Bolat Tleuliev</i>	
PE-186	Significance of Plasma Levels of Soluble Programmed Death-1 and Soluble Programmed Death-Ligand 1 in Hepatocellular Carcinoma	483
	<i>Gwang Hyeon Choi, Jung Wha Chung, Yun Suk Choi, Da woon Jeong, Soomin Ahn, Eun Sun Jang, Jin-Wook Kim, Sook-Hyang Jeong</i>	
PE-187	Significance of Plasma Levels of Angiopoietin-2 and Vascular Endothelial Growth Factor in Hepatocellular Carcinoma	483
	<i>Gwang Hyeon Choi, Jung Wha Chung, Yun Suk Choi, Da woon Jeong, Soomin Ahn, Eun Sun Jang, Jin-Wook Kim, Sook-Hyang Jeong</i>	
PE-188	Cytotoxicity of Human Hepatic Intrasinusoidal CD56bright Natural Killer Cells against Hepatocellular Carcinoma Cells	484
	<i>Shin Hwang, Jaeseok Han, Ji-Seok Baek, Eunyoung Tak, Gi-Won Song, Sung-Gyu Lee, Dong-Hwan Jung, Gil-Chun Park, Chul-Soo Ahn, and Nayoung Kim</i>	
PE-189	Laparoscopic Hemihepatectomy at Liver Tumors	484
	<i>Zhanar Dulibaeva, B. Kuanyshbayev</i>	
PE-190	Serum Level of Growth Differentiation Factor 15 Reflects the Aggressiveness of Hepatocellular Carcinoma Including Metastasis	485
	<i>Soon Kyu Lee, Jong Young Choi, Jung Hyun Kwon, Jung Won Jang, Chang Wook Kim, Si Hyun Bae, Seung Kew Yoon, Mi-La Cho</i>	
PE-191	Hydralazine Stimulates HIF-1-Dependent but Inhibits HIF-2-Dependent Gene Expression in Liver Cancer Cells	485
	<i>Ranbir Singh, Dharmender Singh</i>	
PE-192	Targeting HDAC2 Elicits Synergistic Anti-Cancer Effects of Sorafenib in Hepatocellular Carcinoma	486
	<i>Hyung Seok Kim, Hee Doo Yang, Sang Yeon Kim, Minjung Na, Gyungdeck Yang, and Suk Woo Nam</i>	
PE-193	Association of Telomerase Reverse Transcriptase Gene Expression with Clinical Phenotype of Hepatocellular Carcinoma	486
	<i>Jin Seoub Kim, Hye Seon Kim, Hee Chul Nam, Pil Soo Sung, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon, Jeong Won Jang</i>	
PE-194	Investigating Role of Cinnamon Bioactive Compounds Towards Hepatic Carcinoma Marker in Diabetes State Using Computational Interaction Approach	486
	<i>Chakresh Kumar Jain</i>	
PE-195	Adipose Tissue-Derived Mesenchymal Stem Cells Inhibit Hepatocellular Carcinoma Cells via Secretion of Interferon (IFN)-Beta and Tumor Necrosis Factor-related Apoptosis-Inducing Ligand (TRAIL) <i>in Vitro</i>	487
	<i>Soonjae Hwang, Sung Hoon Kim, Jin Suk Lee, Young Woo Eom</i>	
PE-196	Radiofrequency Ablation of Metastatic Liver Tumors	488
	<i>A. Kozhakhmetov, A. Zhaksenbaev</i>	
PE-197	Transarterial Chemoembolization for Primary and Metastatic Liver Tumors	488
	<i>A. Akbayev, Zh. Ryspanbetov</i>	
PE-198	Activated Human Hematopoietic Stem Cells Exhibit Antitumor Activity toward Hepatocellular Carcinoma <i>in Vitro</i>	488
	<i>Marlen Dorskali, Yuka Tanaka, Shuji Akimoto, Hideki Ohdan</i>	
PE-199	Association between Body Mass Index and Postoperative Morbidity after Liver Resection of Hepatocellular Carcinoma a Multicenter Study of 1,324 Patients	489
	<i>Jiong-Jie YU, Zhen-Li LI, Lei LIANG, Jun HAN, Hao XING, Wan-Guang ZHANG, Xian-Hai MAO, Yong-Yi ZENG, Ting-Hao CHEN, Ya-Hao ZHOU, Hong WANG, Timothy M. PAWLICK, Han WU, Wan Yee LAU, Han ZHANG, Chao LI, Feng SHEN, Tian YANG</i>	
PE-200	Effect of Metformin on IGF-R-Induced Apoptosis and Proliferation in Liver Cancer Cells	489
	<i>Jang Han Jung, Eun Mi Hong, Jin Lee</i>	
PE-201	Liver Cancer Stem Cell Model with Lung Metastasis Developed in the Microenvironment of Hepatocellular Carcinoma	491
	<i>Said M Afify, Ghmkin Hassan, Amira M Osman, Anna Sanchez Calle, Hend M Nawara, Mid Jahangir Alam, Hager M Mansour, Hagar Ali Abu Quora, Juan Du, Maram H Zahra, Akimasa Seno, Yoshiaki Iwasaki, Masaharu Seno</i>	

Liver Cancer, Clinical

PE-202	Association between the Korean National Cancer Screening Program and Liver Cancer-Related Death.....	491
	<i>Gi-Ae Kim, Jae-Jun Shim, Eunhye Kang, Byung-Ho Kim</i>	
PE-203	Cytochrome P450 4A11 Expression in Tumor Cells: A Favorable Prognostic Factor for Hepatocellular Carcinoma Patients	492
	<i>Hyuk Soo Eun, Sang Yeon Cho, Byung Seok Lee, Sup Kim, In-Sang Song, Kwangsik Chun, Cheong-Hae Oh, Min-Kyung Yeo, Seok Hyun Kim, and Kyung-Hee Kim</i>	
PE-204	Profiling Cytochrome P450 Family 4 Gene Expression in Human Hepatocellular Carcinoma	492
	<i>Hyuk Soo Eun, Sang Yeon Cho, Byung Seok Lee, In-Ock Seong, Kyung-Hee Kim</i>	
PE-205	Quantified Hepatic Stiffness by MR Elastography Is a Marker for Early Recurrence in Patients with HCC within the Milan Criteria.....	493
	<i>Hyo Jung Cho, Bo Hyun Kim, Hye Jin Kim, Jimi Huh, Jai Keun Kim, Jei Hee Lee, Chul Won Seo, Young-hwan Ahn, Jinhee Jung, Jung Woo Eun, Soon Sun Kim, Sung Won Cho, and Jae Youn Cheong</i>	
PE-206	Antiviral Treatment Status at Hepatocellular Carcinoma Development Affects Overall Survival in Chronic Hepatitis B Patients	493
	<i>Tae-Se Kim, Dong Hyun Sinn, Wonseok Kang, Geum-Youn Gwak, Yong-Han Paik, Moon Seok Choi, Joon Hyeok Lee, Kwang Cheol Koh, and Seung Woon Paik</i>	
PE-207	Hepatitis C Virus Genotype Affects the Survival of Patients with Hepatocellular Carcinoma.....	493
	<i>Bo Ra Kim, Sang Soo Lee, Hye Kyong Park, Chang Bin Im, Changjo Im, Ra Ri Cha, Wan Soo Kim, Jae Min Lee, Hyun Jin Kim, Tae Hyo Kim, Woon Tae Jung, Ok-Jae Lee</i>	
PE-208	Factors Associated with Postprogression Survival in Advanced Hepatocellular Carcinoma Patients with Post-Sorafenib Progression Not Eligible for Regorafenib	494
	<i>Hee Yeon Kim, Chang Wook Kim, Sang Wook Choi, Do Seon Song, U Im Chang, Jin Mo Yang, Sung Won Lee, Hae Lim Lee, Nam Ik Han, Sun Hong Yoo, Jung Hyun Kwon, Soon Woo Nam, Pil Soo Sung, Jeong Won Jang, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon</i>	
PE-209	Diagnostic Value of Protein Induced by Vitamin K Absence in Hepatocellular Carcinoma Patients with Normal Alpha-Fetoprotein Level.....	494
	<i>Cong Long Nguyen, Truong Khanh Vu, Minh Diep Luu, Nghe Tinh Nguyen, Thanh Nam Nguyen, Manh Duy Vu</i>	
PE-210	Comparing Characteristics, Treatment Outcomes of Non-B Non-C Virus and Hepatitis Virus-Related Hepatocellular Carcinoma	495
	<i>Dong Duc Hoang</i>	
PE-211	Lenvatinib Is Independently Associated with the Reduced Risk of Progressive Disease When Compared to Sorafenib in Patients with Hepatocellular Carcinoma	495
	<i>Kyung Hyun Kim, Beom Kyung Kim, Jun Yong Park, Sang Hoon Ahn, Kwang-Hyub Han, Do Young Kim, and Seung Up Kim</i>	
PE-212	Substantial Risk of Hepatocellular Carcinoma Recurrence Even after Five Years of No-Recurrence Period among Early Stage Hepatocellular Carcinoma Patients Treated with Resection or Radiofrequency Ablation.....	495
	<i>Jihye Kim, Wonseok Kang, Dong-Hyun Sinn, Geum-Youn Gwak, Yong-Han Paik, Moon Seok Choi, Joon Hyeok Lee, Kwang Cheol Koh, Seung Woon Paik</i>	
PE-213	Indications for Endoscopic Screening and Prophylaxis of Esophageal Varices in Patients with Hepatocellular Carcinoma Invading Portal Vein	496
	<i>Jihye Lim, Ha Il Kim, Ju Hyun Shim, Jonggi Choi, Danbi Lee, Kang Mo Kim, Young-Suk Lim, Han Chu Lee, Young-Hwa Chung, Yung Sang Lee, and Dong Jin Suh</i>	
PE-214	Alpha-Fetoprotein L3 Level, Not an L3 Fraction, Is an Useful Marker for the Diagnosis of Hepatocellular Carcinoma	496
	<i>Han Ah Lee, Hyun Gil Goh, Tae Hyung Kim, Sun Young Yim, Young-Sun Lee, Sang Jun Suh, Young Kul Jung, Ji Hoon Kim, Yeon Seok Seo, Hyung Joon Yim, Jong Eun Yeon, Kwan Soo Byun, Soon Ho Um</i>	
PE-215	Clinical Manifestations and Prognosis of Non-Cirrhotic and Cirrhotic Hepatocellular Carcinoma Patients with Chronic Hepatitis B	497
	<i>Jung Hwan Yu, Jongbeom Shin, Young-Joo Jin, Jin-Woo Lee</i>	
PE-216	Albumin-Bilirubin Grade Can Subclassify Patients with a Child-Pugh Score of 5 Treated with Sorafenib for Hepatocellular Carcinoma.....	497
	<i>Hee Yeon Kim, Chang Wook Kim, Sang Wook Choi, Do Seon Song, U Im Chang, Jin Mo Yang, Sung Won Lee, Hae Lim Lee, Nam Ik Han, Sun Hong Yoo, Jung Hyun Kwon, Soon Woo Nam, Seawon Hwang, Pil Soo Sung, Jeong Won Jang, Si Hyun Bae, Jong Young Choi, Seung Kew Yoon</i>	
PE-217	Differentiation between Hepatocellular Carcinoma and Other Hepatic Malignancy in Cirrhosis: Performance of LI-RADS 2018.....	498
	<i>Yeun-Yoon Kim, Myeong-Jin Kim, Eun Hwa Kim, Yun Ho Roh, Chansik An</i>	
PE-218	Epidemiological and Clinical Features of Patients with HCC in Mongolian and Russian Population.....	498
	<i>Baatarkhuu. O, Tsogzolmaa Oidov, Igor Malov, Evgeniy Savilov, Sergey Malov, Rodion Rasulov, and Victoria Dvornichenko, Ariunaa Kh, Sanduijav R, and Baasanjav N</i>	
PE-219	Management of Hepatocellular Carcinoma in Mongolia	498
	<i>Ariunaa Khasbazai, R. Sanduijav, Baasanjav N, and O. Baatarkhuu</i>	
PE-220	Evaluation of the American Joint Committee on Cancer (AJCC) 8 th Edition Staging System for Hepatocellular Carcinoma in 1,034 Patients with Curative Resection	499
	<i>Sang Yun Ha, Sujin Park, Sangjoon Choi, Dong Hyun Sinn, Jong Man Kim</i>	
PE-221	Application of Multimodal Image Fusion Technology in the Diagnosis and Treatment of Intrahepatic Cholangiocarcinoma	499
	<i>Chihua FANG</i>	
PE-222	An Astonishing Familiar Cluster of Intrahepatic Cholangiocarcinoma (ICC) in Wilson's Disease (WD)	500
	<i>Giovanni BRANDI, Alessandro RIZZO, Andrea PALLONI, Simona TAVOLARI, Francesca ABBATI, Stefania DE LORENZO, Giorgio FREGA, Francesco VASURI, Annalisa ASTOLFI, Valentina INDIO, Francesco TOVOLI, Matteo CESCON</i>	

PE-223	Serologic Detection of Autoantibodies from Patients with Cholangiocarcinoma by Proteomic Approach	500
	<i>Mohammad Zahid MUSTAFA, Zunera TANVEER, Eric BALLOT, Jean Charles DUCLOS VALLEE</i>	
PE-224	Predictive Factors and Treatment Outcome for Recurrent Intra-Hepatic Cholangiocarcinoma	501
	<i>Yauren CHANG, Chun-Yi TSAI, Shang-Yu WANG, Kun-Ming CHAN, Wei-Chen LEE, Tse-Ching CHEN, Yi-Yin JAN, Chun-Nan YEH, Ta-Sen YEH</i>	
PE-225	Efficacy of Sorafenib Alone and in Combination with Rapamycin Inhibitors for Post-Liver Transplant Recurrence of Hepatocellular Carcinoma: A Single Center Experience	501
	<i>Ji Hoon Park, Jae Seung Lee, Jae Geun Lee, Beom Kyung Kim, Seung Up Kim, Dong Jin Jo, Do Young Kim, Sang Hoon Ahn, Myoung Soo Kim, Soon Il Kim, Kwang-hyub Han, and Jun Yong Park</i>	
PE-226	Initial Real-Life Experience of Nivolumab Treatment for Patients with Advanced or Metastatic Hepatocellular Carcinoma after Sorafenib Failure	502
	<i>Jin Won Chang, Jae Seung Lee, Beom Kyung Kim, Seung Up Kim, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, and Jun Yong Park</i>	
PE-227	The Risk of Hepatocellular Carcinoma (HCC) after DAA Treatment for Hepatitis C Virus (Clinical Case)	502
	<i>O. Baatarkhuu, Z. Bayarmaa, B. Dulguun, R. Amaraa</i>	
PE-228	Hepatocellular Carcinoma in Old Age – Are There Any Benefits of Resection of Liver in Old Age?	502
	<i>In Sik Shin, Deok Gie Kim, Sung Whan Cha, Seong Hee Kang, Sung Hoon Kim, Moon Young Kim, Soon Koo Baik</i>	
PE-229	Postoperative Infectious Complications Decrease Overall and Recurrence-Free Survival in Patients Undergoing Liver Resection for Hepatocellular Carcinoma	503
	<i>Jiong-Jie YU, Zhen-Li LI, Qian ZHONG, Lei LIANG, Chao LI, Ming-Da WANG, Wan Yee LAU, Yong-Yi ZENG, Ya-Hao ZHOU, Jun HAN, Feng SHEN, Tian YANG</i>	
PE-230	Real-Time Navigation for Laparoscopic Hepatectomy Using Image Fusion of Preoperative 3D Surgical Plan and Intraoperative Indocyanine Green Fluorescence Imaging	503
	<i>Chihua FANG</i>	
PE-231	Three-Dimensional Visualization Evaluation and VR Study of Giant Liver Cancer with Blood Vessels as the Axis	503
	<i>Chihua FANG</i>	
PE-232	Application of Three-Dimensional Visualization, VR Technology Combined with ICG Molecular Fluorescence in Hepatectomy under Non-Vascular Occlusion for Centrally Located Hepatocellular Carcinoma	504
	<i>Chihua FANG</i>	
PE-233	Is the Outcome after Hepatectomy for Hepatocholangiocarcinoma Different from That of Classic Hepatocellular Carcinoma and Mass-Forming Cholangiocarcinoma? A Case-Matched Analysis	504
	<i>Damiano GENTILE, Matteo DONADON, Luca DI TOMMASO, Angela PALMISANO, Matteo CIMINO, Jacopo GALVANIN, Bruno BRANCIFORTE, Guido TORZILLI</i>	
PE-234	ALPPS versus Two-Stage Hepatectomy (TSH): Indications, Safety, Efficacy	504
	<i>Andrey KAPRIIN, Dmitry SIDOROV, Mikhail LOZHKIN, Aisha ISAEVA</i>	
PE-235	ALPPS Procedure in 20 Patients with Primary and Metastatic Malignancies: Single Centre Experience	505
	<i>Andrey KAPRIIN, Dmitry SIDOROV, Mikhail LOZHKIN, Aisha ISAEVA</i>	
PE-236	Surgical Tactics for Colorectal Cancer with Synchronous Liver Metastases	505
	<i>Murzaliev Erlan, Mamashev Nurlan, Bebezov Bakhadyr, Surov Edir, Marshankulov Rezuan</i>	
PE-237	Immediate Results of Surgical Treatment Hepatocellular Cancer	506
	<i>Mamashev Nurlan, Bebezov Bakhadyr, Umetaliev Tilek, Surov Edir, Esenkulov Chyngyz, Murzaliev Erlan</i>	
PE-238	The Current Status of Selecting Treatment Modalities for Naïve Hepatocellular Carcinoma Patients over 70 Years Old: Single-Center Experience	506
	<i>Kyung Sik KIM, Je Suk HYUN, Seoung Yoon RHO</i>	
PE-239	A Current Status of Therapeutic Choice and Feasibility for Hepatocellular Carcinoma Patients over 70 Years Old	506
	<i>Seoung Yoon Rho, Kyung Sik Kim, Do Young Kim, Hyun Woong Lee</i>	
PE-240	Survival According to Recurrence Patterns after Resection for Transplantable Hepatocellular Carcinoma in HBV Endemic Area: Appraisal of Liver Transplantation Strategy	507
	<i>Sun Young Yim, Chung Gyo Seo, Yoo Jin Lee, Tae Hyung Kim, Young Sun Lee, Sang Jun Suh, Na Yeon Han, Yeon Seok Seo, Ji Hoon Kim, Hyung Joon Yim, Dong Sik Kim, Soon Ho Um</i>	
PE-241	The Meaning of Enhanced Liver Fibrosis (ELF) Score as a Predictive Factor for HCC Patient after Liver Resection	508
	<i>Alshandeer Marei Hussein M, Dai Hoon Han, Gi Hong Choi, Jin Sub Choi</i>	
PE-242	Long-Term Post-Resection Prognosis of Primary Neuroendocrine Tumors of the Liver	508
	<i>Jay Jung, Shin Hwang, Seung-Mo Hong, Ki-Hun Kim, Chul-Soo Ahn, Deok-Bog Moon, Tae-Yong Ha, Gi-Won Song</i>	
PE-243	Development and Validation of Novel Scoring System for the Prediction of Disease Recurrence Following Resection of Colorectal Liver Metastasis	508
	<i>Wan-Joon KIM, Tae-Wan LIM, Sang-Hee KANG, Pyoung-Jae PARK, Sae-Byeol CHOI, Sun-Il LEE, Byung-Wook MIN, Wan-Bae KIM</i>	
PE-244	Surgical Strategies of Huge Hepatocellular Carcinoma with Main Portal Vein Thrombosis: A Case Report	509
	<i>Cheon Soo PARK</i>	

PE-245	Outcomes after Robotic Donor Hepatectomy in 48 Consecutive Live Donors	509
	<i>Seoung Yoon RHO, Jae Geun LEE, Dai Hoon HAN, Dong Jin JOO, Myoung Soo KIM, Seon Il KIM, Jin Sub CHOI, Gi Hong CHOI</i>	
PE-246	Synchronous Resection of Colorectal Cancer Liver Metastasis: Propensity Score Matching of Open Versus Minimally Invasive Surgery.....	509
	<i>Seoung Yoon RHO, Dai Hoon HAN, Jin Sub CHOI, Gi Hong CHOI</i>	
PE-247	Treatment of Resectable Hilar Cholangiocarcinoma: A Choice of Right- or Left-Side Hepatectomy	510
	<i>Hye-Sung JO, Dong-Sik KIM, Woo-Hyoung KAN, Kyung Chul YOON, Young-Dong YU</i>	
PE-248	Hypothermic Perfusion Hepatectomy for Unresectable Liver Cancer: A Single-Center Experience.....	510
	<i>Youngjin YOON, Sung-Gyu LEE</i>	
PE-249	Prognostic Analysis of Hepatocellular Carcinoma Greater than 5 cm in Diameter after Curative Resection	510
	<i>Jae Do YANG, Hee Chul YU</i>	
PE-250	Preoperative Glasgow Prognostic Score (GPS) as a Predictor of Poor Prognosis in Synchronous Colorectal Cancer Liver Metastasis	511
	<i>Soon Ha KWON, Sang Ho BAE</i>	
PE-251	Computed Tomograph Imaging Features and Early Response of Hepatocellular Carcinoma Treated by Transarterial Chemoembolization with Drug Eluting Beads	511
	<i>Dong Duc Hoang</i>	
PE-252	Clinical Outcomes after Risk-Adapted Proton Beam Therapy Using Three Dose-Fractionation Regimens for Hepatocellular Carcinoma	511
	<i>Tae Hyun Kim, Joong-Won Park, Bo Hyun Kim, Hyunjung Kim, Sung Ho Moon, Sang Soo Kim, Sang Myung Woo, Young-Hwan Koh, Woo Jin Lee, Dae Yong Kim, Chang-Min Kim</i>	
PE-253	Clinical Outcomes of Stereotactic Body Radiation Therapy for Single Viable Hepatocellular Carcinoma at the Site of Incomplete Transarterial Chemoembolization	512
	<i>Jinhong Jung, Hee Hyun Park, So Yeon Kim, Young-Suk Lim, Han Chu Lee, Jin-hong Park, Jong Hoon Kim, Sang Min Yoon</i>	
PE-254	Yttrium-90 Radioembolization Might Have Better Efficacy in Progression-Free Survival and Disease Control Rate in Patients with Hepatocellular Carcinoma Compared with Conventional Chemoembolization: A Retrospective Cohort Study.....	512
	<i>Minseok Albert Kim, Heejeon Jang, Sun Woong Kim, Cheol-Hyung Lee, Yun Bin Lee, Eun Ju Cho, Jeong-Hoon Lee, Su Jong Yu, Jung-Hwan Yoon, Hyo-Cheol Kim, Jin Wook Chung, Yoon Jun Kim.</i>	
PE-255	Safety of Transarterial Chemoembolization in Patients with Recurrent Hepatocellular Carcinoma after Liver Transplantation.....	513
	<i>Ji Eun Lee, Bo Hyun Kim, Seoung Hoon Kim, In Joon Lee, Hyun Beom Kim, Joong-Won Park</i>	
PE-256	An Earlier Follow-Up Imaging Was Not Associated with Better Overall Survival after Transarterial Chemoembolization for Intermediate- or Advanced-Stage Hepatocellular Carcinoma.....	514
	<i>Heejeon Jang, Jeong-Hoon Lee, Minseok Albert Kim, Sun Woong Kim, Cheol-Hyung Lee, Yun Bin Lee, Eun Ju Cho, Myungsu Lee, Su Jong Yu, Hyo-Cheol Kim, Yoon Jun Kim, Jin Wook Chung, Jung-Hwan Yoon</i>	
PE-257	Survival Outcomes of TACE in Treatment-Naïve and Recurrent HCC after Curative Resection: A Propensity Score-Matched Analysis	515
	<i>David Sooik Kim, Tae Seop Lim, Mi Young Jeon, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, Oidov Baatarkhuu, and Seung Up Kim</i>	
PE-258	Establishment and Validation of a Risk Prediction Model in Patients with Hepatocellular Carcinoma Treated with Trans-Arterial Radioembolization	515
	<i>Jae Seung Lee, Han Ah Lee, Mi Young Jeon, Tae Seop Lim, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Soon Ho Um, Kwang-Hyub Han, Yeon Seok Seo, and Seung Up Kim</i>	
PE-259	Predictors of Radiological Complete Response in Patients with Intrahepatic Hepatocellular Carcinoma Treated with Transarterial Radioembolization	516
	<i>Yoon Ah Kim, Jae Seung Lee, Beom Kyung Kim, Jun Yong Park, Do Young Kim, Sang Hoon Ahn, Kwang-Hyub Han, and Seung Up Kim</i>	
PE-260	Digital Subtraction Angiography Outcome during DC Bead Transarterial Chemoembolization for Hepatocellular Carcinoma.....	516
	<i>Tran Ngoc Thuy</i>	
PE-261	Curative Treatment after Transarterial Radioembolization is Associated with Better Survival Outcomes in Patients with Hepatocellular Carcinoma	516
	<i>Yoon Ah Kim, Han Ah Lee, Jae Seung Lee, Mi Young Jeon, Beom Kyung Kim, Young Kul Jung, Jun Yong Park, Ji Hoon Kim, Yeon Seok Seo, Do Young Kim, Hyung Joon Yim, Sang Hoon Ahn, Jong Eun Yeon, Kwan Soo Byun, Soon Ho Um, Kwang-Hyub Han, and Seung Up Kim</i>	
PE-262	Role and Limitation of Hepatic Arterial Infusion Chemotherapy.....	517
	<i>Beom-Hui LEE, Dong-Shik LEE, Chan-Woo CHO, Sung-Su YUN</i>	
PE-263	Laparoscopic Right Hepatectomy Is Feasible and Safe in Solitary Hepatocellular Carcinoma	517
	<i>Hoang Duct Nam, Jong Man Kim, Gyu-Seong Choi, Jae-Won Joh</i>	

Biliary and Pancreatic Disease

PE-264	Predicting the Choice of Operative Treatment for Common Bile Duct Diseases Complicated by Obstructive Jaundice.....	518
	<i>Valeriy Vladimirovich Boyko, Yuriy Vladimirovich Avdosyev, Anastasiia Lvovna Sochnieva, Maria Segeevna Mazorchuk</i>	

PE-265	The Value of Serum Levels of Procalcitonin for Predicting the Severity of Acute Pancreatitis in Patients According to the 2012 Revised Atlanta Classification	518
	<i>LE THI THU HIEN, LE QUOC TUAN</i>	
PE-266	Statins Use Is Associated with Reduced Risk of Cholangiocarcinoma: A Systematic Review and Meta-Analysis	519
	<i>Gaurav Nepal</i>	
PE-267	Molecular Characteristics Associated with 18F-FDG Uptake in Intrahepatic Cholangiocarcinoma	519
	<i>Keun Soo Ahn, Koo Jeong Kang, Yong Hoon Kim, Tae-Seok Kim, Kyoung Sook Won</i>	
PE-268	Risk Factors Associated with Locoregional Failure and Estimation of Survival after Curative Resection for Patients with Distal Bile Duct Cancer	520
	<i>Ik Jae Lee, Jun Won Kim, Jung Ho Im, Joon Seong Park, Dong Sup Yoon, Dong Ki Lee</i>	
PE-269	Beneficial Effects of Cassia Angustifolia (Senna Leaves) Treatment Improves Constipation, Liver Functions and Defense of Red Blood Cells in Type 2 Diabetic Patients	520
	<i>Sumit Rajput, Sagar Verma</i>	
PE-270	Comparison of Surgical Outcomes of Robotic and Laparoscopic Pancreaticojejunostomy after Pancreaticoduodenectomy in Patient with a Soft Pancreas: Multi-Institutional Study	521
	<i>Sung Hoon Choi, Jae Hoon Lee, Chang Moo Kang</i>	
PE-271	Mucinous Cholangiocarcinoma with Hemobilia: A Case Report	521
	<i>Hanlim CHOI, Jae-Woon CHOI, Dong Hee RYU</i>	
PE-272	Gallbladder Paraganglioma with Hemorrhage: A Case Report	521
	<i>Sanghwa SONG, Chulkyoon CHO</i>	
PE-273	Clinical Outcomes of Robotic Cholecystectomy: Single Center Early Experience	522
	<i>Jae Do YANG</i>	
PE-274	Differentiation of the Gallbladder Adenomyomatosis from Early-Stage Gallbladder Cancer before Surgery	522
	<i>Yong Chan SHIN, Jisum MOON</i>	
PE-275	Management of Xanthogranulomatous Cholecystitis Combined With Common Bile Duct Adenoma Mimicking Biliary Malignancy of Old Age Patient: A Case Report	522
	<i>Junghyun PARK, Jin Hyung PARK</i>	
PE-276	Laparoscopic Resection of Schwannoma in the Pancreas	523
	<i>Yu Ni LEE, Woo Young KIM</i>	
PE-277	Synchronic Ampullary Neuroendocrine Tumor and Extra-Gastrointestinal Stromal Tumor in Association with Neurofibromatosis Type 1: A Case Report	523
	<i>Eunkyu PARK</i>	
PE-278	Benefits and Pitfalls of Surgical Resection after Downstaging Concurrent Chemoradiation Therapy in Patients with Locally Advanced Perihilar Cholangiocarcinoma	523
	<i>Incheon KANG, Gi Hong CHOI</i>	
PE-279	Surgical Outcomes of Bismuth Type IV Perihilar Cholangiocarcinoma	524
	<i>Incheon KANG, Gi Hong CHOI</i>	
PE-280	Minimally Invasive Interventions in Patients with Mechanical Jaundice	524
	<i>Altai Meirambek, B. Kuanyshbayev</i>	
PE-281	Minimally Invasive Endoscopic Technologies in Complex Treatment of Patients with Obstructive Jaundice Syndrome	524
	<i>Aitbayeva Aliya, Zhakiyev Bazylbek</i>	
PE-282	The Efficacy of Single-Stage Endoscopic Treatment of Complicated Forms of Cholelithiasis	525
	<i>Uteulin Nurbulat, Aitbayeva Aliya</i>	
PE-283	Rare Experience of Complication of a Spilled Gallstone after Laparoscopic Cholecystectomy: Case-Report	525
	<i>Eun-Kyoung Jwa, Dong-Lak Choi</i>	
PE-284	Iatrogenic Bile Duct Injury Associated with Anomalies of Isolated Right Anterior Segmental Hepatic Duct Injury Following Laparoscopic Cholecystectomy: A Rare Case Report	526
	<i>Hyukjai Jang, Cheon Soo Park</i>	
PE-285	PD-L1 Expression in Extrahepatic Biliary Tract Cancers: A Comparative Study Using 22C3, SP263 and E1L3N Anti-PD-L1 Antibodies	526
	<i>Soomin Ahn, Yangkyu Lee, Ji-Won Kim, Jong-chan Lee, Jin-Hyeok Hwang, Yoo-Seok Yoon, Jai Young Cho, Ho-Seong Han, YoungRok Choi, Haeryoung Kim</i>	
PE-286	ELCC	526
	<i>Zhanadil Almyrzauly, Galymzhan Aubakirov, Zhazylbek Abdin, Bazylbek Zhakiev</i>	
PE-287	The Value of Lymphadenectomy in Surgical Resection of Perihilar Cholangiocarcinoma	527
	<i>Lei LIANG, Ming-Da WANG, Hao XING, Chao Li, Jun HAN, Han ZHANG, Wan Yee LAU, Timothy M. PAWLICK, Feng SHEN, Tian YANG</i>	

PE-288	Who Can Benefit from Adjuvant Transcatheter Arterial Chemoembolization after Surgical Resection of Hepatocellular Carcinoma?	527
	<i>Lei LIANG, Jiong-Jie YU, Hai-Ying SUN, Ming-Da WANG, Chao LI, Hao XING, Jun HAN, Xin-Fei XU, Timothy M. PAWLICK, Wan Yee LAU, Feng SHEN, Tian YANG</i>	
PE-289	Exosomal miRNA-106b from Cancer-Associated Fibroblast Promotes Gemcitabine Resistance in Pancreatic Cancer	528
	<i>Yuan FANG, Wentao ZHOU, Yefei RONG, Dansong WANG, Tiantao KUANG, Wenchuan WU, Xuefeng XU, Wenhui LOU</i>	
PE-290	The Regulation Mechanism of HEATR1 on the Chemosensitivity of Gemcitabine in Pancreatic Cancer	528
	<i>Yuan FANG, Wentao ZHOU, Yefei RONG, Dansong WANG, Tiantao KUANG, Wenchuan WU, Xuefeng XU, Wenhui LOU</i>	
PE-291	Metformin Inhibited Pancreatic Cancer Growth by Upregulating miR-143/145 Cluster and Suppressing MAPK Signaling Pathway	528
	<i>Yaolin XU, Zizhen WU, Peng YUAN, Mofang LIU, Wenhui LOU</i>	
PE-292	Acute Pancreatitis Induced by Etoposide-Lobaplatin Combination Chemotherapy Used for the Treatment of Lung Cancer	529
	<i>Xiao-Yu GUO, Gang WANG</i>	
PE-293	Exosomes and Pancreatic Diseases: Status, Challenges, and Hopes	529
	<i>Xiao-Yu GUO, Gang WANG</i>	
PE-294	Immunogenicity of Neoplastic Cells in PDA (Review)	529
	<i>Dariga SYRLYBAY, Wenhui LOU</i>	
PE-295	Pancreatic Stellate Cells Promote Epithelial-Mesenchymal Transition of Cancer Cells by Notch-3 Promoter Demethylation	530
	<i>Feng CAO, Fei LI</i>	
PE-296	Smad4 Inhibits Cell Migration via Suppression of KPNA4 and MMP26 in Human Pancreatic Cancer Cells	530
	<i>Mingzhe LI, Huahu GUO, Zhengkui ZHANG, Yazhou WANG, Xiaodong TIAN, Yinmo YANG</i>	
PE-297	General Surgery	530
	<i>Dafei HONG</i>	
PE-298	Lipopolysaccharide Increase PD-L1 Expression in Pancreatic Tumor via TLR4/MyD88/NF- κ B Pathway	531
	<i>Hanlin YIN, Guochao ZHAO, Ning PU, Wenchuan WU</i>	
PE-299	Circulating Tumor Cells with Epithelial-Mesenchymal Transition Features Predict Metastatic Outcome in Pancreatic Cancer	531
	<i>Xudong ZHAO, Xiu DONG, Yongsu MA, Xiaodong TIAN, Xiaohang ZHAO, Yinmo YANG</i>	
PE-300	Serum Lipid Levels and the Risk of Gallbladder Stones: A Population-Based Study in China	531
	<i>Jiwen WANG, Sheng SHEN, Bo WANG, Xiaojian NI, Han LIU, Xiaoling NI, Rong YU, Tao SUO, Houbao LIU</i>	
PE-301	Any Time Laproscopic Cholecystectomy in Moderate to Severe Acute Cholecystitis without Septic Shock: A Prospective Cohort Study	532
	<i>Bhavin Vasavada, Hardik Patel</i>	
PE-302	Post Operative Antibiotics Are Unnecessary Even in Moderate to Severe Cholecystitis According to Tokyo Guidelines: A Prospective Cohort Study	532
	<i>Bhavin Vasavada, Hardik Patel</i>	
PE-303	Preprocurement Pancreas Allocation Suitability Score Does Not Correlate with Long-Term Pancreas Graft Survival	532
	<i>Bekzat ELDESOV, Aidos BISSENBAY</i>	
PE-304	Microvessel Density and Impact of Angiogenesis on Survival of Resected Pancreatic Cancer Patients: A Systematic Review and Meta-Analysis	533
	<i>Yerlan BAKHTORAZOV, Bekzat ELDESOV</i>	
PE-305	Potential Value of Serum Total IgE for Differentiation between Autoimmune Pancreatitis and Pancreatic Cancer	533
	<i>Daulet AZIM, Nursultan KYDYR</i>	
PE-306	Conservative and Surgical Management of Pancreatic Trauma in Adult Patients	533
	<i>Aidos BISSENBAY, Yerlan BAKHTORAZOV</i>	
PE-307	Hepaticojejunostomy (HJ): How We Do It?	534
	<i>Bo Bo HTAY, Myo Myat THU, Aye Min SAN, Myat Su Mon SOE</i>	

Liver Transplantation

PE-308	Program of Transplant Organization to Coordinate the Development of Organ Donation in Kazakhstan	534
	<i>Azat Chinaliyev, Serik Zharikov</i>	
PE-309	Frequency and Main Risk Factors of Ventral Site Hernia Development in Patients Liver Transplantation	534
	<i>Alibek Serkulov, Berdibek Yelchibayev</i>	
PE-310	Portal Vein Thrombosis in Patients with End-Stage Liver Disease on the Waiting List	535
	<i>Seidakhmetova Nazerke, Rysmakhanov Mylytkbay</i>	

PE-311	Influence of Adult Living Donor Liver Transplantation on the Waiting List in Kazakhstan 535 <i>Aigerim Mashyrap, Zharikov Serik</i>	535
PE-312	Pure Laparoscopic Versus Open Right Hepatectomy in Live Liver Donors: A Propensity Score Matched Analysis.....535 <i>Suk Kyun Hong, Kyung-Suk Suh, Jae-Hyung Cho, Jeong-Moo Lee, Nam-Joon Yi, Kwang-Woong Lee</i>	535
PE-313	Survival among Pediatric Liver Transplant Recipients: Impact of Segmental Grafts 536 <i>Yerlan Makhambetov, Samat Issakov</i>	536
PE-314	Risk Factor of Delayed Hepaticojejunostomy Site Stricture in Pylorus Preserving Pancreaticoduodenectomy and Its Predicting Nomogram 536 <i>Seoung Yoon RHO, Ho Kyoung HWANG, Woo Jung LEE, Chang Moo KANG</i>	536
PE-315	A Case of Migration of Cyanoacrylate into Portal Vein after Living Donor Liver Transplantation..... 536 <i>Hee Yeon Kim, Chang Wook Kim, Soo Ho Lee, Yoo Dong Won, Su Lim Lee</i>	536
PE-316	Outcome of Living Donor Liver Transplantation for Secondary Biliary Cirrhosis in Adult: Single Center Experience..... 537 <i>Youngin YOON, Sung-Gyu LEE</i>	537
PE-317	Liver Transplantation for Patient with Emergency Indication..... 537 <i>Sh. Jakanov, E. Kulteshova</i>	537
PE-318	Machine-Learning Models to Predict Tacrolimus Dosage in Liver Transplant Recipients 537 <i>Jeong-Moo LEE, Hyung-Chul LEE, Kyung-Suk SUH, Suk Kyun HONG, Jae-Hyung CHO, Nam-Joon Yi, Kwang-Woong LEE</i>	537
PE-319	De Novo Malignancy after Liver Transplantation: A Single Center Experience..... 538 <i>Jeong-Moo LEE, Kwang-Woong LEE, Suk Kyun HONG, Jae-Hyung CHO, Nam-Joon Yi, Kyung-Suk SUH</i>	538
PE-320	The Impact of Extra-Anatomical Hepatic Artery Reconstruction during Living Donor Liver Transplantation on Biliary Complications and Graft and Patient Survival..... 538 <i>Jinsoo RHU, Jong Man KIM, Gyu Seong CHOI, Jae-Won JOH</i>	538
PE-321	Living Donor Liver Transplantation Using Right Lobe Graft from a Donor with the Left-Sided Gallbladder Anomaly 539 <i>Sung Yeon HONG, Hee-Jung WANG, Bong-Wan KIM, Mina KIM, Xue-Yin SHEN</i>	539
PE-322	The Effect of Downstaging by Locoregional Treatments for Hepatocellular Carcinoma beyond Milan Criteria before Living Donor Liver Transplantation 539 <i>Byeong-Gon NA, Seong Hoon KIM, Eung Chang LEE, Sang Jae PARK</i>	539
PE-323	Effect of Internal Stent Insertion in Duct-to-Duct Biliary Reconstruction to Reduce Bile Duct Complication in Living Donor Liver Transplantation 539 <i>Ho Joong Choi, Tae Yun LEE, Joseph AHN, Bong Jun KWAK, Gun Hyung NA, Tae Ho HONG, Young Kyoung YOU</i>	539
PE-324	Experience of Hepatic Artery Anastomosis in Living Donor Liver Transplantation Using Surgical Loupe: In Small Volume Center 540 <i>Kwan woo KIM, Shung wha KANG</i>	540
PE-325	Hepatoblastoma: From Laparoscopic Resection to Liver Transplantation 540 <i>Samat Issakov, Nursultan Kydyr</i>	540
PE-326	Chronic Renal Dysfunction Following Liver Transplantation 540 <i>Nurlan Makhambetov, Samat Issakov</i>	540
PE-327	Sirolimus and Metformin Synergistically Inhibits Colon Cancer <i>in Vitro</i> and <i>in Vivo</i> 541 <i>Nadiar Mussin, Seung Cheol Oh, Kwang-Woong Lee, Min Young Park, Sooin Seo, Nam-Joon Yi, Hyeyoung Kim, Kyung Chul Yoon, Sung-Woo Ahn, Hyo-Sin Kim, Suk Kyun Hong, Dong Kyu Oh, and Kyung-Suk Suh</i>	541
PE-328	First 4-Year Experience of Living Donor Liver Transplantation 541 <i>Rysmakhanov M.S., Mussin N.M., Konysbek Irzin</i>	541
PE-329	Liver Transplantation during Unresizable Liver Alveokokkoz 541 <i>B. Kuanyshbayev, A. Tukenova</i>	541
PE-330	Renal Safety of Entecavir and Tenofovir with Hepatitis B Immunoglobulin in Liver Transplant Patients..... 542 <i>Juhan Lee, Deok Gie Kim, Jee Youn Lee, Seok Jeong Yang, Dong Jin Joo, Myoung Soo Kim, Soon Il Kim, and Jae Geun Lee</i>	542
PE-331	Acquired Hyponatremia in Pediatric Living Donor Liver Transplantation 542 <i>Akmaral Dossanova, Lazzat Dossanova</i>	542
PE-332	Initial Experience of Laparoscopic Right Lobectomy after Portal Vein Embolization 543 <i>Hwui-Dong Cho, Ki-Hun Kim, Dong-Hwan Jung, Gil-Chun Park, Young-In Yoon, Shin Hwang, Chul-Soo Ahn, Deok-Bog Moon, Tae-Yong Ha, Gi-Won Song, Sung-Gyu Lee</i>	543
PE-333	Analysis of Cancer Incidence after Liver Transplantation in Korea Using Big Data 543 <i>Han Joon KIM, Yun Kyung JUNG, Dongho CHOI, Boyoung PARK, Junghyun YOON, Kyeong Geun LEE, Hwon Kyum PARK</i>	543
PE-334	3D-Laparoscopic Living Donor Hepatectomy: First Experience in Kazakhstan 543 <i>K-W. Lee, Lyailash Kydyrbayeva, M.S. Rysmakhanov, A.A. Kaliev, E.B. Sultangereyev, A.A. Yelemessov, Zh. Almyrzauly, and N.M. Mussin</i>	543

PE-335	Transforming Growth Factor β 1 in Children of Early Age with Liver Transplantation <i>Yerbulan Serikbayev, Aiman Atakhozhaeva</i>	544
PE-336	Dynamics of Insulin-like Growth Factor-1 (IGF-1) in Children after ABO-Incompatible Liver Transplantation <i>Aiman Atakhozhaeva, Yerbulan Serikbayev</i>	544
PE-337	Correction of Extrahepatic Portal Hypertension in Pediatric Patient after Liver Transplantation <i>Aibat Yelibayev, Bekzada Karamat</i>	545
PE-338	Portal and Arterial Flushing with HTK and Tacrolimus Can Attenuate the Incidence of Early Liver Allograft Dysfunction <i>Bekzada Karamat, Aibat Yelibayev</i>	545
PE-339	A Learning Curve for Living Donor Liver Transplantation <i>Aidos Bissenbay, Bakhtorazov Erlan, Yerlan Bakhtorazov</i>	545
PE-340	Pediatric Liver Transplantation UMC, Kazakhstan <i>Yermakhan Assylkhanuly, Zhanna Kozybayeva</i>	546
PE-341	Cost Prediction in Liver Transplantation Using Pretransplant Donor and Recipient Characteristics <i>Arailym Ospanova, Setaev Saken Sarkitovich</i>	546
PE-342	Initial Experience of Liver Transplantation <i>Mylytkbay Rysmakhanov, Bazylbek Zhakiyev</i>	546
PE-343	Long-Term Outcome of the Rendezvous Technique in Patients with Severe Biliary Anastomotic Stricture That Cannot Cannulate after Liver Transplantation <i>Kyeong Sik Kim, Jong Man Kim, Ji Soo Lee, Gyu Sung Choi, Jae-Won Jo, Suk-Koo Lee</i>	547
PE-344	Prevalence of Hepatopulmonary Syndrome in Liver Transplant Candidates in the North Region of Kazakhstan <i>Abylaikhan Sharmenov, Aimkul Ashimhanova</i>	547
PE-345	Splenic Artery Steal Syndrome after Liver Transplantation <i>Aizhan Seitova, Abylaikhan Sharmenov</i>	547
PE-346	LOREK <i>Zhanar Kaidar, Bazylbek Zhakiyev</i>	548
PE-347	Hepatic Abscess after Ortotopic Liver Transplantation <i>Nurlan Zhappasov, Zhanat Spatayev, Abylaikhan Sharmenov</i>	548
PE-348	Liver Transplantation for Patient with Emergency Indications <i>Aidos Kulmagambetov</i>	549
PE-349	Immunosuppression after Liver Transplantation <i>S. Kulmagambetova, M. DoMskaliyev</i>	549
PE-350	Tumor Markers at the Time of Liver Transplantation: Reliable Predictors of Hepatocellular Carcinoma Recurrence after Locoregional Treatment <i>Deok Gie Kim, In Sik Shin, Sung Hoon Kim, Jae Geun Lee, Myoung Soo Kim, Dong Jin Joo</i>	549
PE-351	Splenic Artery Embolization Following Liver Transplantation: Single Center Experience <i>N. Yerniyazov, Baigenzhin A</i>	550
PE-352	Pediatric Liver Transplantation in University Medical Center Astana <i>Yermakhan ASSYLKHANULY, Samat ISSAKOV</i>	550
PE-353	LDLT Program University Medical Center Astana <i>Samat ISSAKOV, Nurmakhan ASSYLKHANULY</i>	551
PE-354	Early-Onset and Bad Place Post Transplantation Lymphoproliferative Disorder (PTLD) after Liver Transplantation: Case Report <i>Sung Yub Jeong, Jung Jun Lee, Sung Hoon Choi</i>	551
PE-355	Laparoscopy-Assisted Hybrid versus Open Living Donor Right Hepatectomy: A Comparison of Surgical Outcomes <i>Myo Zin, Incheon Kang, Dai Hoon Han, Kyung Sik Kim, Jin Sub Choi, Gi Hong Choi</i>	551
PE-356	Tablet or Capsule Form Combined with Tacrolimus after Liver Transplantation: A Prospective Randomized Trial <i>Nyamsuren Ganbileg, Jong Man Kim, Gyu-Seong Choi, Jae-Won Joh</i>	552
PE-357	Splenorenal Shunt Occlusion Associated to Portal Vein Thrombosis after Liver Transplantation: Report of Two Cases and Literature Review <i>Thazin Soe Wai, Lyo Min Kwon, Jin Woo Choi, Jin Wook Chung</i>	552

Surgery, Technical Issues

PE-358	3D-Laparoscopic Surgery in Difficult Localizations of Echinococcosis Cysts of the Liver 553 <i>Kuttymuratov Gani, Rysmakhanov Myltykbaï, Mussin Nadïar</i>	553
PE-359	Surgery-Related DIC Predicts the Severity of Complication after Major Hepatobiliary Pancreatic Surgery 553 <i>Akhmet Seidakhmetov, Yuki Imaoka, Masahiro Ohira, Koki Sato, Kenichiro Uemura, Shintaro Kuroda, Hiroyuki Tahara, Kentaro Ide, Tsuyoshi Kobayashi, Hideki Ohdan</i>	553
PE-360	Anterior Approach for Right Hepatectomy and Right Anterior Sectionectomy with Hanging Maneuver for Large Hepatocellular Carcinoma: A Single-Center Experience in Vietnam 553 <i>Thanh Van LE, Hieu Trung LE, Quang Van VU, et al</i>	553
PE-361	An Experience of Laparoscopic Operations in the Liver Local Lesions 554 <i>Bekzat Toremuratov, Kuanysh Karabalaev</i>	554
PE-362	Extensive Liver Resections for Alveococcosis 554 <i>Surov Edir, Bebezov Bakhadyr, Murzaliyev Erlan, Umetaliyev Tilek</i>	554
PE-363	The Liver Alveococcosis Surgeries with Inferior Cava Vein and Portal Vein Invasions 555 <i>Bebezov Bakhadyr, Surov Edir, Umetaliyev Tilek, Mamashev N. Dj.</i>	555
PE-364	The Liver Alveolar Echinococcosis Surgery of Children 555 <i>Umetaliyev Tilek, Bebezov Bakhadyr, Surov Edir, Ryspekov Bolot, Murzaliyev Erlan</i>	555
PE-365	Developing a Preoperative Serum Metabolome-Based Recurrence-Predicting Nomogram for Patients with Resected Pancreatic Ductal Adenocarcinoma 556 <i>Seoung Yoon Rho, Sang-Guk Lee, Minsu Park, Jinae Lee, Sung Hwan Lee, Ho Kyoung Hwang, Min Jung Lee, Young-Ki Paik, Woo Jung Lee, Chang Moo Kang</i>	556
PE-366	Laparoscopic Repeat Liver Resection: Short-Term Outcomes 556 <i>Yang Won Nah, Jin A Kwon, Hyung Chol Choi</i>	556
PE-367	Is Laparoscopic Liver Resection for Hepatocellular Carcinoma Safe for Obese Patients? 556 <i>Youngin Yoon, Ki-Hun Kim</i>	556
PE-368	Using of Wearable Recording Technology for Surgical Training Video in Living Donor Liver Transplantation 557 <i>Jeong-Moo Lee, Kyung-Suk Suh, Suk Kyun Hong, Jae-Hyung Cho, Nam-joon Yi, Kwang-Woong Lee</i>	557
PE-369	Robotic Simultaneous Resection for Colorectal Liver Metastasis: Feasibility for All Types of Liver Resection 557 <i>Jonathan Navarro, Incheon Kang, Gi Hong Choi, Byung Soh Min</i>	557
PE-370	Parenchymal Preserving Hepatectomy in Perihilar Cholangiocarcinoma 557 <i>Incheon Kang, Gi Hong Choi</i>	557
PE-371	Analysis of Proximal Ductal Resection Margin in Patients with Hilar Cholangiocarcinoma 558 <i>Woo Young Youn, Jae Hoon Lee, Song Cheol Kim, Dae Wook Hwang, Ki Byung Song, Jae Hoon Lee, Woo Hyoung Lee, Jaewoo Kwon</i>	558
PE-372	Radical Excision for Huge Hepatic Cystic Neoplasm by Totally Laparoscopic Liver Resection: A Case Report 558 <i>Bo-Hyun Jung, Jeong-Ik Park</i>	558
PE-373	Optimum Timing of Emergency Cholecystectomy for Acute Cholecystitis 558 <i>Kasenov T., Baimukhamedov J., Azbergenov N.</i>	558
PE-374	The Immediate Results of Surgical Treatment of Liver Hemangiomas 559 <i>Marshankulov Rezuhan, Umetaliyev Tilek, Bebezov Bakhadyr, Sakmamtol Toolukbek</i>	559
PE-375	Surgical Treatment of the Liver Alveococcosis, Complicated by the Mechanical Jaundice 559 <i>Ryspekov Bolot, Surov Edir, Umetaliyev Tilek, Bebezov Bakhadyr</i>	559
PE-376	X-Ray Endobiliary Methods in the Treatment of Patients with Alveococcus of the Liver, Complicated by Mechanical Jaundice 560 <i>Sakmamatov Toolukbek, Ryspekov Bolot, Surov Edir, Umetaliyev Tilek, Marshankulov Rezuhan</i>	560
PE-377	Advantages of Kasai Procedure through Minimally Invasive Approach in Children with Biliary Atresia 560 <i>Razumovskiy A., Ratnikov S., Degtyareva A., Kulikova N., Imakhanova M.</i>	560
PE-378	Transplantation Technologies in Surgical Treatment of Advanced Liver Alveococcosis 561 <i>Zagainov Vladimir Evgenievich, Kiselev Nikolai Mikhailovich, Belskii Vladislav Aleksandrovich, Mukhanzayev Shamsudin Habibulaevich</i>	561
PE-379	Surgical Treatment of Liver Alveococcosis 561 <i>Aliya Myrzabayeva, B. Kuanyshbayev</i>	561
PE-380	The Use of Laparoscopic Echinococctomy in the Surgical Treatment of Echinococcosis of the Liver 561 <i>Makhatova Zhanar, B. Kuanyshbayev</i>	561
PE-381	Surgical Management of Patients with Mirizzi Syndrom 562 <i>Duysenbaeva B.S., Imangeldina M.S., Kurmanalin I.A., Orzbaeva D.R.</i>	562

PE-382	Management of Carcinoma Gallbladder In Patients with Portal Hypertension	562
	<i>Kunal Parasar, Vaibhav Kumar Varshney, Sundeeep Singh Saluja, Pramod Kumar Mishra</i>	
PE-383	Liver Transplantation Outcomes in UMC	563
	<i>Nurmakhan Assylkhanuly, Zhanna Kozybayeva</i>	
PE-384	Finger Fracture Technique with Glissonian Pedical Approach for Liver Resection Is Comparable to All Other Techniques for Liver Resection	563
	<i>Bhavin Vasavada, Hardik Patel</i>	
PE-385	Microwave Assisted Liver Resection: Clinical Feasibility Study and Preliminary Results	564
	<i>Aidos Bissenbay, Samat Issakov</i>	
PE-386	Pure Laparoscopic Left Hepatectomy Using Arantius' Ligament Approach Combined Glissonian Pedicle Approach	564
	<i>Loi LE VAN, Thanh LE VAN, Quang VU VAN, Linh HO VAN, Hieu LE TRUNG, Luc DAO TAN</i>	
PE-387	Cystobiliary Communication in Hydatid Disease: A Recalcitrant Problem	564
	<i>Jenny Sohn, Christos Apostolou, Amitabha Das, Neil Merrett, Kheman Rajkomar</i>	
PE-388	Early Experience of Single Port Robotic Cholecystectomy Using Da Vinci Xi System	565
	<i>Seunghwan Lee, Sun-hyung Joo</i>	
PE-389	'Falciformoplasty' as an Alternative to Omentoplasty for Deep Hydatid Cysts	566
	<i>Jenny Sohn, Christos Apostolou, Amitabha Das, Neil Merrett, Kheman Rajkomar</i>	

Others

PE-390	Robotic Reduced-Port Splenectomy Using Single-Site Platform: 8 Cases of Single Surgeon Experience	567
	<i>Kyungyeon Hwang, Jae Hoon Lee</i>	
PE-391	Liver Cancer and Its Risk Factors-Related Researches in North Korea	567
	<i>Eun-young Lee, Moran Ki</i>	
PE-392	Feasibility of Continuous Venous Infusion in a Porcine Hepatectomy Model	567
	<i>Jin-I Seok, Kyung Chul Yoon, Hye-Sung Jo, Young In Yoon, Yoon Young Choi, Dong-Sik Kim</i>	
PE-393	Mortality after Hepato-Biliary and Pancreatic Surgery (HBPS) in Queensland, Australia	568
	<i>Tristan Anderson, John North, Praga Pillay</i>	
PE-394	A Case of Accessory Cystic Duct with Double Cystic Artery	568
	<i>Dhiraj Saxena</i>	
PE-395	Case Report Cardiovascular and Acute Kidney Disease Caused by Cardiopulmonary Resuscitation in Blood Sugar	568
	<i>Hari Prasad Dulal</i>	
PE-396	Metformine and Insuline Resistance Is Associated with Hirsutisum in Unselected Reproductive-Age Nepali Women	569
	<i>Yupom Tugsila, Hari Prasad Dulal</i>	
PE-397	Effect of Millets Flours, Brown Rice, Corn Flours Consumption on Blood Sugar Levels, Lipid Profile and Anthropometric Indices among Selected Politicians and Known to Know Employees in Nepal	569
	<i>Purushottam Adhikari, Hari Prasad Dulal</i>	
PE-398	A Descriptive Study of Clinical Trials Being Conducted in India Related to the Liver Diseases	570
	<i>Jay Karan, Pankaj Bhardwaj, Jagdish Goyal</i>	
PE-399	Accessory Liver Fissures: A Case Report and Its Clinical Significance	571
	<i>Anju Choudhary, Surajit Ghatak</i>	
PE-400	Liver Diseases in Myanmar	571
	<i>Aung Hlaing Bwa, Hline Yamone Aye, Khine Nwe Thant, Soe Thiha Maung, Si Thu Sein Win, Khin Maung Win</i>	
PE-401	Complementary and Alternative Medicine (CM) Deterioration of Chronic Kidney Patients in Nepal	571
	<i>Ganga Dulal, Hari Prasad Dulal</i>	
PE-402	Lipidogram in Patients with Type2 Diabetes Mellitus Infected with Hepatitis B and C Viruses	572
	<i>Yupom Tugsila, Hari Prasad Dulal</i>	
PE-403	A Case of Hepatitis A Associated with Subchorionic Hematoma during Pregnancy	572
	<i>Byung Seok Lee, Seok Hyun Kim, Eaum Seok Lee, Jong Seok Joo, Hyuk Soo Eun, Woo Sun Rou, Hee Sung Lee, Min Young Shin, Sung Hun Kang, Sang Ok Jung, Min Ji Cho, In Ki Min, Dong Yeon Kim</i>	
PE-404	Prognosis and Risk Factors of Acute Viral Hepatitis D in Mongolia	573
	<i>Batsukh. B, Munkh-Orshikh Dashchirev, Sarangua. G, Gansaikhan. B, Ariunbileg. J, and Baatarkhuu. O</i>	

Contents

PE-405	Analysis of Chemical Composition of a Single Cellular Lipid Droplet in Liver Cells	573
	<i>Ryohei Tamada, Rojeet Shrestha, Hitoshi Chiba, Shu-Ping Hui</i>	
PE-406	Effects of Chronic Kidney Disease on Liver Enzymes Activity during Pre and Post Hemodialysis	573
	<i>Sanjay Kumar Jha, Naval Kishor Yadav, Upma Jha, Daya Ram Pokharel, Pramod Shankar Shukla</i>	
PE-407	Lymphoid Hyperplasia of the Liver Mimicking Hepatocellular Carcinoma: A Case Report	574
	<i>Woo Young Kim, Yu Ni Lee</i>	
PE-408	Liver Enzymes Activity in Patients with Chronic Kidney Disease on Hemodialysis	574
	<i>Naval Kishor Yadav, Dayar Ram Pokharel, Shrinkhala Chhetri, Manoj Sigdel</i>	
PE-409	Diagnostic Performance of Serum Asialo- α 1-Acid Glycoprotein for Advanced Liver Fibrosis or Cirrhosis in Patients with Chronic Hepatitis B or Nonalcoholic Fatty Liver Disease	575
	<i>Seung Up Kim, Mi Young Jeon, Moon Hyun Kim, and Tae Seop Lim</i>	
PE-410	SGOT, SGPT and Alkaline Phosphatase among Suspected Liver Patients Attending Pyuthan District Hospital, Pyuthan, Nepal	575
	<i>Ganga Sagar Bhattarai, Mani Neupane Bishnu Raj Tiwari</i>	
PE-411	Conservative Management of Traumatic Acute Intramural Hematoma of Duodenal 2nd and 3rd Portion: A Case Report and Review of Literature	575
	<i>Jin Ho Lee</i>	
PE-412	Epidemiology of Wilson's Disease in South Korea: A Population-Based Study Using the National Health Insurance Database	576
	<i>Jong Won Choi, Minjin Kang, Chun Kyon Lee</i>	