

[www.icksh.org](http://www.icksh.org)

 Step Further Inside the Real World of Precision Hematology

# ICKSH 2018

2018 KOREAN SOCIETY OF HEMATOLOGY  
INTERNATIONAL CONFERENCE  
& 59<sup>th</sup> ANNUAL MEETING

In conjunction with BTG 2018 by AP Hematology Consortium

---

**MARCH 29 - 31, 2018**

Grand Walkerhill Seoul, Korea

---



The Korean Society of Hematology



**ICKSH 2018**  
& 59<sup>th</sup> ANNUAL MEETING

---

**CONTENTS**

---

Welcome Message	02
Organizing Committee	03
Program-at-a-Glance	04
Floor Plan	12
General Information	14
Speaker Information	16
Social Program	17
Sponsors (Acknowledgement)	18
Exhibition	20
Plenary Lectures	24
Daily Program	27
Poster Presentations	51



## WELCOME MESSAGE

Dear Colleagues,

It is a great honor and privilege to invite you to attend the 2018 KSH International Conference & 59<sup>th</sup> Annual Meeting, hosted by the Korean Society of Hematology (KSH), to be held March 29-31, 2018, at the Grand Walkerhill Seoul, Korea.

Founded in 1958, the Korean Society of Hematology has steadily grown over the years and will soon celebrate its 60<sup>th</sup> anniversary. As the explosion in the 21<sup>st</sup> century of science and industry has brought revolutionary advancement, the expansion of knowledge and development of new technologies goes beyond imagination. The ICKSH 2018 will provide a unique opportunity to learn about the most recent findings and research from renowned experts and offer an occasion to exchange experiences and information with colleagues for the continued success and progress of our field.

Our programs will include benign hematologic diseases, various types of hematologic malignancies, coagulation/thrombosis related disorders and transfusion medicine through plenary lectures, as well as scientific and education sessions. We are also planning to open several satellite symposiums with specialists on numerous hematology-related topics.

We very much look forward to sharing this memorable and fantastic meeting together.



Hwi-Joong Yoon, M.D., Ph.D.  
Congress Chairman  
The Korean Society of Hematology



Hyeoung-Joon Kim, M.D., Ph.D.  
President  
The Korean Society of Hematology

## ORGANIZING COMMITTEE

### Congress Chairman

Hwi-Joong Yoon  
Kyung Hee University College of Medicine

### President

Hyeoung-Joon Kim  
Chonnam National University Medical School

### Secretary General

Bin Cho  
College of Medicine, The Catholic University of Korea

### Vice Secretary General

Seongsoo Jang  
University of Ulsan College of Medicine

### Scientific Committee

Chair  
Hee-Je Kim  
College of Medicine, The Catholic University of Korea

### Finance Committee

Chair  
Jin Seok Kim  
Yonsei University College of Medicine

### Congress Internalization Committee

Chair  
Dong-Wook Kim  
College of Medicine, The Catholic University of Korea

### Vice-Chair

Keon Hee Yoo  
Sungkyunkwan University School of Medicine

### Medical Policy Committee

Chair  
Hyoung Jin Kang  
Seoul National University College of Medicine

### Public Relations Committee

Chair  
Hyeon Jin Park  
National Cancer Center

### Education and Training Committee

Chair  
Dae Young Zang  
Hallym University College of Medicine



## PROGRAM AT A GLANCE March 29 (Thu), 2018

Time	VISTA 1	VISTA 2	VISTA 3
07:30	Registration		
08:00	OPENING REMARKS (Place: Vista 1)		
08:00-09:00	<b>OP01</b>	<b>OP02</b>	<b>OP03</b> (KOR)
09:00-10:00	<b>ES01</b> Multiple Myeloma (KOR)	<b>ES02</b> Typical and Atypical Chronic Myelogenous Leukemia (KOR)	<b>ES03</b> Thrombotic Microangiopathy (KOR)
	Monoclonal Gammopathy of Renal Significance (Jung Eun Lee, Korea)	Optimal First-Line Treatment of Chronic Phase CML (Kyoung Ha Kim, Korea)	Childhood aHUS (Hae Il Cheong, Korea)
	Smoldering Multiple Myeloma (Byung-Su Kim, Korea)	Update on the Treatment of CML in Children (Jae Wook Lee, Korea)	Adult aHUS (Youngil Koh, Korea)
	Next Generation Sequencing in Multiple Myeloma (Miyong Kim, Korea)	BCR-ABL1 Negative Hematologic Neoplasms; Diseases that are Similar to but Different from CML (Hawk Kim, Korea)	Management of TTP (Doyeun Oh, Korea)
10:00-10:20	Coffee Break		
10:20-11:40	<b>SS01</b> Single Cell Genomics	<b>SS02</b> (KAI-KSH JOINT) Cancer Immunology	
	Single Cell Analysis of Multiple Myeloma (Woong-Yang Park, Korea)	Immune Checkpoint Inhibition in Hematologic Malignancy - Focusing on Multiple Myeloma (Yoon Seok Choi, Korea)	
	Characteristics of Tumor Infiltrating Lymphocytes Revealed by Single Cell RNA Sequencing (Zemin Zhang, China)	A New Antigen Presenting Cell based Therapeutic Cancer Vaccine (Chang-yuil Kang, Korea)	

## PROGRAM AT A GLANCE March 29 (Thu), 2018

Time	VISTA 1	VISTA 2	VISTA 3
	Dissecting the Cellular and Genetic Composition of Pediatric Leukemias by Single-Cell Genomics (Charles Gawad, USA)	Chimeric Antigen Receptor-engineered Natural Killer Cell Immunotherapy for Cancer (Kyung-Nam Koh, Korea)	
		Post-transplant Immunotherapy with WT1-specific CTLs for High-risk Acute Myelogenous Leukemia (Tai-Gyu Kim, Korea)	
11:40-11:50	Break		
11:50-12:50	<b>OP04</b>	<b>OP05</b>	<b>OP06</b>
12:50-13:00	Break		
13:00-14:00	[Luncheon] <b>ST01</b> <b>KYOWA KIRIN</b>	[Luncheon] <b>ST02</b> <b>NOVARTIS</b>	[Luncheon] <b>ST03</b> <b>HANJOK</b>
	Updated Febrile Neutropenia Management (Won Seog Kim, Korea)	It's Time We Go Deeper (Pierre Laneuville, Canada)	Complement Mediated Glomerular Disease (Focusing on aHUS): Everything Has Changed in the Last 10 Years but Still a Lot to Do (Giuseppe Remuzzi, Italy)
14:00-15:20	<b>PL01</b> Precision Hematology in Genomics Era		
	Precision Medicine in CLL (Constantine Tam, Australia)		
	The Clinical Management of FLT3-Mutated AML (Mark Levis, USA)		
15:20-15:40	Coffee Break		

\* Session Codes

PL: Plenary Lecture / SS: Scientific Session / ES: Educational Session / SP: Special Report / ST: Satellite Symposium / OP: Oral Presentation

\* Sessions will be presented in English. Only [KOR] marked sessions will be presented in Korean.



## PROGRAM AT A GLANCE March 29 (Thu), 2018

Time	VISTA 1	VISTA 2	VISTA 3
15:40-17:00	<b>EHA-KSH Joint Symposium 01</b> Myelodysplastic Syndromes		<b>SP01</b> Updates on Cellular Therapies
	The Best Prediction of Prognosis for MDS: How to Integrate Clinical and Molecular Data (Valeria Santini, Italy)		CART Treatment for ALL (Jae Park, USA)
	Clinical Effects of Somatic Mutations in MDS (Je-Hwan Lee, Korea)		CAR Expressing Effector Cells in Stem Cell Transplantation (Ulrike Kohl, Germany)
	Pathogenesis and Management of Chronic Myelomonocytic Leukemias (Raphael Itzykson, France)		Ex Vivo T cell-depleted Haploidentical Hematopoietic Cell Transplantation and Cellular Therapy Post-transplantation (Ho Joon Im, Korea)
Hypomethylating Therapy in Stem Cell Transplantation for MDS (Yoo-Jin Kim, Korea)			
17:00-17:10	Break		
17:10-18:10	<b>OP07</b>	<b>OP08</b>	<b>OP09</b>
18:10-18:40	<b>POSTER PRESENTATION 01</b> (Place: Exhibition Hall, B3)		
18:40-20:00	<b>WELCOME RECEPTION</b> (Place: Vista Hall Lobby, B2)		

\* Session Codes

PL: Plenary Lecture / SS: Scientific Session / ES: Educational Session / SP: Special Report / ST: Satellite Symposium / OP: Oral Presentation

\* Sessions will be presented in English. Only [KOR] marked sessions will be presented in Korean.

## PROGRAM AT A GLANCE March 30 (Fri), 2018

Time	VISTA 1	VISTA 2	VISTA 3
08:00-09:00	<b>OP10</b>	<b>OP11</b>	<b>OP12</b> (KOR)
09:00-10:20	<b>SS03</b> Recent Advances in Acute Promyelocytic Leukemia	<b>SS04</b> Recent Advances in Natural Killer T-cell Lymphoma	<b>OP13</b>
	JALSG Prospective Study for APL (Akihiro Takeshita, Japan)	Molecular Pathogenesis of NKTL (Wee Joo Chng, Singapore)	
	Therapy of APL (Lionel Ades, France)	Recent Advances in NK/T-Cell Lymphoma (Yok Lam Kwong, Hong Kong)	
	Strategies to Define High-risk Patients in APL (Byung-Sik Cho, Korea)	Beyond Current Standard Care of ENKTL (Won Seog Kim, Korea)	
10:20-10:30	Break		
10:30-11:50	<b>PL02</b> Targeting Leukemic Stem Cells		
	Human Myeloid Leukemia Stem Cells (Koichi Akashi, Japan)		
Pre-Cancerous Stem Cells in MDS and AML: Significance, Mechanisms, and Therapeutic Targeting (Ulrich Steidl, USA)			
11:50-12:00	Break		
12:00-13:00	[Luncheon] <b>ST04</b> <b>AMGEN</b>	[Luncheon] <b>ST05</b> Bristol-Myers Squibb	[Luncheon] <b>ST06</b> <b>HAN/DOK</b>
	Treatment of Multiple Myeloma in Relapse (Keith Stewart, USA)	Emerging Trends in CML Management (Elias Jabbour, USA)	HSCT Early Complications: Focus on Severe Hepatic Veno- occlusive Disease; - The Revised EBMT Diagnostic and Severity Criteria for Adults and an Update on Defibrotide. (Mohamad Mohty, France)



## PROGRAM AT A GLANCE March 30 (Fri), 2018

Time	VISTA 1	VISTA 2	VISTA 3
13:00-14:20	<b>SS05</b> Cell Death Mechanism	<b>SS06</b> Bone Marrow Failure Syndrome	<b>SS07 (KOGO-KSH JOINT)</b> Cancer Genomics
	Apoptotic Cell Death (Soo Youl Kim, Korea)	Non-Transplant Therapy for Bone Marrow Failure (Danielle Townsley, USA)	Variability in Chromatin Architecture and Associated DNA Repair at Genomic Positions Containing Somatic Mutations (Seon-Young Kim, Korea)
	CHIP Controls Necroptosis Through Ubiquitylation- and Lysosome-dependent Degradation of RIPK3 (Jaewhan Song, Korea)	Role of Microenvironment and Genetics in BM Failure (Myungshin Kim, Korea)	Deciphering the Cell-of-Origin Harboring Driver Mutations in Brain Tumors (Jeong-Ho Lee, Korea)
	Functional Isolation of New Modulators in Apoptosis and Necroptosis (Yong-Keun Jung, Korea)	Inherited BM Failure Syndrome (Hoon Kook, Korea)	Contribution of Germline Variants in Pan-Cancer Development (Youngil Koh, Korea)
14:20-14:40	Coffee Break		
14:40-15:40	<b>Asian Hematology Network: JSH-KSH Joint Symposium</b> Explore Deep Inside the Asian Hematology Network		<b>ST07</b> 
	AML Prognosis based on Clinical and Genomic Data (Hyeoung-Joon Kim, Korea)	A Novel Mechanism of Cancer Immune Evasion Via the Disruption of PD-L1 3'-UTR (Seishi Ogawa, Japan)	Advancing Value-Based Approaches in the Treatment of Non-Hodgkin Lymphoma (NHL): Contemporary Strategies and Innovations (Hyeon-Seok Eom, Korea)

## PROGRAM AT A GLANCE March 30 (Fri), 2018

Time	VISTA 1	VISTA 2	VISTA 3
15:40-17:00	<b>EHA-KSH Joint Symposium 02</b> Aplastic Anemia Paroxysmal Nocturnal Hemoglobinuria		<b>SP02</b> Multiple Myeloma Niche
	Diagnosis and Management of AA and Refractory Cytopenia of Childhood (Ayami Yoshimi, Germany)		Clinical Implications of MRD in Multiple Myeloma (Wee Joo Chng, Singapore)
	Frontline Alternative Donor SCT Versus Immunosuppressive Treatment for Children with Severe AA Who Lack Matched Related Donor (Hyoung Jin Kang, Korea)		The Ubiquitin-Proteasome Pathway: Friend and Foe in Multiple Myeloma (Robert Orłowski, USA)
	An Update on the Management of PNH (Anita Hill, UK)		Cellular Immunotherapy in Multiple Myeloma (Je-Jung Lee, Korea)
Clinical Implications of Renal Dysfunction in Patients with PNH (Jin Seok Kim, Korea)			
17:00-17:10	Break		
17:10-17:50	<b>BEST ABSTRACT PRESENTATION</b>		<b>ST08</b>  Novel Treatment Strategies for Multiple Myeloma: A Focus on Oral Proteasome Inhibitors (Antonio Palumbo, Italy)
	17:50-18:20 <b>POSTER PRESENTATION 02</b> (Place: Exhibition Hall, B3)		
18:40-20:00	<b>GALA DINNER</b> (Place: Walkerhill Theatre, B1)		

\* Session Codes

PL: Plenary Lecture / SS: Scientific Session / ES: Educational Session / SP: Special Report / ST: Satellite Symposium / OP: Oral Presentation

\* Sessions will be presented in English. Only [KOR] marked sessions will be presented in Korean.



## PROGRAM AT A GLANCE March 31 (Sat), 2018

Time	VISTA 1	VISTA 2	VISTA 3
07:30-08:30	<b>BUSINESS MEETING</b> (Place: Cosmos Hall, 3F)		
08:30-09:30	<b>OP14</b>	<b>OP15</b>	<b>OP16</b> (KOR)
09:30-10:50	<b>SS08</b> Current Progress in Pediatric Acute Leukemia	<b>SS09</b> Detection of Minimal Residual Disease in Hematologic Malignancy	<b>OP17</b>
	New Developments in the Treatment of Newly Diagnosed and Relapsed ALL (Stephen Hunger, USA)	MRD Detection in Acute Leukemia, CLL and Multiple Myeloma (Alberto Orfao, Spain)	
	Therapy Optimization in Infant ALL (Daisuke Tomizawa, Japan)	NGS-based Assessment of Clonality & MRD Determination in ALL (In-Suk Kim, Korea)	
	Genomic Landscape and Therapy Optimization of Pediatric Mixed Phenotype Acute Leukemia (Hiroto Inaba, USA)	Selected Short Talk I Development and Preliminary Evaluation of Customized pan-Blood Cancer NGS Panel (Jun Hyung Lee, Korea)	
10:50-11:10	Coffee Break		
11:10-12:30	<b>PL03</b> Development of Precision Medicine Trials		
	Development of Precision Medicine Trials for ALL (Stephen Hunger, USA)		
	Progress in Therapy of Philadelphia Positive ALL (Farhad Ravandi, USA)		

## PROGRAM AT A GLANCE March 31 (Sat), 2018

Time	VISTA 1	VISTA 2	VISTA 3
12:30-13:00	<b>WORKING PARTY REPORTS</b>		
13:00-13:30	<b>AWARD CEREMONY &amp; CLOSING MEETING</b>		

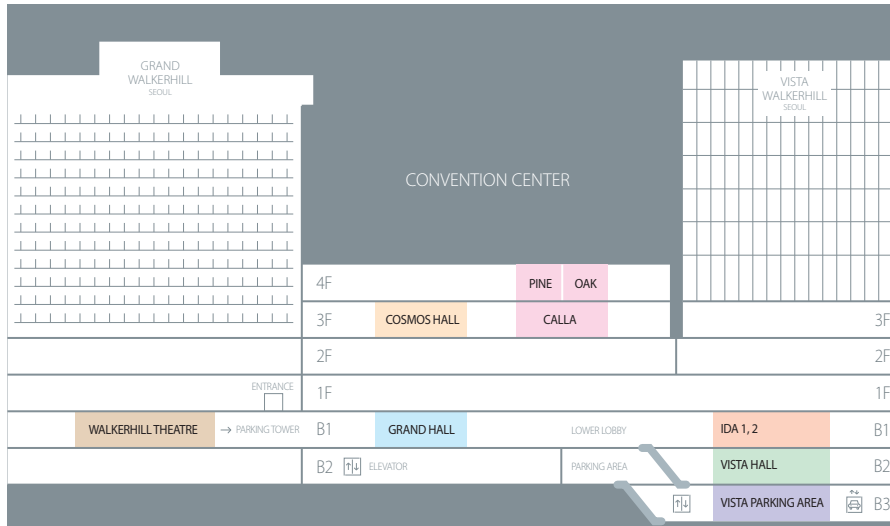
\* Session Codes

PL: Plenary Lecture / SS: Scientific Session / ES: Educational Session / SP: Special Report / ST: Satellite Symposium / OP: Oral Presentation

\* Sessions will be presented in English. Only [KOR] marked sessions will be presented in Korean.



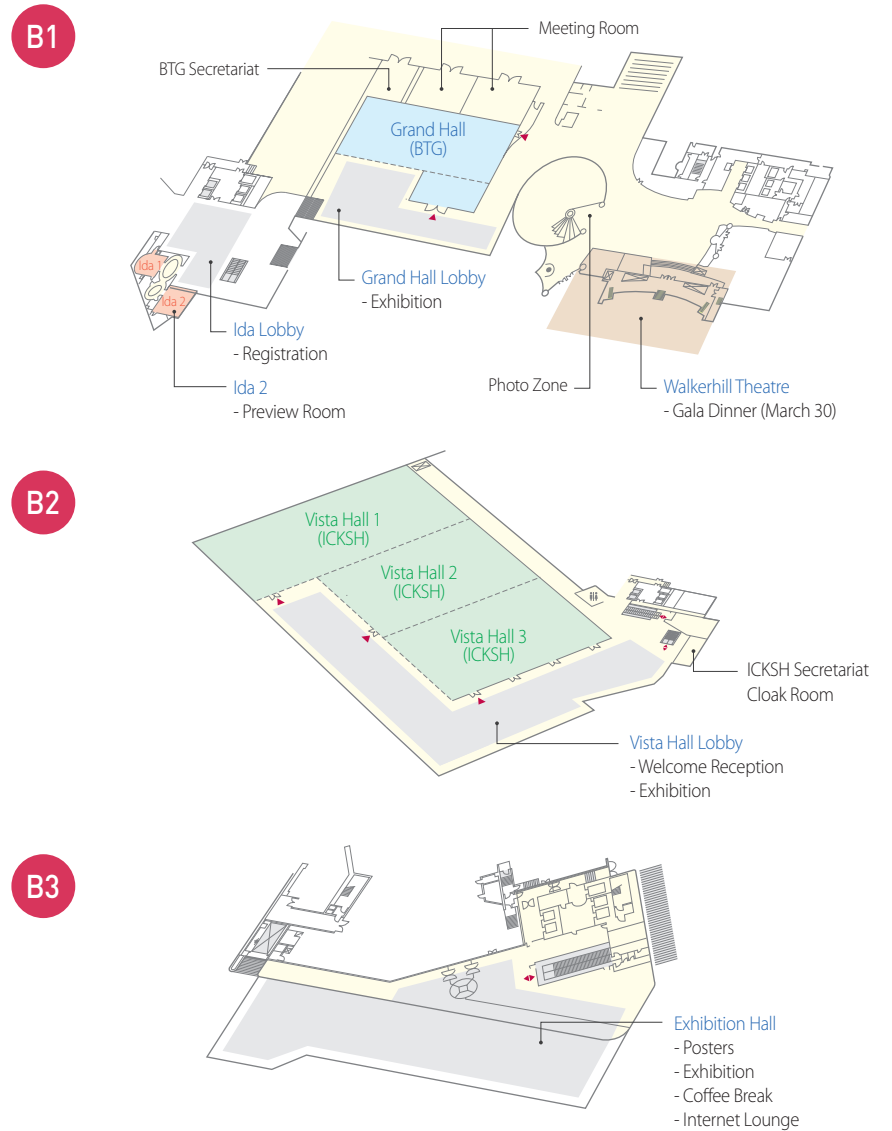
## FLOOR PLAN Side View



- PINE, OAK (4F)**  
Meeting Room
- CALLA (3F)**  
Meeting Room
- IDA 1, 2 (B1)**  
Organizing Committee  
VIP Room  
Preview Room  
Registration (Lobby)
- GRAND HALL (B1)**  
BTG2018 Scientific Session  
Meeting Room  
Exhibition (Lobby)
- COSMOS (3F)**  
Exhibitor's Lunch  
Business Meeting
- WALKERHILL THEATRE (B1)**  
Gala Dinner
- VISTA HALL (B2)**  
ICKSH 2018 Scientific Session  
Opening / Closing Ceremony  
Plenary Session  
Welcome Reception (Lobby)  
Exhibition (Lobby)
- EXHIBITION HALL (B3)**  
Exhibition  
Posters  
Coffee Break  
Internet Lounge



## FLOOR PLAN







## GENERAL INFORMATION

### Registration

All participants are required to check in at the registration desk to pick up their name badge. Badges must be worn during all scientific sessions and social programs.

LOCATION	IDA Lobby (B1)
OPERATION HOURS	March 29 (Thu.) 07:00 - 19:00 March 30 (Fri.) 07:00 - 19:00 March 31 (Sat.) 07:00 - 13:00

### On-site Registration Fees

General	USD 200
Resident / Trainee / Nurse / Student	USD 100

#### + Registration fees include:

Participation in all scientific sessions, exhibition, satellite symposium including lunch, coffee breaks, conference kit, welcome reception and gala dinner.

- + Conference Kit will be distributed with your name badge at the registration desk. The kit includes a Program book and Abstract book.

### Lunch

Lunch boxes will be provided during the satellite symposium. Please bring the lunch coupon in your name badge.

LOCATION	Vista Hall 1, Vista Hall 2, Vista Hall 3 (B2)
OPERATION HOURS	March 29 (Thu.) 13:00 - 14:00 March 30 (Fri.) 12:00 - 13:00 March 31 (Sat.) 13:00 - 13:30

### Coffee Break

Coffee will be served at coffee break times in **Vista Hall Lobby (B2)**.  
Barista coffee will be provided during the conference in **Exhibition Hall (B3)**.

## GENERAL INFORMATION

### Internet

- + Internet lounge is located in **Exhibition Hall (B3)** during the conference.
- + Wifi internet access is available in the entire conference venue.

### Certificate of Attendance

Participants may receive the certificate of attendance. Please contact the ICKSH2018 Secretariat after the conference via [icksh@icksh.org](mailto:icksh@icksh.org)

### Useful Phone Numbers

- + Police 112
- + Fire and Ambulance 119
- + Medical Emergency 1339

### ICKSH2018 Secretariat Office

- + Onsite: Beside the Cloak Room, Vista Hall Lobby (B2)

T. +82-2-450-2201  
E. [icksh@icksh.org](mailto:icksh@icksh.org)

- + After conference: 1F, Haeoreum Bldg., 16 Yeoksam-ro 17Gil, Gangnam-gu, Seoul, 06246, Korea

T. +82-2-566-6031  
F. +82-2-566-6087  
E. [icksh@icksh.org](mailto:icksh@icksh.org)



## SPEAKER INFORMATION

### Preview Room

All speakers are requested to visit the preview room no later than 2 hours before their session. They will be assisted by our staff who will help upload the presentation file to the server before the session.

LOCATION	IDA 2 (B1)
OPERATION HOURS	March 29 (Thu.) 07:00 - 19:00 March 30 (Fri.) 07:00 - 18:00 March 31 (Sat.) 07:00 - 17:00

### Preparatory Meeting

To ensure the smooth communication between chairpersons and presenters, session chairs and speakers are requested to attend our Preparatory Meeting. The meeting will take place at each session room as assigned, 30 minutes prior to your session.

CODE	SESSIONS	SESSIONS	LOCATION & TIME	LOCATION & TIME
SS01	Single Cell Genomics	March 29 (Thu.) 10:20 - 11:40	Oak	March 29 (Thu.) 09:50
SS04	Recent Advances in Natural Killer T-cell Lymphoma	March 30 (Fri.) 09:00 - 10:20	Oak	March 30 (Fri.) 08:30
SS08	Current Progress in Pediatric Acute Leukemia	March 31 (Sat.) 09:30 - 10:50	Oak	March 31 (Sat.) 09:00
SS09	Detection of Minimal Residual Disease in Hematologic Malignancy	March 31 (Sat.) 09:30 - 10:50	Pine	March 31 (Sat.) 09:00

### Poster Presentation

Pre-selected posters are required to have a presentation time following the schedule below. After onsite reviews, the scientific committee will select the Best Posters. Winners should attend the Closing Ceremony on March 31 (Sat.) to receive the award.

LOCATION	Exhibition Hall (B3)
DATE & TIME	March 29 (Thu.) 18:10 - 18:40 March 30 (Fri.) 17:50 - 18:20

## SOCIAL PROGRAM

### Opening

With the opening address by Congress Chairman Hwi-Joong Yoon, ICKSH2018 will begin.

LOCATION	Vista 1 Hall (B2)
DATE & TIME	March 29 (Thu.) 08:00

### Welcome Reception

Welcome to ICKSH2018! The Organizing Committee has prepared a marvelous welcome reception.

LOCATION	Vista Hall Lobby (B2)
DATE & TIME	March 29 (Thu.) 18:40 - 20:00

### Gala Dinner

Please join us to share an unforgettable evening. Enjoy the climax of ICKSH2018 with an excellent dinner and exciting performance.

LOCATION	Walkerhill Theatre (B1)
DATE & TIME	March 30 (Fri.) 18:20 - 20:00



### SPONSORS (Acknowledgement)

**DIAMOND**

**AMGEN**<sup>®</sup>  **Bristol-Myers Squibb**

**HAN/DOK**  **NOVARTIS**

**KYOWA KIRIN**  **Roche**

**Takeda**  
ONCOLOGY

**PLATINUM**

 **DAEWOONG**  
PHARMACEUTICAL CO.,LTD.  **GC Pharma**

**Janssen**  
PHARMACEUTICAL COMPANIES  
of 

### SPONSORS (Acknowledgement)

**GOLD**  **CELTRION**  **Pfizer Korea**

 **yuhan** CORPORATION **SANOFI** 

**SILVER**  **astellas**  
Leading Light for Life  **JW Pharmaceutical**  **MSD**

**BRONZE**  **BL&H Co., Ltd.**  **BORYUNG**  
Pharmaceutical  **Otsuka**  
Korea Otsuka Pharm.

 **Roche**  **Shire**  **Novo Nordisk**

 **Mundipharma**  **TEVA HAN/DOK**  **SK plasma**

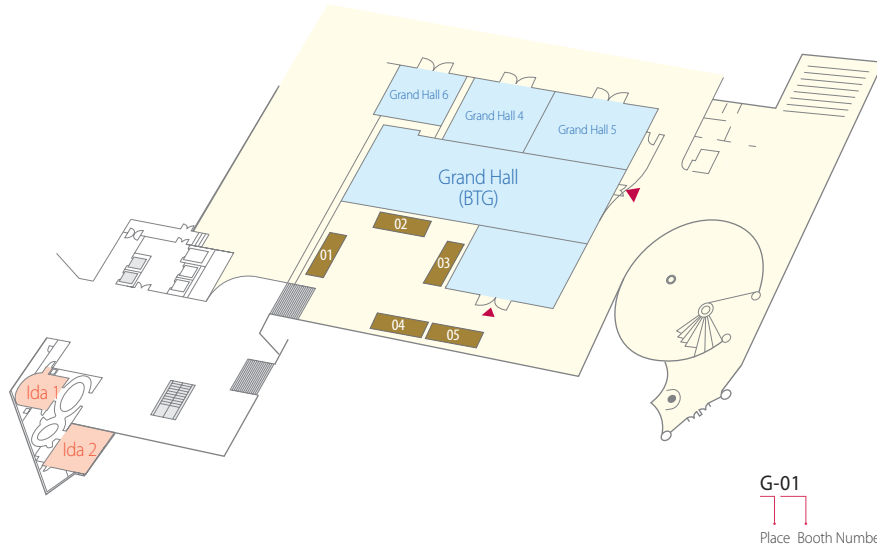
 **DAEWON**  
Pharm. Co., Ltd.  **sysmex**  **samyang**  
Biopharm

 **DONG-A ST**  **Pfizer Korea**  **KWANG DONG**  
PHARMACEUTICAL CO., LTD.



## EXHIBITION

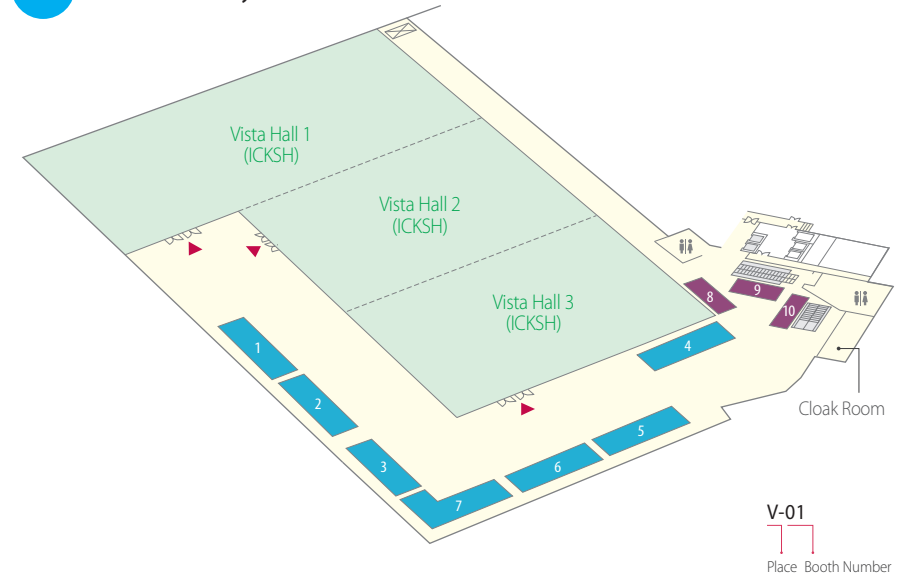
### B1 Grand Hall Lobby



Booth No.	Grade	Company Name
G-01	Gold	Genzyme Korea
G-02	Gold	Pfizer Korea
G-03	Gold	Yuhan Corporation
G-04	Gold	Celgene
G-05	Gold	Celltrionpharm

## EXHIBITION

### B2 VISTA Hall Lobby

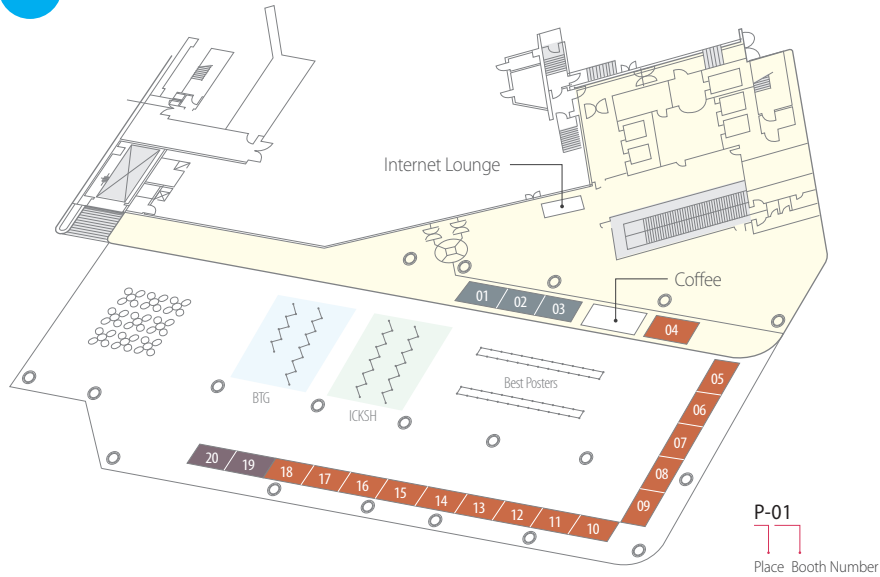


Booth No.	Grade	Company Name
V-01	Diamond	Takeda Pharmaceuticals
V-02	Diamond	Roche Korea, Co Ltd
V-03	Diamond	Amgen Korea Limited
V-04	Diamond	Kyowa Hakko Kirin Korea
V-05	Diamond	Bristol-Myers Squibb Korea
V-06	Diamond	Handok
V-07	Diamond	Novartis
V-08	Platinum	Janssen Korea
V-09	Platinum	Daewoong
V-10	Platinum	Greencross Corp.



## EXHIBITION

### B3 Exhibition Hall



Booth No.	Grade	Company Name
P-01	Silver	Astellas Korea
P-02	Silver	JW Pharmaceutical
P-03	Silver	MSD Korea
P-04	Bronze	TEVA-Handok
P-05	Bronze	Pfizer Korea
P-06	Bronze	Symex Korea
P-07	Bronze	Roche Diagnostics Korea Co., Ltd.
P-08	Bronze	Daewon Pharm
P-09	Bronze	SK Plasma
P-10	Bronze	BL&H

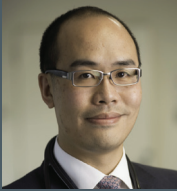
## EXHIBITION

P-11	Bronze	Samyang Biopharmaceuticals Corp
P-12	Bronze	Kwangdong
P-13	Bronze	Mundipharma Korea
P-14	Bronze	Novo Nordisk Pharma Korea, Ltd.
P-15	Bronze	Shire Pharma Korea
P-16	Bronze	Korea Otsuka Pharmaceutical Co., Ltd
P-17	Bronze	Donga ST
P-18	Bronze	Boryung Pharmaceutical Co.,Ltd.
P-19	Others	E-Public
P-20	Others	The Korean Society of Blood and Marrow Transplantation



## PLENARY LECTURES

MARCH 29 (Thu.)



### PL01-01

14:00-14:40 | VISTA Hall (B2)

Precision Medicine in CLL

Constantine Tam

Peter MacCallum Cancer Centre, St Vincent's Hospital  
and University of Melbourne, Australia



### PL01-02

14:40-15:20 | VISTA Hall (B2)

The Clinical Management of  
FLT3-Mutated AML

Mark Levis

Johns Hopkins School of Medicine, USA

## PLENARY LECTURES

MARCH 31 (Sat.)



### PL03-01

11:10-11:50 | VISTA Hall (B2)

Development of Precision Medicine Trials  
for ALL

Stephen Hunger

Children's Hospital of Philadelphia, USA



### PL03-02

11:50-12:30 | VISTA Hall (B2)

Progress in Therapy of Philadelphia  
Positive ALL

Farhad Ravandi

MD Anderson Cancer Center, USA

MARCH 30 (Fri.)



### PL02-01

10:30-11:10 | VISTA Hall (B2)

Human Myeloid Leukemia Stem Cells

Koichi Akashi

Kyushu University Graduate School of Medical  
Sciences, Japan



### PL02-02

11:10-11:50 | VISTA Hall (B2)

Pre-Cancerous Stem Cells in MDS and  
AML: Significance, Mechanisms, and  
Therapeutic Targeting

Ulrich Steidl

Albert Einstein College of Medicine, USA





## DAILY PROGRAM March 29 (Thursday)

07:30 -	<b>Registration</b>	Lobby
08:00 -	<b>Opening Remarks</b>	Vista 1
08:00-09:00	<b>Oral Presentation 01 (Eng)</b>	Vista 1
Chairs	Chan-Jeoung Park (University of Ulsan College of Medicine, Korea) In Ho Kim (Seoul National University College of Medicine, Korea)	
OP01-1	Immature Platelet Fraction (IPF): A Useful Marker for Evaluating the Cause of Thrombocytopenia and Predicting Platelet Recovery Kibum Jeon (Departments of Laboratory Medicine, Hallym University Sacred Heart Hospital, Korea)	
OP01-2	Acacia Senegal Supplementation Improve Dyslipidemia in Sickle Cell Anemia Novel Effect of Gum Arabic Lamis Kaddam (Department of Physiology, Alneelain University Faculty of Medicine, Sudan)	
OP01-3	Proof of Concept - Leukodepleted Red Blood Cells by Double Filtration Can Replace Irradiated Blood Se Jong Chun (Department of Laboratory Medicine, Chonnam National University Medical School, Korea)	
OP01-4	Establishing of Reference Intervals for 16 Complete Blood Count Parameters in Healthy Elderly People Eun Jin Lee (Department of Laboratory Medicine, Hallym University College of Medicine, Korea)	
08:00-09:00	<b>Oral Presentation 02 (Eng)</b>	Vista 2
Chairs	Ki Young Kwon (Keimyung University School of Medicine, Korea) Hye Lim Jung (Sungkyunkwan University School of Medicine, Korea)	
OP02-1	The Spectrum of Anemia in Therapy Naive Patients with Lymphoma and Myeloma from North India Gaurav Prakash (Clinical Hematology Unit, Department of Internal Medicine, PGIMER, India)	
OP02-2	Successful Treatment of Refractory Pure Red Cell Aplasia with Sirolimus Zhangbiao Long (Department of Hematology, Peking Union Medical College Hospital, China)	

## DAILY PROGRAM March 29 (Thursday)

OP02-3	Dynamics of CMV and EBV Loads after Rabbit ATG and Cyclosporine : A Prospective Observational Study Sung Soo Park (Catholic Blood and Marrow Transplantation Center, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea)	
OP02-4	Helicobacter Pylori Testing in Patients with Pernicious Anemia Ik Chan Song (Department of Internal Medicine, College of Medicine, Chungnam National University, Korea)	
08:00-09:00	<b>Oral Presentation 03 (Kor)</b>	Vista 3
Chairs	Chul-Won Choi (Korea University College of Medicine, Korea) Won-Sik Lee (Inje University College of Medicine, Korea)	
OP03-1	Treatment Outcome and Prognostic Factors of Precursor T-Acute Lymphoblastic Leukemia in Children Hyery Kim (Department of Pediatric, University of Ulsan College of Medicine, Asan Medical Center, Korea)	
OP03-2	Allogeneic Hematopoietic Stem Cell Transplantation for Childhood Myelodysplastic Syndrome Jae Won Yoo (Department of Pediatrics, University of Ulsan College of Medicine, Asan Medical Center Children's Hospital, Korea)	
OP03-3	Cell Therapy to Control Relapsed AML following Allogeneic Stem Cell Transplantation Woo Chan Park (Department of Internal Medicine, Seoul National University Hospital, Korea)	
OP03-4	Discrepancy in Efficacy of Disulfiram between NUP98-PHF23 Fusion Acute Myelogenous Leukemia Eun Sil Park (Department of Pediatrics, Institute of Health Science, College of Medicine Gyeongsang National University, Korea)	
OP03-5	Arsenic Trioxide-Based Initial Treatment for Acute Promyelocytic Leukemia with High-Risk Features Gi June Min (Department of Hematology, Catholic Blood and Marrow Transplantation Center, Seoul St. Mary's Hospital, Korea)	
OP03-6	Feasibility of Blinatumomab Salvage for Adult Patients with Relapsed or Refractory Ph-Negative ALL Jae-Ho Yoon (Department of Hematology, Catholic Blood and Marrow Transplantation Center, Leukemia Research Institute, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea)	





## DAILY PROGRAM March 29 (Thursday)

09:00-10:00	<b>[ES01] Multiple Myeloma (Kor.)</b>	Vista 1
Chairs	Ki Hyun Kim (Sungkyunkwan University School of Medicine, Korea) Jin Seok Kim (Yonsei University College of Medicine, Korea)	
ES01-1	Monoclonal Gammopathy of Renal Significance Jung Eun Lee (Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea)	
ES01-2	Smoldering Multiple Myeloma Byung-Su Kim (Department of Hemato-Oncology, Hallym University College of Medicine, Korea)	
ES01-3	Next Generation Sequencing in Multiple Myeloma Miyoung Kim (Department of Laboratory Medicine, Hallym University College of Medicine, Korea)	
09:00-10:00	<b>[ES02] Typical and Atypical Chronic Myelogenous Leukemia (Kor.)</b>	Vista 2
Chairs	Chul Won Jung (Sungkyunkwan University School of Medicine, Korea) Suk Joong Oh (Sungkyunkwan University School of Medicine, Korea)	
ES02-1	Optimal First-line Treatment of Chronic Phase CML Kyoung Ha Kim (Division of Hematology-Oncology, Department of Internal Medicine, Soonchunhyang University College of Medicine, Korea)	
ES02-2	Update on the Treatment of CML in Children Jae Wook Lee (Department of Pediatrics, College of Medicine, The Catholic University of Korea, Korea)	
ES02-3	BCR-ABL1 Negative Hematologic Neoplasms; Diseases that are Similar to but Different from CML Hawk Kim (Division of Hematology, Gachon University College of Medicine, Korea)	
09:00-10:00	<b>[ES03] Thrombotic Microangiopathy (Kor.)</b>	Vista 3
Chairs	Kyung Duk Park (Chonbuk National University Medical School, Korea) Soo Mee Bang (Seoul National University College of Medicine, Korea)	
ES03-1	Childhood aHUS Hae Il Cheong (Department of Pediatrics, Seoul National University College of Medicine, Korea)	

## DAILY PROGRAM March 29 (Thursday)

ES03-2	Adult aHUS Youngil Koh (Hematology & Medical Oncology, Department of Internal Medicine, Seoul National University College of Medicine, Korea)	
ES03-3	Management of TTP Doyeun Oh (Department of Internal Medicine, CHA University School of Medicine, Korea)	
10:00-10:20	Coffee Break	Lobby
10:20-11:40	<b>[SS01] Single Cell Genomics (Eng.)</b>	Vista 1
Chairs	Woong-Yang Park (Sungkyunkwan University School of Medicine, Korea) Dong Soon Lee (Seoul National University College of Medicine, Korea)	
SS01-1	Single Cell Analysis of Multiple Myeloma Woong-Yang Park (Department of Molecular Cell Biology, Sungkyunkwan University School of Medicine, Korea)	
SS01-2	Characteristics of Tumor Infiltrating Lymphocytes Revealed by Single Cell RNA Sequencing Zemin Zhang (BIOPIC and School of Life Sciences, Peking University, China)	
SS01-3	Dissecting the Cellular and Genetic Composition of Pediatric Leukemias by Single-Cell Genomics Charles Gawad (Department of Oncology, Department of Computational Biology, St. Jude Children's Research Hospital, USA)	
10:20-11:40	<b>[SS02] (KAI-KSH JOINT) Cancer Immunology (Eng.)</b>	Vista 2
Chairs	Jae Hoon Lee (Gachon University College of Medicine, Korea) Chung Gyu Park (Seoul National University College of Medicine, Korea)	
SS02-1	Immune Checkpoint Inhibition in Hematologic Malignancy - Focusing on Multiple Myeloma Yoon Seok Choi (Department of Internal Medicine, Chungnam National University College of Medicine, Korea)	
SS02-2	A New Antigen Presenting Cell based Therapeutic Cancer Vaccine Chang-yuil Kang (Laboratory of Immunology, College of Pharmacy, Seoul National University, Korea)	



## DAILY PROGRAM March 29 (Thursday)

- SS02-3 Chimeric Antigen Receptor-Engineered Natural Killer Cell Immunotherapy for Cancer  
Kyung-Nam Koh (Division of Pediatric Hematology/Oncology, Department of Pediatrics, Asan Medical Center Children's Hospital, University of Ulsan College of Medicine, Korea)
- SS02-4 Post-transplant Immunotherapy with WT1-specific CTLs for High-risk Acute Myelogenous Leukemia  
Tai-Gyu Kim (Department of Microbiology, Catholic Hematopoietic Stem Cell Bank, College of Medicine, The Catholic University of Korea, Korea)
- 11:40-11:50 Break Lobby
- 11:50-12:50 **Oral Presentation 04 (Eng.)** Vista 1
- Chairs  
Byung-Su Kim (Hallym University College of Medicine, Korea)  
Won Seog Kim (Sungkyunkwan University School of Medicine, Korea)
- OP04-1 Inflammatory Factor-Based Scoring System in DLBCL in the Rituximab Era  
Ji Hyun Lee (Department of Internal Medicine, Dong-A University College of Medicine, Korea)
- OP04-2 Clinical Features and Treatment Outcomes of Limited State Mantle Cell Lymphoma (CISL1606)  
Jae-Cheol Jo (Department of Hematology and Oncology, Ulsan University Hospital, Korea)
- OP04-3 Poor Clinical Outcome of Epstein-Barr Virus Associated Secondary Hemophagocytic Lymphohistiocytosis  
Jae-Ho Yoon (Department of Hematology, Catholic Blood and Marrow Transplantation Center, Seoul St. Mary's Hospital, Korea)
- OP04-4 3.5-Yr Follow-Up of Ibrutinib-Treated Relapsed/Refractory Mantle Cell Lymphoma Patients: Pooled Analysis  
Seok-Goo Cho (Department of Hematology, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea)
- 11:50-12:50 **Oral Presentation 05 (Eng.)** Vista 2
- Chairs  
Jae Yong Kwak (Chonbuk National University Medical School, Korea)  
Seok Lee (College of Medicine, The Catholic University of Korea, Korea)

## DAILY PROGRAM March 29 (Thursday)

- OP05-1 Clinical Significance of Secondary-Type Mutations in MDS and AML  
Joon-Ho Moon (Department of Hematology and Oncology, Kyungpook National University Hospital, Korea)
- OP05-2 Comparable Outcomes of RIC to MAC-HCT by MRD Kinetics in Adults with Ph-Positive ALL in CR1  
Jae-Ho Yoon (Department of Hematology Catholic BMT Center, Leukemia Research Institute, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea)
- OP05-3 Comprehensive Analysis of Genetic Variations in Patients with Acute Lymphoblastic Leukemia  
Borahm Kim (Department of Laboratory Medicine, Yonsei University College of Medicine, Korea)
- OP05-4 Molecular Scoring System integrated with IPSS-R in Korean Myelodysplastic syndrome  
Hee Sue Park (Department of Laboratory Medicine, Seoul National University College of Medicine, Korea)
- 11:50-12:50 **Oral Presentation 06 (Eng.)** Vista 3
- Chairs  
Joon Seong Park (Ajou University School of Medicine, Korea)  
Keon Hee Yoo (Sungkyunkwan University School of Medicine, Korea)
- OP06-1 Decitabine Versus Intensive Chemotherapy for Induction Treatment of Elderly Patients with Acute Myeloid Leukemia  
Eun-Ji Choi (Department of Hematology, Asan Medical Center, University of Ulsan College of Medicine, Korea)
- OP06-2 The Role of WT-1 as a Potential Marker to Predict Prognosis and Monitor Minimal Residual Disease  
Seung-Hwan Shin (Department of Hematology, Yeouido St. Mary's Hospital, The Catholic University of Korea, Korea)
- OP06-3 Prognostic Factors in Children with Core Binding Factor Acute Myeloid Leukemia  
Jae Wook Lee (Department of Pediatrics, The Catholic University of Korea, Korea)
- OP06-4 Registry-Based Study of Hematopoietic Stem Cell Transplantation in Korean Children  
Hee Young Ju (Department of Center for Pediatric Cancer, National Cancer Center, National Cancer Control Institute, Korea)



## DAILY PROGRAM March 29 (Thursday)

12:50-13:00	Break	Lobby
13:00-14:00	<b>Luncheon Satellite Symposium 1</b> (Eng.) <b>KYOWA KIRIN</b>	Vista 1
Chair	Cheol Won Suh (University of Ulsan College of Medicine, Korea)	
	Updated Febrile Neutropenia Management Won Seog Kim (Sungkyunkwan University School of Medicine, Korea)	
13:00-14:00	<b>Luncheon Satellite Symposium 2</b> (Eng.) <b>NOVARTIS</b>	Vista 2
Chair	Dong-Wook Kim (College of Medicine, The Catholic University of Korea, Korea)	
	It's Time We Go Deeper Pierre Laneuville (McGill University Health Centre Montreal, Canada)	
13:00-14:00	<b>Luncheon Satellite Symposium 3</b> (Eng.) <b>HANJOK</b>	Vista 3
Chair	Doyeun Oh (College of Medicine, CHA University, Korea)	
	Complement Mediated Glomerular Disease(Focusing on aHUS): Everything has Changed in the Last 10 Years but Still a Lot to Do Giuseppe Remuzzi (Mario Negri Institute for Pharmacological Research, Italy)	
14:00-15:20	<b>[PL01] Precision Hematology in Genomics Era</b> (Eng.)	Vista 1-3
Chairs	Yoo-Hong Min (Yonsei University College of Medicine, Korea) Sun Hee Kim (Sungkyunkwan University School of Medicine, Korea)	
PL01-1	Precision Medicine in CLL Constantine Tam (Peter MacCallum Cancer Centre, St Vincent's Hospital and University of Melbourne, Australia)	
PL01-2	The Clinical Management of FLT3-Mutated AML Mark Levis (Johns Hopkins School of Medicine, USA)	

## DAILY PROGRAM March 29 (Thursday)

15:20-15:40	Coffee Break	Lobby
15:40-17:00	<b>[EHA-KSH Joint Symposium 01] Myelodysplastic Syndrome</b> (Eng.)	Vista 1-2
Chairs	Je-Hwan Lee (University of Ulsan College of Medicine, Korea) Valeria Santini (University of Florence, Italy)	
EHA-KSH-01	The Best Prediction of Prognosis for MDS: How to Integrate Clinical and Molecular Data Valeria Santini (University of Florence, Italy)	
EHA-KSH-02	Clinical Effects of Somatic Mutations in MDS Je Hwan Lee (Department of Hematology, University of Ulsan College of Medicine, Korea)	
EHA-KSH-03	Pathogenesis and Management of Chronic Myelomonocytic Leukemias Raphael Itzykson (Department of Hematology, Paris Diderot University, France)	
EHA-KSH-04	Hypomethylating Therapy in Stem Cell Transplantation for MDS Yoo-Jin Kim (Department of Hematology, College of Medicine, The Catholic University of Korea, Korea)	
15:40-17:00	<b>[SP01] Updates on Cellular Therapies</b> (Eng.)	Vista 3
Chairs	Ulrike Koehl (University Hospital Leipzig and Hannover Medical School, Germany) Tai-Gyu Kim (College of Medicine, The Catholic University of Korea, Korea)	
SP01-1	CAR T Treatment for ALL Jae Park (Memorial Sloan-Kettering Cancer Center and Weill Cornell Medical College, USA)	
SP01-2	CAR Expressing Effector Cells in Stem Cell Transplantation Ulrike Koehl (University Hospital Leipzig and Hannover Medical School, Germany)	
SP01-3	Ex Vivo T cell-depleted Haploidentical Hematopoietic Cell Transplantation and Cellular Therapy Post-transplantation Ho Joon Im (Department of Pediatrics, University of Ulsan College of Medicine, Korea)	
17:00-17:10	Coffee Break	Lobby



## DAILY PROGRAM March 29 (Thursday)

- 17:10-18:10 **Oral Presentation 07 (Eng)** Vista 1
- Chairs Jong Ho Won (Soon Chun Hyang University College of Medicine, Korea)  
Joo Seop Chung (Pusan National University College of Medicine, Korea)
- OP07-1 The Clinical Outcomes of Lenalidomide and Dexamethasone in Patients with Relapsed Multiple Myeloma  
Ho Sup Lee (Department of Internal Medicine, Kosin University College of Medicine, Korea)
- OP07-2 Prognostic Significance of Clonal Evolution by Bone Marrow Cytogenetic Analysis in Multiple Myeloma  
Chang Ahn Seol (Department of Laboratory Medicine, University of Ulsan College of Medicine and Asan Medical Center, Korea)
- OP07-3 3-Methyladenine Potentiates Apoptosis of Myeloma Cells via Mitochondrial Reactive Oxygen Species  
Yeung-Chul Mun (Department of Hematology, Ewha Womans University, Korea)
- OP07-4 The Safety and Efficacy of Pomalidomide in Combination with Cyclophosphamide and Dexamethasone (PCD)  
Ho Sup Lee (Department of Internal Medicine, Kosin University College of Medicine, Korea)
- 17:10-18:10 **Oral Presentation 08 (Eng)** Vista 2
- Chairs Seong Kyu Park (Soon Chun Hyang University College of Medicine, Korea)  
Yoo-Jin Kim (College of Medicine, The Catholic University of Korea, Korea)
- OP08-1 Targeted NGS Identifies a Novel Nonsense Mutation in SPTB for Hereditary Spherocytosis  
Joon Hong Park (Department of Laboratory Medicine, College of Medicine, The Catholic University of Korea, Korea)
- OP08-2 Mitochondrial Genomic Analysis in Patients with Myelodysplastic Syndromes and Other Myeloid Malignancies  
Seon Young Kim (Department of Laboratory Medicine, Chungnam National University School of Medicine, Chungnam National University Hospital, Cancer Research Institute, Korea)
- OP08-3 Comprehensive Genomic Analyses of Core-Binding Factor AML from Serial Samples  
Taehyung Kim (Department of Computer Science, University of Toronto, The Donnelly Centre for Cellular and Biomolecular Research, Canada)

## DAILY PROGRAM March 29 (Thursday)

- OP08-4 TET2 and MicroRNA-22 in Myelodysplastic Syndrome Patients who Received Hypomethylating Agents  
Se Hyung Kim (Department of Internal Medicine, Division of Hemato-Oncology, Soonchunhyang University Bucheon Hospital, Korea)
- 17:10-18:10 **Oral Presentation 09 (Eng)** Vista 3
- Chairs June-Won Cheong (Yonsei University College of Medicine, Korea)  
Sung-Hyun Kim (Dong-A University College of Medicine, Korea)
- OP09-1 Evaluate the Effect of Imatinib in Treatment Chronic Myeloid Leukemia in Children  
Quoc Thanh Nguyen (Department of Hematology, University of Medicine and Pharmacy in Ho Chi Minh city, 2nd Pediatric, Blood Transfusion and Hematology in Ho Chi Minh city, Ha Noi Medical University, Vietnam)
- OP09-2 Evaluation of 10-Year Imatinib's Treatment Effects on Chronic Myeloid Leukemia in Chronic Phase  
Nguyen Phuong Dung Co (Department of Hematology, Pham Ngoc Thach Medical University, Ha Noi Medical University, Blood Transfusion and Hematology in Ho Chi Minh city, Vietnam)
- OP09-3 The Significance of Very Early Molecular Response with Frontline Dasatinib Treatment in CML Patients  
Won-Sik Lee (Department of Internal Medicine, Inje University Busan Paik Hospital, Korea)
- OP09-4 Deeper Molecular Response in Newly Diagnosed CML-CP Patients Receiving Radotinib: RERISE 3 Years FU  
Youngrok Do (Department of Hematology and Oncology, Department of Medicine, Dongsan Medical Center, Keimyung University, Korea)
- 18:10-18:40 **Poster Presentation 01** Exhibition Hall, B3
- 18:40-20:00 **Welcome Reception** Vista Hall Lobby, B2



## DAILY PROGRAM March 30 (Friday)

08:00-09:00	<b>Oral Presentation 10 (Eng)</b>	Vista 1
Chairs	Young-Ho Lee (Hanyang University College of Medicine, Korea) Ki-Seong Eom (College of Medicine, The Catholic University of Korea, Korea)	
OP10-1	Gene Spectrum Analysis of Thalassemia Carriers Residing in Northern China Wenzhe Zhou (Department of Hematology, Peking Union Medical Collage, Chinese Academe of Medical Science, China)	
OP10-2	Comparison of Gene Spectrum of Thalassemia in Northern, Southern China and Southeast Asia Quexuan Cui (Department of Hematology, Peking Union Medical Collage Hospital, Chinese Academe of Medical Science, China)	
OP10-3	ThalPred: A Web-Based Decision Making Tool for Discriminating Thalassemia Trait and Iron Deficiency Pornlada Nuchnoi (Department of Clinical Microscopy, Faculty of Medical Technology, Mahidol University, Thailand)	
OP10-4	Epidemiology of Hereditary Hemolytic Anemia for 10 Years (2007-2016): RBC Disorder WP Study Ye Jee Shim (Department of Pediatrics, Keimyung University School of Medicine and Dongsan Medical Center, Korea)	
08:00-09:00	<b>Oral Presentation 11 (Eng)</b>	Vista 2
Chairs	Seok-Lae Chae (College of Medicine, Dongguk University, Korea) Dae-Chul Jeong (College of Medicine, The Catholic University of Korea, Korea)	
OP11-1	Nutritional Iron Deficiency Anemia: Magnitude and Its Predictors among School Age Children, Southwest, Ethiopia Amare Desalegn Wolide (Department of Biomedical Sciences, Jimma University, Ethiopia)	
OP11-2	Prevalence of Inherited Hemoglobin Disorders and Relationships with Anemia and Micronutrient Status Yannick Oyono (Department of Medical Laboratory Sciences, University of Buea, Centre Pasteur, Cameroon)	
OP11-3	Impact of Thrombocytopenia on In-Hospital Outcome in Patients with Acute STEMI Ru Liu (Department of Cardiology, Fuwai Hospital, National Center for Cardiovascular Diseases, China)	

## DAILY PROGRAM March 30 (Friday)

OP11-4	Important Factors to Increase the Survival in Hemophilia Patient with Life-Threatening Hemorrhage Kun Soo Lee (Department of Pediatrics, Kyungpook National University School of Medicine, Korea)	
08:00-09:00	<b>Oral Presentation 12 (Kor)</b>	Vista 3
Chairs	Ho Jin Shin (Pusan National University College of Medicine, Korea) Seonyang Park (Inje University College of Medicine, Korea)	
OP12-1	Comparison of Outcomes between Unrelated Donor and Haploidentical Transplantation in Aplastic Anemia Sung Soo Park (Department of Hematology, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea)	
OP12-2	Role of FDG PET for Evaluation of Bone Marrow Status and Prognosis Prediction in T-Cell Lymphomas Go-Un Woo (Department of Internal Medicine, Seoul National University Hospital, Korea)	
OP12-3	Nutritional Status and Cardiovascular Risk Factors Affect Survival of DLBCL Ji Hyun Lee (Department of Internal Medicine, Dong-A University College of Medicine, Korea)	
OP12-4	Experience of Levetiracetam for Prevention of Busulfan-Induced Seizures in Adult HSCT Patients Soo-Jeong Kim (Department of Internal Medicine, Yonsei University College of Medicine, Korea)	
OP12-5	Clinical Factors to Predict the Engraftment in Low CD34 Count Autologous Stem Cell Transplantation Sang-A Kim (Department of Internal Medicine, Seoul National University Hospital, Korea)	
OP12-6	Efficacy and Safety of Bendamustine Plus Rituximab as Early Salvage Treatment in Relapsed/Refractory NHL Young-Woo Jeon (Department of Hematology, Catholic Blood and Marrow Transplantation Center, Seoul St. Mary's Hospital, Korea)	
09:00-10:20	<b>[SS03] Recent Advances in Acute Promyelocytic Leukemia (Eng)</b>	Vista 1
Chairs	Hee-Je Kim (College of Medicine, The Catholic University of Korea, Korea) Lionel Ades (Hôpital Saint-Louis, Paris Diderot University, France)	



## DAILY PROGRAM March 30 (Friday)

SS03-1	JALSG Prospective Study for APL Akihiro Takeshita (Department of Transfusion and Cell Therapy, Hamamatsu University School of Medicine, Japan)
SS03-2	Therapy of APL Lionel Ades (Hematology, Hôpital Saint-Louis, Paris Diderot University, France)
SS03-3	Strategies to Define High-risk Patients in APL Byung-Sik Cho (Department of Hematology, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea)
09:00-10:20	<b>[SS04] Recent Advances in Natural Killer T-cell Lymphoma</b> (Eng.) <span style="color: blue;">Vista 2</span>
Chairs	Seok-Goo Cho (College of Medicine, The Catholic University of Korea, Korea) Wee Joo Chng (National University Cancer Institute, Singapore)
SS04-1	Molecular Pathogenesis of NKTL Wee Joo Chng (National University Cancer Institute, Singapore)
SS04-2	Recent Advances in NK/T-Cell Lymphoma Yok Lam Kwong (Department of Medicine, University of Hong Kong, Hong Kong)
SS04-3	Beyond Current Standard Care of ENKTL Won Seog Kim (Division of Hematology-Oncology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea)
09:00-10:00	<b>Oral Presentation 13</b> (Eng.) <span style="color: blue;">Vista 3</span>
Chairs	Myungshin Kim (College of Medicine, The Catholic University of Korea, Korea) Jin Yeong Han (Dong-A University College of Medicine, Korea)
OP13-1	Quality of Life in Patients with Type I Gaucher Disease after Long Term Enzyme Replacement Therapy Hongmin Li (Department of Hematology, Peking Union Medical College Hospital, China)
OP13-2	Hematological Finding and Clinical Profile in Pulmonary Tuberculosis among HIV Patients Petrus Kanisius Yogi Hariyanto (Department of Medicine, Faculty of Medicine, Udayana University, Indonesia)

## DAILY PROGRAM March 30 (Friday)

OP13-3	Cefepime Versus Cefepime Plus Amikacin For Febrile Neutropenia In Pediatric Cancer Patients Na Hee Lee (Department of Pediatrics, Cha Bundang Medical Center, Cha University, Korea)
OP13-4	Detection of Bacteremia MRSA Using a Novel Isothermal Amplification with SPR Biosensor Methodology Zhenbo Xu (Department of Microbial Pathogenesis, School of Food Sciences and Engineering, South China University of Technology, Guangdong Province Key Laboratory for Green Processing of Natural Products and Product Safety, School of Dentistry, University of Maryland, China)
10:20-10:30	Coffee Break <span style="float: right; color: blue;">Lobby</span>
10:30-11:50	<b>[PL02] Targeting Leukemic Stem Cells</b> (Eng.) <span style="float: right; color: blue;">Vista 1-3</span>
Chairs	Hyeoung-Joon Kim (Chonnam National University Medical School, Korea) Dong-Wook Kim (College of Medicine, The Catholic University of Korea, Korea)
PL02-1	Human Myeloid Leukemia Stem Cells Koichi Akashi (Department of Medicine and Biosystemic Science, Graduate School of Medical Science, Kyushu University, Japan)
PL02-2	Pre-Cancerous Stem Cells in MDS and AML: Significance, Mechanisms, and Therapeutic Targeting Ulrich Steidl (Department of Cell Biology, and Department of Medicine, Albert Einstein College of Medicine, USA)
11:50-12:00	Break <span style="float: right; color: blue;">Lobby</span>
12:00-13:00	<b>Luncheon Satellite Symposium 4</b> (Eng.) <b>AMGEN</b> ® <span style="float: right; color: blue;">Vista 1</span>
Chair	Chang-Ki Min (College of Medicine, The Catholic University of Korea, Korea)
	Treatment of Multiple Myeloma in Relapse Keith Stewart (Mayo Clinic, USA)



## DAILY PROGRAM March 30 (Friday)

12:00-13:00 **Luncheon Satellite Symposium 5** (Eng.)  **Bristol-Myers Squibb** Vista 2

Chair Dong-Wook Kim (College of Medicine, The Catholic University of Korea, Korea)

Emerging Trends in CML Management

Elias Jabbour (Leukemia Department, MD Anderson Cancer Center, USA)

12:00-13:00 **Luncheon Satellite Symposium 6** (Eng.)  **HAN/DOK** Vista 3

Chair Jong Wook Lee (College of Medicine, The Catholic University of Korea, Korea)

HSCT Early Complications: Focus on Severe Hepatic Veno-occlusive Disease;  
- The Revised EBMT Diagnostic and Severity Criteria for Adults and an Update on Defibrotide

Mohamad Mohty (Clinical Hematology and Cellular Therapy Dpt., Sorbonne University, Hôpital Saint-Antoine, France)

13:00-14:20 **[SS05] Cell Death Mechanism** (Eng.) Vista 1

Chairs Myung-Geun Shin (Chonnam National University Medical School, Korea)  
Yong Goo Kim (College of Medicine, The Catholic University of Korea, Korea)

SS05-1 Apoptotic Cell Death

Soo Youl Kim (Cancer Microenvironment Branch, Division of Cancer Biology, National Cancer Center, Korea)

SS05-2 CHIP Controls Necroptosis through Ubiquitylation- and Lysosome-Dependent Degradation of RIPK3

Jaewhan Song (Department of Biochemistry, Yonsei University, Korea)

SS05-3 Functional Isolation of New Modulators in Apoptosis and Necroptosis  
Yong-Keun Jung (School of Biological Science, Seoul National University, Korea)

13:00-14:20 **[SS06] Bone Marrow Failure Syndrome** (Eng.) Vista 2

Chairs Ki Woong Sung (Sungkyunkwan University School of Medicine, Korea)  
Danielle Townsley (Clinical Development – Oncology, Medimmune LLC, USA)

SS06-1 Non-Transplant Therapy for Bone Marrow Failure

Danielle Townsley (Clinical Development – Oncology, Medimmune LLC, USA)

## DAILY PROGRAM March 30 (Friday)

SS06-2 Role of Microenvironment and Genetics in BM Failure  
Myungshin Kim (Department of Laboratory Medicine, College of Medicine, The Catholic University of Korea, Korea)

SS06-3 Inherited BM Failure Syndrome  
Hoon Kook (Department of Pediatrics, Chonnam National University Medical School, Korea)

13:00-14:20 **[SS07] (KOGO-KSH Joint) Cancer Genomics** (Eng.) Vista 3

Chairs Sung-Soo Yoon (Seoul National University College of Medicine, Korea)  
Hyoung-Pyo Kim (Yonsei University College of Medicine, Korea)

SS07-1 Variability in Chromatin Architecture and Associated DNA Repair at Genomic Positions Containing Somatic Mutations  
Seon-Young Kim (Gene Editing Research Center, Korea Research Institute of Bioscience & Biotechnology (KRIBB), Korea)

SS07-2 Deciphering the Cell-of-Origin Harboring Driver Mutations in Brain Tumors  
Jeong-Ho Lee (Graduate School of Medical Science and Engineering, Korea Advanced Institute of Science and Technology (KAIST), Korea)

SS07-3 Contribution of Germline Variants in Pan-Cancer Development  
Youngil Koh (Hematology & Medical Oncology, Department of Internal Medicine, Seoul National University College of Medicine, Korea)

SS07-4 Developing a Genetic Data based Prognostic Model for Hematologic Cancer  
SeungHyun Jung (Cancer Evolution Research Center, College of Medicine, The Catholic University of Korea, Korea)

14:20-14:40 Coffee Break Lobby

14:40-15:40 **[Asian Hematology Network: JSH-KSH Joint Symposium]**  
**Explore Deep Inside the Asian Hematology Network** (Eng.) Vista 1-2

Chairs Seishi Ogawa (Graduate School of Medicine, Kyoto University, Japan)  
Hwi-Joong Yoon (Kyung Hee University College of Medicine, Korea)

JSH-KSH-01 AML Prognosis based on Clinical and Genomic Data  
Hyeoung-Joon Kim (Department of Internal Medicine, Chonnam National University Medical School, Korea)



## DAILY PROGRAM March 30 (Friday)

JSH-KSH-02	A Novel Mechanism of Cancer Immune Evasion Via the Disruption of PD-L1 3'-UTR Seishi Ogawa (Department of Pathology and Tumor Biology, Graduate School of Medicine, Kyoto University, Japan)	
14:40-15:40	<b>Satellite Symposium 7 (Eng.)</b>  Vista 3	
Chair	Won Seog Kim (Sungkyunkwan University School of Medicine, Korea)	
	Advancing Value-Based Approaches in the Treatment of Non-Hodgkin Lymphoma (NHL): Contemporary Strategies and Innovations Hyeon-seok Eom (National Cancer Center, Korea)	
15:40-17:00	<b>[EHA-KSH Joint Symposium 02]</b> Vista 1-2 <b>Aplastic Anemia/Paroxysmal Nocturnal Hemoglobinuria (Eng.)</b>	
Chairs	Hoon Kook (Chonnam National University Medical School, Korea) Anita Hill (St. James' University Hospital, UK)	
EHA-KSH 02-01	Diagnosis and Management of AA and Refractory Cytopenia of Childhood Ayami Yoshimi (Department of Paediatrics and Adolescent Medicine, University Children's Hospital, Freiburg, Germany)	
EHA-KSH 02-02	Frontline Alternative Donor SCT versus Immunosuppressive Treatment for Children with Severe AA who Lack Matched Related Donor Hyoung Jin Kang (Department of Pediatrics, Seoul National University College of Medicine, Korea)	
EHA-KSH 02-03	An Update on the Management of PNH Anita Hill (St. James' University Hospital, UK)	
EHA-KSH 02-04	Clinical Implications of Renal Dysfunction in Patients with PNH Jin Seok Kim (Department of Internal Medicine, Yonsei University College of Medicine, Korea)	
15:40-17:00	<b>[SP02] Multiple Myeloma Niche (Eng.)</b> Vista 3	
Chairs	Robert Orlowski (The University of Texas MD Anderson Cancer Center (MDACC), USA) Je-Jung Lee (Chonnam National University Medical School, Korea)	
SP02-1	Clinical Implications of MRD in Multiple Myeloma Wee Joo Chng (National University Cancer Institute, Singapore)	

## DAILY PROGRAM March 30 (Friday)

SP02-2	The Ubiquitin-Proteasome Pathway : Friend and Foe in Multiple Myeloma Robert Orlowski (Department of Lymphoma/Myeloma, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, USA)	
SP02-3	Cellular Immunotherapy in Multiple Myeloma Je-Jung Lee (Department of Hematology-Oncology, Chonnam National University Medical School, Korea)	
17:00-17:10	Break	Lobby
17:10-17:50	<b>Best Abstract Presentation (Eng.)</b> Vista 1-2	
Chairs	Hwi-Joong Yoon (Kyung Hee University College of Medicine, Korea)	
BP-01	RAG1 High Expression Associated with IKZF1 Dysfunction in B-cell Acute Lymphoblastic Leukemia Zheng Ge (Zhongda Hospital, Medical School of Southeast University, China)	
BP-02	Decision Supporting Tool for Thrombotic Microangiopathy Based on Machine Learning Technique Youngil Koh ((Hematology & Medical Oncology, Department of Internal Medicine, Seoul National University College of Medicine, Korea))	
BP-03	Aberrant ARID5B Expression and IKAROS Regulation in ALL Chunhua Song (Pennsylvania State University Medical College, USA)	
17:10-17:50	<b>Satellite Symposium 8 (Eng.)</b>  Vista 3	
Chair	Jae Hoon Lee (Gachon University College of Medicine, Korea)	
	Novel Treatment Strategies for Multiple Myeloma: A Focus on Oral Proteasome Inhibitors Antonio Palumbo (Distinguished Research Fellow Oncology, Takeda Pharmaceuticals International AG, Italy)	
17:50-18:20	<b>Poster Presentation 02</b>	Exhibition Hall, B3
18:20-20:00	<b>Gala Dinner</b>	Walkerhill Theatre B1





## DAILY PROGRAM March 31 (Saturday)

- 08:30-09:30 **Oral Presentation 14 (Eng)** Vista 1
- Chairs Deog Yeon Jo (Chungnam National University College of Medicine, Korea)  
Chuhl Joo Lyu (Yonsei University College of Medicine, Korea)
- OP14-1 Comparative Study of Porcine ALG and Rabbit ATG as a First-Line Treatment of Severe Aplastic Anemia  
Miao Chen (Department of Hematology, Peking Union Medical College Hospital, China)
- OP14-2 PIGA Mutations as a Predictors of Treatment Response in PNH  
Dajeong Jeong (Department of Laboratory Medicine, Seoul National University College of Medicine, Korea)
- OP14-3 Prognostic Implications of Renal Dysfunction in Korean Patients with PNH  
Jin Seok Kim (Department of Internal Medicine, Division of Hematology, Severance Hospital, Yonsei University College of Medicine, Korea)
- OP14-4 Dynamics of PNH Clone in Adult Patients with PNH/aplastic Anemia Following Immunosuppressive Therapy  
Sung-Soo Park (Catholic Blood and Marrow Transplantation Center, Catholic Blood and Marrow Transplantation Center, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea)
- 08:30-09:30 **Oral Presentation 15 (Eng)** Vista 2
- Chairs Hong Ghi Lee (Konkuk University School of Medicine, Korea)  
Deok Hwan Yang (Chonnam National University Medical School, Korea)
- OP15-1 Analysis of Genetic Variants Related to the Hepatic Venous Occlusive Disease in Pediatric Patients Receiving HSCT with Targeted Dose Busulfan Based Conditioning  
Jung Yoon Choi (Department of Pediatrics, Cancer Research Institute, Seoul National University College of Medicine, Korea)
- OP15-2 Enhanced Immunosuppressive Properties of Human Mesenchymal Stem Cells Primed by Inflammatory Stimuli  
Dae Seong Kim (Department of Pediatrics, Stem Cell and Regenerative Medicine Institute for Future Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea)
- OP15-3 Ruxolitinib Treatment for Steroid-Refractory Graft-Versus-Host Disease  
Han-Seung Park (Department of Hematology, Asan Medical Center, University of Ulsan College of Medicine, Korea)

## DAILY PROGRAM March 31 (Saturday)

- OP15-4 Change of Gut Bacterial Diversity by Antibiotics Correlates with the Occurrence of Intestinal GVHD  
Chang-Ki Min (Department of Hematology, Seoul St. Mary's Hospital, The Catholic University of Korea, College of Medicine, Korea)
- 08:30-09:30 **Oral Presentation 16 (Kor)** Vista 3
- Chairs Hyeon Jin Park (National Cancer Center, Korea)  
Seongsoo Jang (University of Ulsan College of Medicine, Korea)
- OP16-1 Mean Platelet Volume and Platelet Distribution Width Reflect the Pathophysiology of ITP and ET  
Eunyup Lee (Department of Laboratory Medicine, Hallym University Sacred Heart Hospital, Korea)
- OP16-2 Clinical Features and Outcomes of Borderline Thrombocytopenia: A Single Center Experience  
Ik Chan Song (Department of Internal Medicine, College of Medicine, Chungnam National University, Korea)
- OP16-3 Genetic Confirmation of Platelet Function Disorders by Diagnostic Exome Sequencing (K-PHOG Study)  
Ye Jee Shim (Department of Pediatrics, Keimyung University School of Medicine and Dongsan Medical Center, Korea)
- OP16-4 Hot-Line to Increase the Survival in Hemophilia Patient with Life-Threatening Hemorrhage  
Kun Soo Lee (Department of Pediatrics, Kyungpook National University School of Medicine, Korea)
- OP16-5 Effect of Peramivir on Platelet Counts in Patients with Suspected or Confirmed Influenza Infection  
Young-Gon Kim (Department of Laboratory Medicine, Korea University Medical Center, Korea)
- OP16-6 Immature Platelet Fraction as a Predictor of Bone Marrow Cellularity in Thrombocytopenic Patients  
Ha Jin Lim (Department of Laboratory Medicine, Chonnam National University Medical School and Chonnam National University Hwasun Hospital, Korea)
- 09:30-10:50 **[SS08] Current Progress in Pediatric Acute Leukemia (Eng)** Vista 1
- Chairs Stephen Hunger (Children's Hospital of Philadelphia, USA)  
Ho Joon Im (University of Ulsan College of Medicine, Korea)



## DAILY PROGRAM March 31 (Saturday)

SS08-01	New Developments in the Treatment of Newly Diagnosed and Relapsed ALL Stephen Hunger (Division of Pediatric Oncology, Center for Childhood Cancer Research, Children's Hospital of Philadelphia, USA)	
SS08-02	Therapy Optimization in Infant ALL Daisuke Tomizawa (Division of Leukemia and Lymphoma, Children's Cancer Center, National Center for Child Health and Development, Japan)	
SS08-03	Genomic Landscape and Therapy Optimization of Pediatric Mixed Phenotype Acute Leukemia Hiroto Inaba (Leukemia/Lymphoma Division, Department of Oncology, St. Jude Children's Research Hospital, USA)	
09:30-10:50	<b>[SS09] Detection of Minimal Residual Disease in Hematologic Malignancy (Eng)</b>	Vista 2
Chairs	Hee Young Shin (Seoul National University College of Medicine, Korea) Alberto Orfao (University of Salamanca (USAL), Spain)	
SS09-01	MRD Detection in Acute Leukemia, CLL and Multiple Myeloma Alberto Orfao (University of Salamanca (USAL), Spain)	
SS09-02	NGS-based Assessment of Clonality & MRD Determination in ALL In-Suk Kim (Department of Laboratory Medicine, Pusan National University School of Medicine, Korea)	
SS09-03	[Selected Short Talk I] Development and Preliminary Evaluation of Customized Pan-Blood Cancer NGS Panel Jun Hyung Lee (Department of Laboratory Medicine, Chonnam National University Medical School, Chonnam National University Hwasun Hospital, Korea)	
SS09-04	[Selected Short Talk II] Evaluation of Two Commercial Kits for Flow Cytometric MRD Detection in B-ALL Ari Ahn (Department of Laboratory Medicine, University of Ulsan College of Medicine and Asan Medical Center, Korea)	
09:30-10:30	<b>Oral Presentation 17 (Eng)</b>	Vista 3
Chairs	Sang Kyun Sohn (Kyungpook National University School of Medicine, Korea) Nak Gyun Chung (College of Medicine, The Catholic University of Korea, Korea)	

## DAILY PROGRAM March 31 (Saturday)

OP17-1	Expression of Inhibitory Receptors on T cells and Inhibitory Ligands on Leukemic Blasts in Childhood acute Leukemia Kyung-Nam Koh (Department of Pediatrics, Division of Pediatric Hematology and Oncology, Asan Medical Center Children's Hospital, University of Ulsan College of Medicine, Korea)	
OP17-2	Reversal of Cytarabine Resistance in AML-OCI2 Cell Line after Na/H Exchanger 1 Modulation June-Won Cheong (Department of Internal Medicine, Division of Hematology, Yonsei University College of Medicine, Korea)	
OP17-3	The Role of Myeloid-Derived Suppressor Cell-Like Blasts in Acute Myeloid Leukemia Shin Young Hyun (Department of Internal Medicine, Division of Hematology and Oncology, Yonsei University Wonju College of Medicine, Korea)	
OP17-4	The Clinical Implication of Cytogenetic Clonal Evolution Pattern in Relapsed Adult ALL Patients Ji Hyun Lee (Department of Internal Medicine, Dong-A University College of Medicine, Korea)	
10:50-11:10	Coffee Break	Lobby
11:10-12:30	<b>[PL03] Development of Precision Medicine Trials (Eng)</b>	Vista 1-3
Chairs	Hong Hoe Koo (Sungkyunkwan University School of Medicine, Korea) Kyoo Hyung Lee (University of Ulsan College of Medicine, Korea)	
PL03-01	Development of Precision Medicine Trials for ALL Stephen Hunger (Division of Pediatric Oncology, Center for Childhood Cancer Research, Children's Hospital of Philadelphia, USA)	
PL03-02	Progress in Therapy of Philadelphia Positive ALL Farhad Ravandi (Department of Leukemia, University of Texas - MD Anderson Cancer Center, USA)	
12:30-13:00	<b>Working Party Reports</b>	Vista 1-3
13:00-13:30	<b>Award Ceremony &amp; Closing Meeting</b>	Vista 1-3





## POSTER PRESENTATIONS

### PP-01 ~ PP-22 : Poster Presentation 01

March 29 (Thursday) 18:10-18:40

- PP-01** Statin Promotes Apoptosis by Activating JNK Signaling in FLT3-ITD Acute Myeloid Leukemia Cells  
Ji Eun Jang<sup>1</sup>, So-Young Seol<sup>2</sup>, Dohyu Hwang<sup>3</sup>, Ju-In Eom<sup>2</sup>, Hoi-Kyung Jeung<sup>2</sup>, Soo-Jeong Kim<sup>1</sup>, Jin Seok Kim<sup>1</sup>, June-Won Cheong<sup>1</sup>, Yoo Hong Min<sup>\*1</sup>  
<sup>1</sup> Department of Internal Medicine, Yonsei University College of Medicine, Korea  
<sup>2</sup> Avison Biomedical Research Center, Yonsei University College of Medicine, Korea  
<sup>3</sup> Department of Internal medicine, Catholic Kwndong University, Korea
- PP-02** The Synergistic Effect of DMNT Inhibitors and Nutlin-3 on Apoptosis of TP53 Wild Type AML in Vitro  
Ji Eun Jang<sup>1</sup>, Ju-In Eom<sup>2</sup>, Hoi-Kyung Jeung<sup>2</sup>, Haerim Chung<sup>1</sup>, So-Young Seol<sup>2</sup>, Soo-Jeong Kim<sup>1</sup>, Jin Seok Kim<sup>1</sup>, June-Won Cheong<sup>1</sup>, Yoo Hong Min<sup>\*1</sup>  
<sup>1</sup> Department of Internal Medicine, Yonsei University College of Medicine, Korea  
<sup>2</sup> Avison Biomedical Research Center, Yonsei University College of Medicine, Korea
- PP-03** Calcium Blocker-Induced Interference Effects on Steroid Resistance in Acute Lymphoblastic Leukemia  
Hyun Joo Jung<sup>1</sup>, Eunhee Han<sup>2</sup>, Jun Eun Park<sup>\*3</sup>  
<sup>1</sup> Department of Pediatrics, Ajou University Hospital, Ajou University School of Medicine, Korea  
<sup>2</sup> Department of Pediatrics, Ajou University School of Medicine, Korea  
<sup>3</sup> Department of Pediatrics, Ajou University Hospital, Ajou University School of Medicine, Korea
- PP-04** Role of High-Dose Cytarabine as Consolidation Therapy before Allogeneic HCT for AML without CBF  
Yoojin Lee<sup>1</sup>, Sangkyun Sohn<sup>\*1</sup>, Joonho Moon<sup>1</sup>, Dongwon Back<sup>1</sup>, Hyeoung-Joon Kim<sup>2</sup>, Jae-Sook Ahn<sup>2</sup>, Seo-Yeon Ahn<sup>2</sup>, Sung-Hoon Jung<sup>2</sup>  
<sup>1</sup> Hematology, Kyungpook National University Hospital, Korea  
<sup>2</sup> Hematology, Chonnam National University Hwasun Hospital, Korea
- PP-05** The Efficacy of Daily ATRA Monotherapy as Maintenance Therapy for Newly Diagnosed APL  
Yoojin Lee, Sangkyun Sohn, Joonho Moon, Dongwon Back  
Hematology, Kyungpook National University Hospital, Korea
- PP-06** MiR-424/-503 Regulates Expression of Cobll1 in Chronic Myeloid Leukemia  
Seung Hun Han<sup>1</sup>, Soo-Hyun Kim<sup>2</sup>, Hyoung-June Kim<sup>1</sup>, Yoonsung Lee<sup>3</sup>, Soo-Young Choi<sup>2</sup>, Do-Hyun Kim<sup>4</sup>, Aram Lee<sup>5</sup>, Kibeom Park<sup>1</sup>, Jongmin Kim<sup>5</sup>, Je-Min Choi<sup>4</sup>, Yonghwan Kim<sup>5</sup>, Kyungjae Myung<sup>3</sup>, Hongtae Kim<sup>1</sup>, Dong-Wook Kim<sup>\*2,6</sup>  
<sup>1</sup> Department of Biological Sciences, Sungkyunkwan University, Korea  
<sup>2</sup> Leukemia Research Institute, The Catholic University of Korea, Korea



## POSTER PRESENTATIONS

- <sup>3</sup> Center for Genomic Integrity Institute for Basic Science (IBS), Ulsan National Institute of Science and Technology, Korea  
<sup>4</sup> Department of Life Science, Hanyang University, Korea  
<sup>5</sup> Department of Life Systems, Sookmyung Women's University, Korea  
<sup>6</sup> Department of Hematology, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea
- PP-07** Comparison of Treatment Strategies in CML Patients with Suboptimal Molecular Response to Imatinib  
Sung-Eun Lee<sup>1,9</sup>, Soo-Young Choi<sup>1</sup>, Soo-Hyun Kim<sup>1</sup>, Saengsuree Jootar<sup>2</sup>, Hyeoung-Joon Kim<sup>3</sup>, Sang-Kyun Sohn<sup>4</sup>, Joon Seong Park<sup>5</sup>, Sung-Hyun Kim<sup>6</sup>, Dae-Young Zang<sup>7</sup>, Suk-Joong Oh<sup>8</sup>, Dong-Wook Kim<sup>\*1,9</sup>  
<sup>1</sup> Leukemia Research Institute, The Catholic University of Korea, Korea  
<sup>2</sup> BMT Program, Ramathibodi Hospital, Mahidol University, Thailand  
<sup>3</sup> Department of Hematology, Chonnam National University Medical School, Chonnam National University Hwasun Hospital, Korea  
<sup>4</sup> Department of Oncology/Hematology, Kyungpook National University Hospital, Korea  
<sup>5</sup> Department of Hematology/Oncology, Ajou University School of Medicine, Korea  
<sup>6</sup> Department of Internal Medicine, Dong-A University, College of Medicine, Korea  
<sup>7</sup> Department of Internal Medicine, Hallym University College of Medicine, Korea  
<sup>8</sup> Department of Internal Medicine, Kangbuk Samsung Hospital, Korea  
<sup>9</sup> Department of Hematology, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea
- PP-08** Compound Mutations are the Major Components of Multiple Mutations Detected in TKI Resistant CML  
Ki-Hoon Kang<sup>1</sup>, Soo-Hyun Kim<sup>1</sup>, Soo-Young Choi<sup>1</sup>, Sung-Eun Lee<sup>1,2</sup>, Hae-Lyun Yoo<sup>1</sup>, Mi-Young Lee<sup>1</sup>, Hye-Young Song<sup>1</sup>, Kyung-Mi Kee<sup>1</sup>, Ji-Hyung Suh<sup>1</sup>, Seon-Young Yang<sup>1</sup>, Eun-Jung Jang<sup>1</sup>, Dong-Wook Kim<sup>\*1,2</sup>  
<sup>1</sup> Leukemia Research Institute, The Catholic University of Korea, Korea  
<sup>2</sup> Department of Hematology, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea
- PP-09** Optimal Time Point for BCR-ABL1 KD Mutation Analysis in CML Patients; Based on 2013 ELN Guideline  
Hea-Lyun Yoo<sup>1</sup>, Soo-Hyun Kim<sup>1</sup>, Soo-Young Choi<sup>1</sup>, Mi-Young Lee<sup>1</sup>, Hye-Young Song<sup>1</sup>, Ki-Hoon Kang<sup>1</sup>, Kyoung-Mi Ki<sup>1</sup>, Sun-Young Yang<sup>1</sup>, Dong-Wook Kim<sup>\*1,2</sup>  
<sup>1</sup> Leukemia Research Institute, The Catholic University of Korea, Korea  
<sup>2</sup> Department of Hematology, The Catholic University of Korea Seoul St. Mary's Hospital, Korea
- PP-10** The Impact of Early Molecular Response on Long-Term Survival in CML Patients following TKIs Therapy  
Sung-Eun Lee<sup>1,2</sup>, Soo-Young Choi<sup>2</sup>, Soo-Hyun Kim<sup>2</sup>, Hye-Young Song<sup>2</sup>, Kyung-Mi Kee<sup>2</sup>, Hea-Lyun Yoo<sup>2</sup>, Mi-Young Lee<sup>2</sup>, Ki-Hoon Kang<sup>2</sup>, Ji-Hyung Suh<sup>2</sup>, Seon-Young Yang<sup>2</sup>, Eun-Jung Jang<sup>2</sup>, Dong-Wook Kim<sup>\*1,2</sup>  
<sup>1</sup> Department of Hematology, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea  
<sup>2</sup> Leukemia Research Institute, The Catholic University of Korea, Korea



## POSTER PRESENTATIONS

- PP-11** Outcomes of CML Patients who Have Achieved CCyR but Not MMR after 24 Months on Frontline Imatinib  
Sung-Eun Lee<sup>1,9</sup>, Won-Sik Lee<sup>2</sup>, Young Rok Do<sup>3</sup>, Jae-Yong Kwak<sup>4</sup>, Sukjoong Oh<sup>5</sup>, Sung Hyun Kim<sup>6</sup>, Jeong-A Kim<sup>7</sup>, Dae Young Zang<sup>8</sup>, Soo-Young Choi<sup>9</sup>, Dong-Wook Kim<sup>8,1,9</sup>  
<sup>1</sup> Department of Hematology, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea  
<sup>2</sup> Department of Internal Medicine, Inje University College of Medicine, Inje University Busan Paik Hospital, Korea  
<sup>3</sup> Division of Hematology-Oncology, Keimyung University, School of Medicine, Keimyung University Hospital, Korea  
<sup>4</sup> Division of Hematology-Oncology, Chonbuk National University Medical School, Chonbuk National University Hospital, Korea  
<sup>5</sup> Department of Internal Medicine, School of Medicine, Sungkyunkwan University, Kangbuk Samsung Hospital, Korea  
<sup>6</sup> Department of Internal Medicine, Dong-A University College of Medicine, Dong-A University Hospital, Korea  
<sup>7</sup> Department of Hematology, The Catholic University of Korea, St. Vincent's Hospital, Korea  
<sup>8</sup> Department of Internal Medicine, Hallym University College of Medicine, Hallym University Hospital, Korea  
<sup>9</sup> Leukemia Research Institute, The Catholic University of Korea, Korea
- PP-12** Pegylated L-Asparaginase Induced Cholestatic Jaundice and Treated with Oral L- Carnitine: A Case Report  
Asma Nasir Mahmud<sup>1</sup>, Huma Asif<sup>1</sup>, Ayisha Imran<sup>1</sup>, Tasneem Farzana<sup>2</sup>  
<sup>1</sup> Department of hematology, Chughtai Lab lahore, Pakistan  
<sup>2</sup> National centre for blood diseases, National hospital and medical centre, Lahore, Pakistan
- PP-13** Molecular Docking to Identify a Novel Inhibitors for Tyrosine Kinase in CML from Alkaloids  
Shah Md Shahik<sup>1,2</sup>  
<sup>1</sup> Genetic Engineering and Biotechnology, University of Chittagong, Bangladesh  
<sup>2</sup> Chronic Disease, Biomedical Research Foundation Bangladesh, Bangladesh
- PP-14** Erdheim–Chester Disease (ECD) is an Uncommon Aggressive, Multisystem Immunological Disease among Arab Males  
Abdalla Bowirrat, Abdalla Bowirrat  
Neuroscience and Genetic, Emms Hospital, Palestine
- PP-15** Adverse Drug Reactions to Anti-TB Drugs: Pharmacogenomics Perspective for Identification of Host Genes  
Kamal Kishor  
Analytical, Institute of Pesticide Formulation Technology, India  
Survey of Titanium Dioxide Nanoparticles Exposure during Pregnancy on Hematological Parameters
- PP-16** Survey of Titanium Dioxide Nanoparticles Exposure during Pregnancy on Hematological Parameters  
Cyrus Jalili<sup>1</sup>, Faramarz Jalili<sup>2</sup>, Mahdi Taghadosi<sup>3</sup>, Mohammad Reza Salahshoor<sup>4</sup>  
<sup>1</sup> Department of Anatomy and Cell Biology, Medical Biology Research Center, Kermanshah University of Medical Sciences, Iran  
<sup>2</sup> Students Research Committee, Students Research Committee, Kermanshah University of Medical Sciences, Iran  
<sup>3</sup> Department of Immunology, Department of Immunology, Kermanshah University of Medical Sciences, Iran  
<sup>4</sup> Department of Anatomy and Cell Biology, Medical Biology Research Center, Kermanshah University of Medical Sciences, Iran



## POSTER PRESENTATIONS

- PP-17** Apoptotic Genes Expression Changes of Mice Tissues Exposed to Nicotine  
Faramarz Jalili<sup>1</sup>, Cyrus Jalili<sup>2</sup>  
<sup>1</sup> Students Research Committee, Students Research Committee, Kermanshah University of Medical Sciences, Iran  
<sup>2</sup> Department of Anatomy and Cell Biology, Medical Biology Research Center, Kermanshah University of Medical Sciences, Iran
- PP-18** Prevalence of Glucose-6-Phosphate Dehydrogenase Deficiency among Lao Theung Ethnic Group  
Amkha Sanephonasa<sup>1,2</sup>, Kamonlak Leecharoenkiat<sup>3</sup>, Chalisa Louicharoen Cheesunthorn<sup>3</sup>, Issarang Nuchprayoon<sup>4</sup>, Naly Khaminsou<sup>2</sup>, Onkham Savongsy<sup>2</sup>  
<sup>1</sup> Department of clinical Microscopy, Faculty of Allied Health Sciences, Chulalongkorn University, Thailand  
<sup>2</sup> Department of Laboratory, Faculty of Medical Technology, University of Health Sciences, Laos  
<sup>3</sup> Department of Biochemistry, Faculty of Medicine, Chulalongkorn University, Thailand  
<sup>4</sup> Department of Pediatrics, Faculty of Medicine, Chulalongkorn University, Thailand
- PP-19** Prognostic Factors and Response to the Hypomethylating Agents in Hypocellular Myelodysplastic Syndromes: A Retrospective Study from the Korean Society of Hematology AML/MDS Working Party  
Jungmin Jo<sup>1</sup>, Sung Hwa Bae<sup>1</sup>, Jinny Park<sup>2</sup>, Hong-Ghi Lee<sup>3</sup>, Chul Won Choi<sup>4</sup>, Yong Park<sup>5</sup>, Ho Sup Lee<sup>6</sup>, Sung-Hyun Kim<sup>7</sup>, Won-Sik Lee<sup>8</sup>, Soo-Mee Bang<sup>9</sup>, Jun-Ho Jang<sup>10</sup>, Inho Kim<sup>11</sup>, Je-Hwan Lee<sup>12</sup>, June-Won Cheong<sup>13</sup>, Seongkyu Park<sup>14</sup>, Jong-Ho Won<sup>15</sup>, Min Kyoung Kim<sup>16</sup>, Hyeok Shim<sup>17</sup>, Yeung-Chul Mun<sup>18</sup>, Jae-Sook Ahn<sup>19</sup>, Deog-Yeon Jo<sup>20</sup>, Dae Young Zang<sup>21</sup>  
<sup>1</sup> Daegu Catholic Univ. Medical Center, Daegu, Korea  
<sup>2</sup> Gil Medical Center Gachon University, Incheon, Korea  
<sup>3</sup> Konkuk University School of Medicine, Seoul, Korea  
<sup>4</sup> Korea University, Guro Hospital, Seoul, Korea  
<sup>5</sup> Korea University, Anam Hospital, Seoul, Korea  
<sup>6</sup> Kosin University Gospel Hospital, Busan, Korea  
<sup>7</sup> Department of Internal Medicine, Dong-A University College of Medicine, Dong-A University Hospital, Busan, Korea  
<sup>8</sup> Inje Univ. Busan Baik-Hospital, Busan, Korea  
<sup>9</sup> Seoul national university, Bundang hospital, Seongnam-si, Gyeonggi-do, Korea  
<sup>10</sup> Division of Hematology-Oncology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea  
<sup>11</sup> Seoul national university hospital, Seoul, Korea  
<sup>12</sup> Department of Hematology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea  
<sup>13</sup> Yonsei University College of Medicine, Severance Hospital, Seoul, Korea  
<sup>14</sup> Hematology/Oncology, Soan Chunhyang University Bucheon Hospital, Bucheon, Korea  
<sup>15</sup> Soonchunhyang University Hospital, Seoul, Korea  
<sup>16</sup> Department of Internal Medicine, Yeungnam University Medical Center, Daegu, Korea  
<sup>17</sup> Wonkwang University Hospital, Iksan, Korea  
<sup>18</sup> Department of Internal Medicine, EwhaWomans University School of Medicine, Seoul, Korea  
<sup>19</sup> Department of Hematology-Oncology, Chonnam National University Hwasun Hospital, Hwasun-Gun, Korea  
<sup>20</sup> Department of Internal Medicine, Chungnam National University College of Medicine, Daejeon, Korea  
<sup>21</sup> Department of Internal Medicine, Hallym University College of Medicine, Hallym University Hospital, Anyang, Korea, Korean Society of Hematology AML/MDS Working Party



## POSTER PRESENTATIONS

- PP-20** Increased Proportion of Th17/Treg T Cells for Early Prediction of Chronic Immune Thrombocytopenia in Children  
Hao Gu, Zhenping Chen, Jingyao Ma, Lingling Fu, Jie Ma, Runhui Wu\*  
*Beijing Children Hospital, Capital Medical University, China*
- PP-21** Torque Teno Virus/Torque Teno-Like Minivirus in Kikuchi-Fujimoto Disease  
Yosep Chong<sup>1</sup>, Seung Bum Hong<sup>2</sup>, Ji Young Lee<sup>1</sup>, Eun Jung Lee\*<sup>1</sup>  
<sup>1</sup> *Department of Hospital Pathology, College of Medicine, The Catholic University of Korea, Korea*  
<sup>2</sup> *Department of Genetic Analysis, Criminal Investigation Command, Ministry of National Defense, Korea*
- PP-22** Genotype-Phenotype Study on Familial Hh in Korea: A Study from Korea Histiocytosis Working Party  
Hyery Kim<sup>1</sup>, Kyung Nam Koh<sup>1</sup>, Ho Joon Im<sup>1</sup>, Hyung Jin Kang<sup>2</sup>, Hee Young Shin<sup>2</sup>, Jae Wook Lee<sup>3</sup>, Nak Gyun Chung<sup>3</sup>, Bin Cho<sup>3</sup>, Ji Won Lee<sup>4</sup>, Kun Hee Yoo<sup>4</sup>, Ki Woong Sung<sup>4</sup>, Hong Hoe Koo<sup>4</sup>, Hee Jo Baek<sup>5</sup>, Hoon Kook<sup>5</sup>, Kyung Mi Park<sup>6</sup>, Eu Jeon Yang<sup>6</sup>, Young Tak Lim<sup>6</sup>, Eun Sun Yoo<sup>7</sup>, Kyung-Ha Ryu<sup>7</sup>, Jong Jin Seo\*<sup>1,7</sup>  
<sup>1</sup> *Pediatrics, University of Ulsan College of Medicine, Asan Medical Center, Korea*  
<sup>2</sup> *Pediatrics, Seoul National University College of Medicine, Asan Medical Center, Korea*  
<sup>3</sup> *Pediatrics, The Catholic University of Korea College of Medicine, Korea*  
<sup>4</sup> *Pediatrics, Sungkyunkwan University School of Medicine, Korea*  
<sup>5</sup> *Pediatrics, Chonnam National University Hwasun Hospital, Korea*  
<sup>6</sup> *Pediatrics, Pusan National University College of Medicine, Korea*  
<sup>7</sup> *Pediatrics, Ewha Womans University College of Medicine, Korea*  
<sup>8</sup> *Pediatrics, Yonsei University College of Medicine, Korea*  
<sup>9</sup> *Pediatrics, Ajou University School of Medicine, Korea*  
<sup>10</sup> *Pediatrics, Yeungnam University College of Medicine, Korea*

### PP-23 ~ PP-46 : Poster Presentation 02

March 30 (Friday) 17:50-18:20

- PP-23** Prevalence of Anemia among Chronic Kidney Disease Patients in India: Evidence from a Meta-Analysis  
Md Salman Hussain<sup>1</sup>, Abul Kalam Najmi<sup>2</sup>  
<sup>1</sup> *Department of Pharmaceutical Medicine, Jamia Hamdard (Hamdard University), India*  
<sup>2</sup> *Department of Pharmacology, Jamia Hamdard (Hamdard University), India*
- PP-24** Cell Bead: Affordable Counting Bead by Flow Cytometry  
Duangdao Palasuwan, Attakorn Palasuwan  
*Clinical Microscopy, Faculty of Allied Health Sciences, Department of Clinical Microscopy, Chulalongkorn University, Thailand*



## POSTER PRESENTATIONS

- PP-25** Red Blood Cell Deformability in Patients with Hematologic Neoplasms  
Yu Kyung Kim<sup>1</sup>, Jae Min Lee<sup>2</sup>, Ji Yeon Ham<sup>1</sup>, Jang Soo Suh\*<sup>1</sup>  
<sup>1</sup> *Clinical Pathology, Kyungpook National University School of Medicine, Korea*  
<sup>2</sup> *Pediatrics, College of Medicine, Yeungnam University, Korea*
- PP-26** Bone Marrow and Laboratory Findings in Light Chain Amyloidosis in a Single Center Study  
Taegeun Lee, Min Young Lee, Eunkyong You, Young-Uk Cho, Seongsoo Jang, Chan-Jeoung Park\*  
*Department of Laboratory Medicine, University of Ulsan College of Medicine and Asan Medical Center, Korea*
- PP-27** Synergistic Effect but Acquisition of Resistance for Danusertib and BKM120 in BL Cell Lines  
Jun Liu<sup>1</sup>, Junshik Hong\*<sup>1,2</sup>, Kwang-Sung Ahn<sup>3</sup>, Sung-Soo Yoon<sup>1,2</sup>  
<sup>1</sup> *Cancer Research Institute, Seoul National University College of Medicine, Korea*  
<sup>2</sup> *Department of Internal Medicine, Seoul National University Hospital Seoul National University College of Medicine, Korea*  
<sup>3</sup> *PDxEn Biosystems Co., Korea*
- PP-28** Development and Validation of Mobile Application of Machine Learning Expert Supporting System "ImmunoGenius" for Diagnosis Presumption of Lymphoid Neoplasms Using 1000 Immunohistochemistry Dataset  
Yosep Chong, Gyeongsin Park\*, Ji Young Lee, Myungjin Choi, Eun Jung Lee  
*Department of Hospital Pathology, College of Medicine, The Catholic University of Korea, Korea*
- PP-29** Seasonal Variation in PE but Not DVT Incidence: A Korean Nationwide Epidemiology Study  
Junshik Hong<sup>1</sup>, Ju Hyun Lee<sup>2</sup>, Ji Yun Lee<sup>2</sup>, Won-Il Choi<sup>3</sup>, Soyeon Ahn<sup>4</sup>, Yun Hee Lee<sup>5</sup>, Soo-Mee Bang\*<sup>2</sup>, Doyeun Oh<sup>6</sup>  
<sup>1</sup> *Department of Internal Medicine, Seoul National University College of Medicine, Seoul National University Hospital, Korea*  
<sup>2</sup> *Department of Internal Medicine, Seoul National University College of Medicine, Seoul National University Bundang Hospital, Korea*  
<sup>3</sup> *Department of Internal Medicine, Keimyung University School of Medicine, Keimyung University Dongsan Medical Center, Korea*  
<sup>4</sup> *Medical Research Collaborating Center, Seoul National University Bundang Hospital, Korea*  
<sup>5</sup> *Environmental Health Center, Seoul National University College of Medicine, Korea*  
<sup>6</sup> *Department of Internal Medicine, CHA university School of Medicine, CHA Bundang Medical Center, Korea*
- PP-30** Reevaluation of Initial Antiphospholipid Antibody Positivities  
Jin-Yeong Han, In-Wha Jeong, Gyu-Dae An, Hyeon-Ho Lim, Kwang-Sook Woo  
*Laboratory Medicine, Dong-A University College of Medicine, Korea*
- PP-31** Platelet Proteome and Hypercoagulable State of Non-Splenectomized  $\beta$ -Thalassemia/HbE Patients  
Puangpaka Chanpeng<sup>1</sup>, Kamonlak Leecharoenkiat\*<sup>1</sup>, Saowaros Svasti<sup>2</sup>, Duncan R. Smith<sup>3</sup>, Kittiphong Paiboonsukwong<sup>2</sup>, Wannapa Sorngjai<sup>3</sup>, Wasinee Kheansaard<sup>2</sup>  
<sup>1</sup> *Department of Clinical Microscopy, Faculty of Allied Health Sciences, Chulalongkorn University, Thailand*  
<sup>2</sup> *Thalassemia Research Center, Institute of Molecular Biosciences, Mahidol University, Thailand*  
<sup>3</sup> *Molecular Pathology Laboratory, Institute of Molecular Biosciences, Mahidol University, Thailand*



## POSTER PRESENTATIONS

- PP-32** Von Willebrand Antigen Levels in Blood Group 'O' and Non-O Individuals  
Asma Nasir Mahmud, Huma Asif\*, Ayisha Imran, Nauman A. Malik  
*Department of hematology, Chughtai lab lahore, Pakistan*
- PP-33** Nonstroke Arterial Thromboembolism in Pediatric Patients: A Single Institution Experience in Korea  
Hyoung Soo Choi, Chang Won Choi, Heon Min Kim, Young Hwan Song  
*Pediatrics, Seoul National University Bundang Hospital, Korea*
- PP-34** Screening of HIV, HBsAg, HCV and VDRL among Voluntary Blood Donors of Western Region of Nepal  
Mukunda Raj Kaloun<sup>1</sup>, Arnab Ghosh\*<sup>2</sup>  
<sup>1</sup> *Clinical Pathology, Manipal Teaching Hospital, Nepal*  
<sup>2</sup> *Clinical Pathology, Manipal Teaching Hospital, Nepal*
- PP-35** Prevalence of Anemia among Type 2 Diabetes Mellitus Patients: A Pilot Study  
Abul Kalam Najmi<sup>1</sup>, Salman Hussain<sup>2</sup>  
<sup>1</sup> *Department of Pharmacology, Jamia Hamdard, India*  
<sup>2</sup> *Department of Pharmaceutical Medicine, Jamia Hamdard, India*
- PP-36** Prospective Phase II Pilot Study to Evaluate the Use of Intravenous Iron in the Treatment of Anemia  
Youjin Kim, Jun Ho Jang\*, Silvia Park, Chul Won Jung  
*Division of Hematology-Oncology, Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea*
- PP-37** SFKs Inhibitor Bosutinib and Dasatinib Enhances ATRA or ATO Induced NB4 Cell Differentiation  
Hee-Jeong Cheong<sup>1</sup>, Min Young Lee<sup>2</sup>, Kyoung Ha Kim<sup>2</sup>, Namsu Lee<sup>2</sup>, Sung Hee Lim<sup>2</sup>, Jina Yoon<sup>2</sup>, Se Hyoung Kim<sup>2</sup>, Chan-Kyu Kim<sup>2</sup>, Sung Kyu Park<sup>2</sup>, Dae Sik Hong<sup>2</sup>, Han Jo Kim<sup>2</sup>, Sang-Cheol Lee<sup>2</sup>, Sang Byung Bae<sup>2</sup>, Kyu Taeg Lee<sup>2</sup>, Jong-Ho Won\*<sup>2</sup>  
<sup>1</sup> *Institute for Clinical Molecular Biology Research, Soonchunhyang University Hospital, Korea*  
<sup>2</sup> *Division of Hematology-Oncology, Department of Internal Medicine, Soonchunhyang University Hospital, Korea*
- PP-38** Advanced Serological Evaluation of a Case of Evans Syndrome with Anti D Autoantibody Induced AIHA  
Nitin Agarwal, Prashant Pandey  
*Transfusion Medicine and Transplant immunology, Jaypee Hospital, India*



## POSTER PRESENTATIONS

- PP-39** Serum NLR and PLR as a Systemic Inflammatory Marker among HIV-TB before Antiretroviral Therapy  
Muhammad Faisal Putro Utomo<sup>1</sup>, Anindia Reina Yolanda<sup>1</sup>, Nur Rizky Amaliah<sup>1</sup>, Petrus Kanisius Yogi Hariyanto<sup>1</sup>, Ni Made Dewi Dian Sukmawati<sup>2</sup>, I Made Susila Utama<sup>2</sup>  
<sup>1</sup> *Faculty of Medicine, Udayana University, Indonesia*  
<sup>2</sup> *Division of Tropical and Infectious Disease, Department of Internal Medicine, Faculty of Medicine, Udayana University, Sanglah General Hospital, Indonesia*
- PP-40** Association between Immunological Status with Hematological Findings among TB-HIV Patients  
Anindia Reina Yolanda, Muhammad Faisal Utomo, Yogi Haryanto, Nurrizky Amaliah  
*Medical Student, Udayana University, Indonesia*
- PP-41** Clinical Characteristics, Treatment Patterns, and Outcome of Lymphoplasmacytic Lymphoma  
Jang Ho Cho<sup>1</sup>, Silvia Park<sup>1</sup>, Young Hyeh Ko<sup>2</sup>, Hee-Jin Kim<sup>3</sup>, Sun-Hee Kim<sup>3</sup>, Kihyun Kim<sup>1</sup>, Won Seog Kim<sup>1</sup>, Seok Jin Kim\*<sup>1</sup>  
<sup>1</sup> *Medicine, Samsung Medical Center, Korea*  
<sup>2</sup> *Pathology, Samsung Medical Center, Korea*  
<sup>3</sup> *Laboratory Medicine, Samsung Medical Center, Korea*
- PP-42** Thrombocytopenia due to Dengue and Vitamin D  
Narendra Gemawat  
*Pediatrics-School health, Hindustan Chamber Chikitsalaya, India*
- PP-43** Clinical Characteristics of Young-Age Venous Thromboembolism: A Nationwide Study in Korea  
Chang-Hun Park<sup>1</sup>, Inho Kim<sup>2</sup>, Soo-Mee Bang<sup>3</sup>, Ho-Young Yhim<sup>4</sup>, Yeo-Kyeong Kim<sup>5</sup>, Yang-Ki Kim<sup>6</sup>, Won-Il Choi<sup>7</sup>, Chul Won Jung<sup>8</sup>, Doyeun Oh<sup>9</sup>, Sun-Hee Kim<sup>1</sup>, Hee-Jin Kim\*<sup>1</sup>  
<sup>1</sup> *Department of Laboratory Medicine & Genetics, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea*  
<sup>2</sup> *Department of Internal Medicine, Seoul National University College of Medicine, Seoul National University Hospital, Korea*  
<sup>3</sup> *Department of Internal Medicine, Seoul National University College of Medicine, Seoul National University Bundang Hospital, Korea*  
<sup>4</sup> *Department of Internal Medicine, Chonbuk National University Medical School, Korea*  
<sup>5</sup> *Department of Internal Medicine, Chonnam National University College of Medicine, Korea*  
<sup>6</sup> *Department of Internal Medicine, Soonchunhyang University School of Medicine, Korea*  
<sup>7</sup> *Department of Internal Medicine, Keymyung University College of Medicine, Korea*  
<sup>8</sup> *Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea*  
<sup>9</sup> *Department of Internal Medicine, School of Medicine, CHA University, Korea*



## POSTER PRESENTATIONS

- PP-44** Effect of the Hydro-Alcoholic Extract of *Falcaria Vulgaris* on Liver Parameters of Diabetic Rats  
Faramarz Jalili<sup>1</sup>, Cyrus Jalili<sup>2</sup>  
<sup>1</sup> Department of Anatomy and Cell Biology, Students Research Committee, Kermanshah University of Medical Sciences, Iran  
<sup>2</sup> Department of Anatomy and Cell Biology, Department of Anatomy and Cell Biology, Kermanshah University of Medical Sciences, Iran
- PP-45** Expression of PD-1 in Pediatric Patients with Haploidentical SCT not Correlates with GVHD  
Eunkyong You<sup>1</sup>, Seongsoo Jang<sup>\*1</sup>, Ari Ahn<sup>1</sup>, Min Young Lee<sup>1</sup>, Young-Uk Cho<sup>1</sup>, Chan-Jeoung Park<sup>1</sup>, Yu Jin Lee<sup>2</sup>, Nu-Ree Park<sup>2</sup>, Eun Seok Choi<sup>3</sup>, Hery Kim<sup>3</sup>, Kyung Nam Koh<sup>3</sup>, Ho Joon Im<sup>3</sup>, Jong Jin Seo<sup>3</sup>  
<sup>1</sup> Department of Laboratory Medicine, Asan Medical Center and University of Ulsan College of Medicine, Korea  
<sup>2</sup> Asan Clinical Research Center, Asan Medical Center and University of Ulsan College of Medicine, Korea  
<sup>3</sup> Department of Pediatrics, Asan Medical Center and University of Ulsan College of Medicine, Korea
- PP-46** Successful Renal Re-Transplant after Desensitization with Plasmapheresis & IVIG in High Risk Patient  
Nitin Agarwal, Prashant Pandey  
Transfusion Medicine and Transplant Immunology, Jaypee Hospital, India

### PP-47 ~ PP-85 : Poster Only

- PP-47** Patients with Therapy-Related Myeloid Neoplasm Harboring Normal Karyotype Showed Better Outcomes  
Sang-A Kim<sup>1</sup>, Junshik Hong<sup>\*1</sup>, Go-Un Woo<sup>1</sup>, Youngil Koh<sup>1</sup>, Dong-Yeop Shin<sup>1</sup>, Inho Kim<sup>1</sup>, Dong Soon Lee<sup>2</sup>, Sung-Soo Yoon<sup>1</sup>  
<sup>1</sup> Department of Internal Medicine, Seoul National University Hospital, Korea  
<sup>2</sup> Department of Laboratory Medicine, Seoul National University Hospital, Korea
- PP-48** Micafungin Prophylaxis for Acute Myeloid Leukemia Patients Undergoing Induction Chemotherapy  
Hyunkyung Park<sup>1</sup>, Jiwon Jeong<sup>1</sup>, Jeonghwan Youk<sup>2</sup>, Wan Beom Park<sup>1</sup>, Dong-Yeop Shin<sup>1,3</sup>, Junshik Hong<sup>1,3</sup>, Inho Kim<sup>1,3</sup>, Nam Joong Kim<sup>1</sup>, Sung-Soo Yoon<sup>1,3</sup>, Youngil Koh<sup>\*4</sup>  
<sup>1</sup> Internal Medicine, Seoul National University Hospital, Korea  
<sup>2</sup> Korea Advanced Institute of Science and Technology, Korea  
<sup>3</sup> Cancer Research Institute, Seoul National University College of Medicine, Korea  
<sup>4</sup> Biomedical Research Institute, Seoul National University Hospital, Korea
- PP-49** SET-NUP214 Fusion in Acute Myeloid Leukemia with Massive Hyperdiploidy  
Gyu-Dae An<sup>1</sup>, In-Hwa Jeong<sup>1</sup>, Hyeon-Ho Lim<sup>1</sup>, Kwang-Sook Woo<sup>1</sup>, Kyeong-Hee Kim<sup>1</sup>, Jeong-Man Kim<sup>1</sup>, Ji-Hyun Lee<sup>2</sup>, Jin-Yeong Han<sup>\*1</sup>  
<sup>1</sup> Department of Laboratory Medicine, Dong-A University College of Medicine, Korea  
<sup>2</sup> Division of Hematology-Oncology, Department of Internal Medicine, Dong-A University College of Medicine, Korea



## POSTER PRESENTATIONS

- PP-50** Evaluation and Application of RNA Fusion Gene Panel for the Patients with Acute Leukemia  
Borahm Kim<sup>1</sup>, Saeam Shin<sup>4</sup>, Jieun Jang<sup>3</sup>, Soo Jeong Kim<sup>3</sup>, Seung-Tae Lee<sup>1</sup>, June-Won Cheong<sup>2</sup>, Chuhi Joo Lyu<sup>3</sup>, Yoo Hong Min<sup>2</sup>, Jong Rak Choi<sup>\*1</sup>  
<sup>1</sup> Department of Laboratory Medicine, Yonsei University College of Medicine, Korea  
<sup>2</sup> Department of Pediatrics, Yonsei University College of Medicine, Korea  
<sup>3</sup> Department of Internal Medicine, Yonsei University College of Medicine, Korea  
<sup>4</sup> Department of Laboratory Medicine, Hallym University College of Medicine, Kangnam Sacred Heart Hospital, Korea
- PP-51** A Case of Lineage Conversion with Clonal Evolution from Acute Lymphoblastic Leukemia to Acute Myeloid Leukemia  
Heerah Lee<sup>1</sup>, Chan-Jeoung Park<sup>\*1</sup>, Eunkyong You<sup>1</sup>, Hyery Kim<sup>2</sup>, Jong Jin Seo<sup>2</sup>  
<sup>1</sup> Laboratory Medicine, University of Ulsan College of Medicine and Asan Medical Center, Korea  
<sup>2</sup> Pediatrics, University of Ulsan College of Medicine and Asan Medical Center, Korea
- PP-52** Inhibition of Mitochondrial Respiration by Treatment of PDTA Entails Depletion of ATP Content in AML  
Ilhwan Ryu<sup>1,2,3</sup>, Jeongsu Han<sup>1,3</sup>, Yunseon Jang<sup>1,2,3</sup>, Soo Jeong Kim<sup>1,2,3</sup>, Min Joung Lee<sup>1,2,3</sup>, Xianshu Ju<sup>2,3</sup>, Byeong Hyeon Yoo<sup>1,2,3</sup>, Yu Lim Lee<sup>1,2,3</sup>, Min Jeong Ryu<sup>1,4</sup>, Woosuk Chung<sup>6</sup>, Gi Ryang Kweon<sup>1,2,4</sup>, Jun Young Heo<sup>1,2,3</sup>  
<sup>1</sup> Department of Biochemistry, Chungnam National University School of Medicine, Korea  
<sup>2</sup> Department of Medical Science, Chungnam National University School of Medicine, Korea  
<sup>3</sup> Infection Control Convergence Research Center, College of Medicine, Chungnam National University, Korea  
<sup>4</sup> Research Institute for Medical Science, Chungnam National University School of Medicine, Korea  
<sup>5</sup> Brain research Institute, Chungnam National University School of Medicine, Korea  
<sup>6</sup> Department of Anesthesiology and Pain Medicine, Chungnam National University Hospital, Korea
- PP-53** Single Center Experience of Blinatumomab for Relapsed/Refractory B Cell Acute Lymphoblastic Leukemia  
Soo-Jeong Kim<sup>1</sup>, Ji Eun Jang<sup>1</sup>, Hae Rim Chung<sup>1</sup>, Chul-Joo Yoo<sup>2</sup>, Jin Seok Kim<sup>1</sup>, June-Won Cheong<sup>\*1</sup>, Yoo Hong Min<sup>1</sup>  
<sup>1</sup> Department of Internal Medicine, Yonsei University College of Medicine, Korea  
<sup>2</sup> Department of Pediatrics, Yonsei University College of Medicine, Korea
- PP-54** Acute Myeloid Leukemia Classification in an Era of the WHO 2016 Diagnostic Criteria  
Jung Jin, Eunhee Han, Myungshin Kim\*, Yonggoo Kim, Kyungja Han  
Department of Laboratory Medicine, College of Medicine, The Catholic University of Korea, Korea
- PP-55** Clinical Dissection of Infectious Event following ATG Treatment for Aplastic Anemia and Hypoplastic Myelodysplastic Syndrome  
Hee Ryong Jang<sup>1</sup>, Youngil Koh<sup>\*1</sup>, Sung-Soo Yoon<sup>1</sup>, Inho Kim<sup>1</sup>, Soo-Mee Bang<sup>2</sup>, Jeong-Ok Lee<sup>2</sup>  
<sup>1</sup> Internal Medicine, Seoul National University Hospital, Korea  
<sup>2</sup> Internal Medicine, Seoul National University Bundang Hospital, Korea





## POSTER PRESENTATIONS

- PP-56** Diagnostic Considerations for the Recently Described Entity, MDS/MPN-RS-T: A Review of 6 Cases  
Min Young Lee, Seongsoo Jang\*, Chan-Jeoung Park, Young-Uk Cho, Eunkyong You, Ari Ahn  
*Laboratory Medicine, Asan Medical Center, University of Ulsan College of Medicine, Korea*
- PP-57** A Rare Case of MPN with a Coexistence of JAK2 V617F Mutation and BCR/ABL1 Translocation  
Sang Hyuk Park<sup>1</sup>, Ji-Hun Lim<sup>\*1</sup>, Joseph Jeong<sup>1</sup>, Sun-Ho Lee<sup>1</sup>, Yunsuk Choi<sup>2</sup>, Jae-Cheol Cho<sup>2</sup>, Young-Uk Cho<sup>3</sup>, Sang-Hyun Hwang<sup>3</sup>, Seongsoo Jang<sup>3</sup>, Chan-Jeoung Park<sup>3</sup>  
<sup>1</sup> *Department of Laboratory Medicine, University of Ulsan College of Medicine, Ulsan University Hospital, Korea*  
<sup>2</sup> *Department of Hematology and Cellular Therapy, University of Ulsan College of Medicine, Ulsan University Hospital, Korea*  
<sup>3</sup> *Department of Laboratory Medicine, University of Ulsan College of Medicine and Asan Medical Center, Korea*
- PP-58** Very Early Molecular Response at 1 Month is a Predictor of the Outcome of CP-CML Treated with TKIs  
Hye-Young Song<sup>1</sup>, Soo-Young Choi<sup>1</sup>, Sung-Eun Lee<sup>2</sup>, Soo-Hyun Kim<sup>1</sup>, Hea-Lyun Yoo<sup>1</sup>, Mi-Young Lee<sup>1</sup>, Ki-Hoon Kang<sup>1</sup>, Kyung-Mi Kee<sup>1</sup>, Ji-Hyung Suh<sup>1</sup>, Seon-Young Yang<sup>1</sup>, Dong-Wook Kim<sup>\*1,2</sup>  
<sup>1</sup> *Leukemia Research Institute, The Catholic University of Korea, Korea*  
<sup>2</sup> *Department of Hematology, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea*
- PP-59** Dasatinib-Induced Pulmonary Arterial Hypertension Diagnosed by Echocardiography in CML  
Jee Hyun Kong<sup>1</sup>, Sung-Eun Lee<sup>2</sup>, Young-Woo Jeon<sup>2</sup>, Soo Young Choi<sup>3</sup>, Soo-Hyun Kim<sup>3</sup>, Eun-Jung Jang<sup>3</sup>, Hae-Eok Jung<sup>4</sup>, Dong-Wook Kim<sup>\*2,3</sup>  
<sup>1</sup> *Hematology-Oncology, Wonju Christian Hospital, Yonsei University College of Medicine, Korea*  
<sup>2</sup> *Hematology, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea*  
<sup>3</sup> *Leukemia Research Institute, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea*  
<sup>4</sup> *Cardiology, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea*
- PP-60** Therapeutic Targeting of BCR-ABL in Chronic Myelogenous Leukemia by Modulating NAD Levels  
Jeongsu Han<sup>1,2,3,4</sup>, Soo Jeong Kim<sup>1,2,4</sup>, Min Joung Lee<sup>1,2,4</sup>, Ilhwan Ryu<sup>1,2,4</sup>, Xianshu Ju<sup>1,2,4</sup>, Byeong Hyeon Yoo<sup>1,2,4</sup>, Yu Lim Lee<sup>1,2,4</sup>, Yunseon Jang<sup>1,2,4</sup>, Min Jeong Ryu<sup>1,2,3</sup>, Junyoung Heo<sup>1,2,4,5</sup>, Gi Ryang Kweon<sup>\*1,2,3</sup>  
<sup>1</sup> *Department of Biochemistry, Chungnam National University School of Medicine, Korea*  
<sup>2</sup> *Department of Medical Science, Chungnam National University School of Medicine, Korea*  
<sup>3</sup> *Research Institute for Medical Science, Chungnam National University School of Medicine, Korea*  
<sup>4</sup> *Infection Control Convergence Research Center, Chungnam National University School of Medicine, Korea*  
<sup>5</sup> *Brain Research Institute, Chungnam National University School of Medicine, Korea*
- PP-61** Quantification of BCR-ABL1 Using Digital PCR in CML Patients for TKI Discontinuation  
Hee-Jung Chung<sup>1</sup>, Hye-Won Lee<sup>2</sup>, Mi-Kyoung Han<sup>2,3</sup>, Hyun-Seok Um<sup>\*2</sup>  
<sup>1</sup> *Laboratory Medicine, Konkuk Medical Center, Korea*  
<sup>2</sup> *Internal Medicine, Center for Hematologic Malignancy, National Cancer Center Hospital, Korea*  
<sup>3</sup> *Division of Convergence Technology, Immunotherapeutics Branch, National Cancer Center Research Institute, Korea*



## POSTER PRESENTATIONS

- PP-62** Performance of Automated Imaging Cell Analyzer Vision Hema for White Blood Cell Differentials  
Sumi Yoon, Mikyoung Park, Hanah Kim\*, Mina Hur  
*Department of Laboratory Medicine, Konkuk University School of Medicine, Korea*
- PP-63** Performance Evaluation of the Automated Digital Cell Morphology Analyzer Di-60 in Pediatric Patients  
Gyu-Dae An<sup>1</sup>, In-Hwa Jeong<sup>1</sup>, Hyeon-Ho Lim<sup>1</sup>, Sung-Suk Cho<sup>2</sup>, Kwang-Sook Woo<sup>1</sup>, Kyeong-Hee Kim<sup>1</sup>, Jeong-Man Kim<sup>1</sup>, Hee-Won Chueh<sup>3</sup>, Jin-Yeong Han<sup>\*1</sup>  
<sup>1</sup> *Department of Laboratory Medicine, Dong-A University College of Medicine, Korea*  
<sup>2</sup> *Department of Laboratory Medicine, Dong-A University Hospital, Korea*  
<sup>3</sup> *Department of Pediatrics Medicine, Dong-A University College of Medicine, Korea*
- PP-64** A Case of Iron-Refractory Iron Deficiency Anemia with Autoimmune Chronic Gastritis  
Hyunjung Kim<sup>1</sup>, Der Sheng Sun<sup>\*2</sup>, Joonhong Park<sup>1</sup>, Myungshin Kim<sup>1</sup>  
<sup>1</sup> *Laboratory Medicine, College of Medicine, The Catholic University of Korea, Korea*  
<sup>2</sup> *Internal Medicine, College of Medicine, The Catholic University of Korea, Korea*
- PP-65** Performance Evaluation of Automatic Image Analyzer for Differential Count of Bone Marrow Cells  
Yong Jun Kwon, Jun Hyung Lee, Ha Jin Lim, Hyun Jung Choi, Soo Hyun Kim, Myung Geun Shin<sup>\*</sup>  
*Departments of Laboratory Medicine, Chonnam National University Medical School and Chonnam National University Hwasun Hospital, Korea*
- PP-66** Relapsed Acute Myeloid Leukemia Preceded by Discrepant Morphologic and Molecular Evaluations  
Sumi Yoon, Hanah Kim, Mina Hur\*  
*Department of Laboratory Medicine, Konkuk University School of Medicine, Korea*
- PP-67** Visionhema is Useful for Nucleated Cell Differentials in Bone Marrow Aspirates without Abnormalities  
Eunkyong You, Chan-Jeoung Park\*, Min Young Lee, Young-Uk Cho, Seongsoo Jang  
*Department of Laboratory Medicine, Asan Medical Center, University of Ulsan College of Medicine, Korea*
- PP-68** Clonal TCR Rearrangements in Patients with Hemophagocytic Lymphohistiocytosis without Malignancy  
Heyjin Kim<sup>1</sup>, Keon Hee Yoo<sup>2</sup>, Silvia Park<sup>3</sup>, Seok Jin Kim<sup>3</sup>, Duck Cho<sup>1</sup>, Sun-Hee Kim<sup>1</sup>, Hee-Jin Kim<sup>\*1</sup>  
<sup>1</sup> *Department of Laboratory Medicine and Genetics, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea*  
<sup>2</sup> *Department of Pediatrics, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea*  
<sup>3</sup> *Division of Hematology-Oncology, Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea*



## POSTER PRESENTATIONS

- PP-69** Myc and Bcl2 Coexpression is Not Related with Inferior Outcome in the Diffuse Large B-Cell Lymphoma  
Yu Ri Kim<sup>1</sup>, Sun Och Yoon<sup>2</sup>, Soo-Jeong Kim<sup>3</sup>, June-Won Cheong<sup>3</sup>, Haerim Chung<sup>3</sup>, Jung Yeom Lee<sup>4</sup>, Ji Eun Jang<sup>3</sup>, Yundeok Kim<sup>1</sup>, Woo-Ick Yang<sup>2</sup>, Yoo Hong Min<sup>3</sup>, Jin Seok Kim\*<sup>3</sup>  
<sup>1</sup> Division of Hematology, Department of Internal Medicine, Gangnam Severance Hospital, Yonsei University College of Medicine, Korea  
<sup>2</sup> Department of Pathology, Severance Hospital, Yonsei University College of Medicine, Korea  
<sup>3</sup> Division of Hematology, Department of Internal Medicine, Severance Hospital, Yonsei University College of Medicine, Korea  
<sup>4</sup> Department of Internal Medicine, Wonju Severance Christian Hospital, Yonsei University, Wonju College of Medicine, Korea
- PP-70** Different Role of Surveillance 18FDG-PET/CT according to Histologic Subtypes in Patients with NHL  
Yu Ri Kim<sup>1</sup>, Soo-Jeong Kim<sup>2</sup>, June-Won Cheong<sup>2</sup>, Yundeok Kim<sup>1</sup>, Ji Eun Jang<sup>2</sup>, Huynsoo Cho<sup>2</sup>, Haerim Chung<sup>2</sup>, Yoo Hong Min<sup>2</sup>, Woo Ick Yang<sup>3</sup>, Arthur Cho<sup>4</sup>, Jin Seok Kim\*<sup>2</sup>  
<sup>1</sup> Division of Hematology, Department of Internal Medicine, Gangnam Severance Hospital, Yonsei University College of Medicine, Korea  
<sup>2</sup> Division of Hematology, Department of Internal Medicine, Severance Hospital, Yonsei University College of Medicine, Korea  
<sup>3</sup> Department of Pathology, Severance Hospital, Yonsei University College of Medicine, Korea  
<sup>4</sup> Department of Nuclear Medicine, Severance Hospital, Yonsei University College of Medicine, Korea
- PP-71** Efficacy and Safety of Once-Weekly Bortezomib in Relapsed/Refractory Multiple Myeloma Patients  
Sang Eun Yoon, Yeung-Chul Mun\*, Chu-Myong Seong, Eun-Mi Nam, Kyoung-Eun Lee, Soon-Nam Lee  
Department of Internal Medicine, Ewha Womans University, Hemato-Oncology, Korea
- PP-72** Thalidomide/Dexamethasone Maintenance after Autologous Stem Cell Transplantation in Multiple Myeloma  
Sang-A Kim<sup>1</sup>, Youngil Koh\*<sup>2</sup>, Dong-Yeop Shin<sup>2</sup>, Jin Seok Kim<sup>3</sup>, Kihyun Kim<sup>4</sup>, Chang-Ki Min<sup>5</sup>, Hyeon-Seok Eom<sup>6</sup>, Je Jung Lee<sup>7</sup>, Jeong-Ok Lee<sup>8</sup>, Soo-Mee Bang<sup>8</sup>, Sung-Soo Yoon<sup>2</sup>  
<sup>1</sup> Department of Internal Medicine, Seoul National University Hospital, Korea  
<sup>2</sup> Division of Hematology, Department of Internal Medicine, Seoul National University Hospital, Seoul National University College of Medicine, Korea  
<sup>3</sup> Division of Hematology, Department of Internal Medicine, Severance Hospital, Yonsei University College of Medicine, Korea  
<sup>4</sup> Division of Hematology, Department of Internal Medicine, Samsung Medical Centre, Sungkyunkwan University School of Medicine, Korea  
<sup>5</sup> Division of Hematology, Department of Internal Medicine, Seoul St Mary's Hospital, The Catholic University of Korea, College of Medicine, Korea  
<sup>6</sup> Hematology-Oncology Clinic, Department of Internal Medicine, National Cancer Center, Korea  
<sup>7</sup> Division of Hematology, Department of Internal Medicine, Chonnam National University Hwasun Hospital, Korea  
<sup>8</sup> Division of Hematology, Department of Internal Medicine, Seoul National University Bundang Hospital, Seoul National University College of Medicine, Korea



## POSTER PRESENTATIONS

- PP-73** Prognostic Role of Myeloid-Derived Suppressor Cells in Transplant-Eligible Multiple Myeloma  
Sung-Soo Park<sup>1,2</sup>, Gi June Min<sup>1,2</sup>, Young-Woo Jeon<sup>1,2</sup>, Jae-Ho Yoon<sup>1,2</sup>, Seung-Ah Yahng<sup>3</sup>, Seung-Hwan Shin<sup>4</sup>, Sung-Eun Lee<sup>1,2</sup>, Byung-Sik Cho<sup>1,2</sup>, Ki-Seong Eom<sup>1,2</sup>, Yoo-Jin Kim<sup>1,2</sup>, Seok Lee<sup>1,2</sup>, Hee-Je Kim<sup>1,2</sup>, Seok-Goo Cho<sup>1</sup>, Jong Wook Lee<sup>1</sup>, Chang-Ki Min\*<sup>1,2</sup>  
<sup>1</sup> Department of Hematology, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea  
<sup>2</sup> Leukemia Research Institute, College of Medicine, The Catholic University of Korea, Korea  
<sup>3</sup> Department of Hematology, Incheon St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea  
<sup>4</sup> Department of Hematology, Yeoido St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea
- PP-74** Prognostic Impact of 18F-FDG PET/CT at Diagnosis in Newly Diagnosed Multiple Myeloma  
Sung-Hoon Jung, Seo-Yeon Ahn, Seung-Shin Lee, Deok-Hwan Yang, Jae-Sook Ahn, Yeo-Kyeong Kim, Hyeoung-Joon Kim, Je-Jung Lee\*  
Department of Hematology-Oncology, Chonnam National University Hwasun Hospital, Korea
- PP-75** Single Center Experience of Pomalidomide Plus Low-Dose Dexamethasone in Patients with Refractory and Relapsed Multiple Myeloma  
Sung Won Lim<sup>1</sup>, Silvia Park<sup>1</sup>, Seok Jin Kim<sup>1</sup>, Jun Ho Jang<sup>1</sup>, Won Seog Kim<sup>1</sup>, Chul Won Jung<sup>1</sup>, Hyo Jung Kim<sup>2</sup>, Kihyun Kim<sup>1</sup>  
<sup>1</sup> Division of Hematology-Oncology, Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea  
<sup>2</sup> Department of Internal Medicine, Hallym University Sacred Heart Hospital, Hallym University College of Medicine, Korea
- PP-76** The Use of mTOR Inhibitor in Patients with Activated PI3K  $\delta$  Syndrome 1; A Case Series in Korea  
Ji-Man Kang<sup>1,2</sup>, Su Kyung Kim<sup>1</sup>, Hyeon-Jin Park<sup>3</sup>, Sae Rom Choi<sup>1</sup>, Yeon Jung Lim<sup>4</sup>, Soon Ki Kim<sup>5</sup>, Meerim Park<sup>6</sup>, Youn-Soo Hahn<sup>6</sup>, Byung-Kiu Park<sup>7</sup>, Weon Seo Park<sup>8</sup>, Young Hye Ko<sup>7</sup>, Sung Yoon Cho<sup>1</sup>, Dong-Kyu Jin<sup>1</sup>, Yon Ho Choe<sup>1</sup>, Ji Won Lee<sup>1</sup>, Keon Hee Yoo<sup>1</sup>, Yae-Jean Kim\*<sup>1</sup>  
<sup>1</sup> Pediatrics, Sungkyunkwan University School of Medicine, Samsung Medical Center, Korea  
<sup>2</sup> Center for Pediatric Cancer, National Cancer Center, Korea  
<sup>3</sup> Pediatrics, Seoul National University College of Medicine, Korea  
<sup>4</sup> Pediatrics, College of Medicine, Chungnam National University, Korea  
<sup>5</sup> Pediatrics, Inha University Medical Center, Korea  
<sup>6</sup> Pediatrics, College of Medicine, Chungbuk National University, Korea  
<sup>7</sup> Pathology, Sungkyunkwan University School of Medicine, Samsung Medical Center, Korea  
<sup>8</sup> Pathology, National Cancer Center, Korea
- PP-77** Efficacy Of Darbeoetin Alfa for Chemotherapy-Induced Anemia in Solid Cancer Patients  
Jang Ho Cho, Jun Ho Jang, Silvia Park, Jong-Mu Sun, Jeeyun Lee, Yeon Hee Park, Jin Seok Ahn, Chul Won Jung\*  
Division of Hematology-Oncology, Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea
- PP-78** The Implementation of Next Generation Sequencing in Myeloid Neoplasm Clinical Diagnostics  
Smbat Daghbashyan<sup>1</sup>, Aline Aywaz<sup>1,2</sup>  
<sup>1</sup> Hematology, Hematology Center after Prof. Yeolyan, USA  
<sup>2</sup> Molecular genetics and immunophenotyping laboratory, Hematology Center after Prof. Yeolyan, USA



## POSTER PRESENTATIONS

### PP-79 Evaluation of the Immature Platelet Fraction in the Diagnosis of ITP and Other Various Diseases

Dong Jin Park<sup>1</sup>, Sooyoung Kim<sup>1</sup>, Yeongsic Kim<sup>1</sup>, Jeong-A Kim<sup>2</sup>, Young Hoon Park<sup>2</sup>, Dong Jin Park\*<sup>1</sup>

<sup>1</sup> Laboratory Medicine, The Catholic University of Korea, St. Vincent's Hospital, Korea

<sup>2</sup> Division of Hematology, Department of Internal Medicine, The Catholic University of Korea, St. Vincent's Hospital, Korea

### PP-80 Association of HSV to Chemotherapy-Induced Oral Mucositis in Patients with Hematologic Malignancies

Junshik Hong<sup>1</sup>, Youngnim Choi<sup>2</sup>, Ji-Yeob Choi<sup>4</sup>, Dong-Yeop Shin<sup>1</sup>, Youngil Koh<sup>1</sup>, Hee Kyung Park<sup>3</sup>, Inho Kim\*<sup>1</sup>, Sung-Soo Yoon<sup>1</sup>

<sup>1</sup> Department of Internal Medicine, Seoul National University Hospital, Seoul National University College of Medicine, Korea

<sup>2</sup> Department of Oromaxillofacial Infection & Immunity, School of Dentistry and Dental Research Institute, Seoul National University, Korea

<sup>3</sup> Department of Oral Medicine and Oral Diagnosis, School of Dentistry and Dental Research Institute, Seoul National University, Korea

<sup>4</sup> Department of Biomedical Sciences, Seoul National University College of Medicine, Korea

### PP-81 Efficacy of Olanzapine-Containing Antiemetic Regimen in ASCT Patients with TBC Conditioning

Bobae Kim<sup>1</sup>, Youree Jung<sup>1</sup>, Eunjeong Shin<sup>1</sup>, Sungyun Suh<sup>1</sup>, Yoonsook Cho<sup>1</sup>, Ju-Yeun Lee<sup>2</sup>, Youngil Koh\*<sup>3</sup>

<sup>1</sup> Pharmacy, Seoul National University Hospital, Korea

<sup>2</sup> College of Pharmacy, Hanyang University, Korea

<sup>3</sup> Hematology, Seoul National University Hospital, Korea

### PP-82 Prevention of PTLD in Children Using Preemptive Rituximab Therapy

Bo Kyung Kim, Hyoung Jin Kang\*, Kyung Taek Hong, Jung Yoon Choi, Hong Yul An, Che Ry Hong, Hee Young Shin

Department of Pediatrics, Cancer Research Institute, Seoul National University College of Medicine, Korea

### PP-83 A Comparative Analysis of Efficiency Among the Different Donor Groups in Stem Cell Collection Result According to Injected with G-CSF on Unrelated Peripheral Blood Stem Cell Donors

Ok-Ja Hyoung<sup>1</sup>, Min-Jung Kawk<sup>1</sup>, Tai-Gyu Kim<sup>1</sup>, Young-Shin Lee<sup>2</sup>, Min-Jin Choi<sup>3</sup>

<sup>1</sup> Catholic Hematopoietic Stem Cell Bank, Department of Coordination, Catholic University of Korea, Korea

<sup>2</sup> Department of Oncology, Asan Medical Center, University of Ulsan College of Medicine, Korea

<sup>3</sup> Department of Internal Medicine, Samsung Medical Center, Korea

### PP-84 Granulocyte Transfusions in Pediatric Patients with Neutropenic Fever: A Single Center Experience

Eu Jeon Yang<sup>1</sup>, Kyung Mi Park<sup>1</sup>, Hyun-Ji Lee<sup>2</sup>, Young Tak Lim\*<sup>1</sup>

<sup>1</sup> Pediatrics, Pusan National University Children's Hospital, Korea

<sup>2</sup> Laboratory Medicine, Pusan National University Yangsan Hospital, Korea

### PP-85 Low Rate of Rh Alloimmunization after Rh-Incompatible Solid Organ Transplantations

Ari Ahn<sup>1</sup>, Duck Cho<sup>2</sup>, Sang-Hyun Hwang\*<sup>1</sup>

<sup>1</sup> Department of Laboratory Medicine, University of Ulsan College of Medicine and Asan Medical Center, Korea

<sup>2</sup> Department of Laboratory Medicine and Genetics, Samsung Medical Center, Sungkyunwan University School of Medicine, Korea









When multiple myeloma relapses,

Don't put your patient's survival at risk<sup>1,2</sup>

**21%** KYPROLIS®-based regimens (KRd and Kd) reduced the risk of death by **21%** vs Rd and Vd.<sup>1,2</sup>

**KRd from ASPIRE**

⚡ **26.3 months** of median PFS with KRd vs. 17.6 with Rd<sup>3</sup>  
HR 0.69 (0.57-0.83), P = 0.0001

⚡ **48.3 months** of median OS with KRd vs. 40.4 with Rd<sup>2</sup>  
HR 0.79 (0.67-0.95), P = 0.0045

⚡ **3x patients** achieved ≥ CR with KRd vs. Rd<sup>3</sup>  
P < 0.001 in CR+sCR

**Kd from ENDEAVOR**

⚡ **18.7 months** of median PFS with Kd vs. 9.4 with Vd<sup>4</sup>  
HR 0.53 (0.44-0.65); P < 0.0001

⚡ **47.6 months** of median OS with Kd vs 40.0 with Vd<sup>4</sup>  
HR 0.79 (0.65-0.96), P = 0.010

⚡ **2x patients** achieved ≥ CR with Kd vs. Vd<sup>4</sup>  
P = 0.0010 in CR+sCR

PFS, progression-free survival; CR, complete response; HR<sub>QoL</sub>, Health-Related Quality of Life; OS, overall survival; PN, peripheral neuropathy; sCR, stringent complete response

ASPIRE was a randomized, phase 3, open-label, multicenter study evaluating KYPROLIS® in patients with relapsed multiple myeloma who had 1 to 3 prior lines of therapy. 792 patients were randomized in a 1:1 ratio (396 patients to KRd, 396 to Rd). The primary endpoint was progression-free survival. Secondary endpoints included overall survival, overall response rate (partial response or better), duration of response, health-related quality of life, and safety.<sup>2</sup>

ENDEAVOR was a randomized, phase 3, open-label, multicenter study evaluating KYPROLIS® in patients with relapsed or refractory multiple myeloma who had 1 to 3 previous treatments. 929 patients were randomly assigned (1:1) to receive carfilzomib with dexamethasone (Kd) or bortezomib with dexamethasone (Vd). The primary endpoint was progression-free survival in the intention-to-treat population. Secondary endpoints included overall survival, overall response (partial response or better), duration of response, incidence of ≥ grade 2 peripheral neuropathy events, and safety.<sup>4</sup>

References 1. Dimopoulos MA, et al. Lancet Oncol 2017;18:1327-37 2. Siegel DS, et al. J Clin Oncol. 2018 Jan 17. doi: 10.1200/JCO.2017.76.5032 [Epub ahead of print] 3. Stewart AK, et al. N Engl J Med. 2015;372:142-52. 4. Dimopoulos MA, et al. Lancet Oncol. 2016;17:27-38.

**키프로리스® 주 제품오야정보**

제품명 키프로리스주0.60밀리그램, 300밀리그램(키프로리스), 효능효과: 이전에 한 가지 이상의 치료를 받은 다발성골수종 환자의 치료에 레날리도마이드 및 엑사메타손 또는 엑사메타손과의 병용요법 용법용량: 3주 동안 매주 2일 연속으로 투여 후 12일간 휴약하여 총 28일간 1회 투여한다. 첫 번째 주기의 1일, 2일에 20mg/m<sup>2</sup>의 시작용량으로 투여한다. 레날리도마이드 및 엑사메타손과의 병용요법: 10분 동안 정맥내 주입으로 투여, 시작 용량 투여 후, 첫 번째 주기의 8일에 목표 용량 27mg/m<sup>2</sup>로 증량한다. 13주(첫 번째 8일과 5일에 투여하지 않으며 18 주가 이후에는 투여를 중단한다. 레날리도마이드는 1-21일에 25mg을 경구 투여하고, 엑사메타손은 28일 주기의 1일, 8일, 15일, 22일에 40mg을 경구 투여하며, 엑사메타손과의 병용요법: 30분 동안 정맥내 주입으로 투여, 시작 용량 투여 후, 첫 번째 주기의 8일에 목표 용량 56mg/m<sup>2</sup>로 증량한다. 매 28일 주기의 1, 2, 8, 15, 16, 22, 23일에 엑사메타손 20mg을 경구 투여 또는 정맥투여 한다. 다음 환자에게는 투여하지 말 것 이 약의 투여 또는 다른 심혈관 관련 증상이 있는 환자, 심방불규(레날리도마이드 및 엑사메타손과의 병용요법) 임상시험에서 10% 이상 보고된 이상반응은 빈혈, 호중구감소증, 혈소판감소증, 설사, 변비, 구역, 피로, 발열, 말초부종, 무력증, 상기도감염, 비만, 두통, 지각불명증, 지각불명증, 고혈압증, 근육경련, 기타 이분류 및 모노신병증, 불면증, 기침, 호흡곤란, 발진, 호흡곤란 및 혈전증, 고혈압이었고, 10% 이상 보고된 3-4등급 이상심장사상 이상은 심방부조, 정맥조동증, 인, 혈소판, 총 백혈구수, 헤모글로빈, 칼륨 감소이었다. 엑사메타손과의 병용요법 임상시험에서 10% 이상 보고된 이상반응은 빈혈, 혈소판감소증, 설사, 구역, 변비, 구토, 피로, 발열, 말초부종, 무력증, 상기도감염, 기관지염, 비만, 두통, 근육경련, 오한, 두통, 말초신경병증, 불면증, 호흡곤란, 기침, 고혈압이었고, 10% 이상 보고된 3-4등급 이상심장사상 이상은 심방부조, 헤모글로빈, 혈소판, 인, 크레아티닌 혈소중 감소 및 요산, 칼륨감소가 있었다. 시험 후 용혈모용증후군(HELLP), 허혈성 전염, 상급열, 저혈압, 저산소혈증, 급성신부전, 응양혈중중추근, 폐색성 폐동맥고혈압, 호중구감, 고혈압, 정맥혈전증, 주된반응, 유행, 혈소판감소증, 간독성 및 간염, 혈전성 미세혈관염, 가래상 투여 부작용 증후군(ARDS), 폐색성 폐동맥이 발생할 수 있으므로 주의한다. 응양열, 무력증, 두통, 기침, 중대한 심혈관 질환적 조치를 취해야 한다. 일부 및 수분부: 약용기온과 동등시할 정도로 보며, 테이(혈소중을) 가할수 있으므로 적절한 피임 조치를 해야 한다. 임신 중 사용하거나 환자가 투약 중에 임신하게 되면, 환자에게 태아에 유해) 영향을 미칠 수 있다. 보관 및 취급상의 주의사항: 차광 방지 2-8°C 보관. 제품 투여를 위한 재구성 및 조제방법: 과립투여를 막기위해 투약용 계산에 주의해야 하며, 재구성하기 전 조제방법을 숙지하여야 한다. 수입판매처: 임진코바이오(주) (서울특별시 강남구 테헤란로 203, 서울인태내셔널타워 14층). 제품용 처방하기 전 상세 제품설명서를 참고하여야 합니다. 2018.12.14

**AMGEN** AMGEN Korea  
14th Floor, Seoul International Tower 203, Teheran-ro, Gangnam-gu, Seoul, 06141 Korea | Office: (82) 2-3434-4800

**Kyprolis**  
(carfilzomib) Injection  
KR-00719-KYP-2018-Jan

**Neulasta**  
(pegfilgrastim)

**FN** Prophylaxis through every cycle

Neulasta® used **first and every cycle** helps reduce the incidence of **febrile neutropenia**



전문의약품

**원료의약품 및 분말** 1(1만지0.60밀리그램) (주성분) 페그필그라스티(분말) : 6mg (첨가제) 방출산(글리시릴아세테이트), 수산화나트륨, 소르비톨(30mg), 폴리소르베이트20(0.02mg), 주사용수 성분 무색의 용액이 충전된 주사침이 달린 투약용 유리프라이드시린지 주사제 효능효과 및 안전성에 대한 세부특성 확인요법을 투여 받는 환자의 발열성 호중구 감소증의 발생과 호중구 감소증의 기간 감소(발열성 호중구 감소증의 예방) 및 약 6mg을 함유한 암페리올(분말) 이후 약 24시간 후에 피하주사 \*소이에 대한 사용 제한 \*말기 신장에 환자를 포함한 신장에 환자에게 용량 변경은 추천되지 않음 **사용상 주의사항** 1. 경고 1) 처방전 처방 필요 2) 약이 투여 후, 좌측 상복부, 어깨 통증이 있는 환자는 비정비데, 비정비데 검사 2) 급성 호흡곤란 증후군(ARDS)가 발생할 수 있음. 알, 폐 질환, 호흡곤란이 있는 환자는 ARDS 검사, ARDS가 발생한 환자에게 투여 금지 3) 아나필락시스를 포함한 심각한 알러지 반응이 발생할 수 있음. 심각한 알러지 반응이 발생한 환자에게 투여 금지 4) 경상척추관절 질환 환자가 필그라스티, 페그필그라스티를 투여 받는 경우 통증, 때때로 치명적인 경상척추관절 부종이 발생할 수 있음 5) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 6) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 7) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 8) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 9) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 10) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 11) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 12) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 13) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 14) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 15) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 16) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 17) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 18) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 19) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 20) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 21) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 22) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 23) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 24) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 25) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 26) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 27) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 28) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 29) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 30) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 31) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 32) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 33) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 34) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 35) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 36) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 37) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 38) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 39) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 40) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 41) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 42) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 43) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 44) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 45) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 46) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 47) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 48) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 49) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 50) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 51) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 52) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 53) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 54) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 55) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 56) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 57) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 58) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 59) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 60) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 61) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 62) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 63) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 64) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 65) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 66) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 67) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 68) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 69) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 70) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 71) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 72) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 73) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 74) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 75) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 76) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 77) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 78) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 79) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 80) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 81) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 82) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 83) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 84) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 85) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 86) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 87) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 88) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 89) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 90) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 91) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 92) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 93) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 94) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 95) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 96) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 97) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 98) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 99) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음 100) 페그필그라스티 및 필그라스티에 작용하는 G-CSF 수용체가 암세포에서 발견됨. 페그필그라스티는 골수성 암과 골수이형성증을 포함한 암 종류를 증가시키는 것으로 작용할 수 있음

**KYOWA KIRIN** 서울특별시 강남구 논현동 430(역삼동), 11층(아세아 타워빌딩) 우)06223  
**한국코와이코기린(주)** TEL:02-3471-4321 FAX:02-3471-4322 Http://www.kyowa-kirin-korea.com



# SPRYCEL®

dasatinib

HELP YOUR PATIENTS  
ALONG THEIR JOURNEY



729KR18PRO1603-01 / Mar 2018

Don't let severe  
**VOD\*** stand  
in the way of recovery



VOD\* : Veno-Occlusive Disease

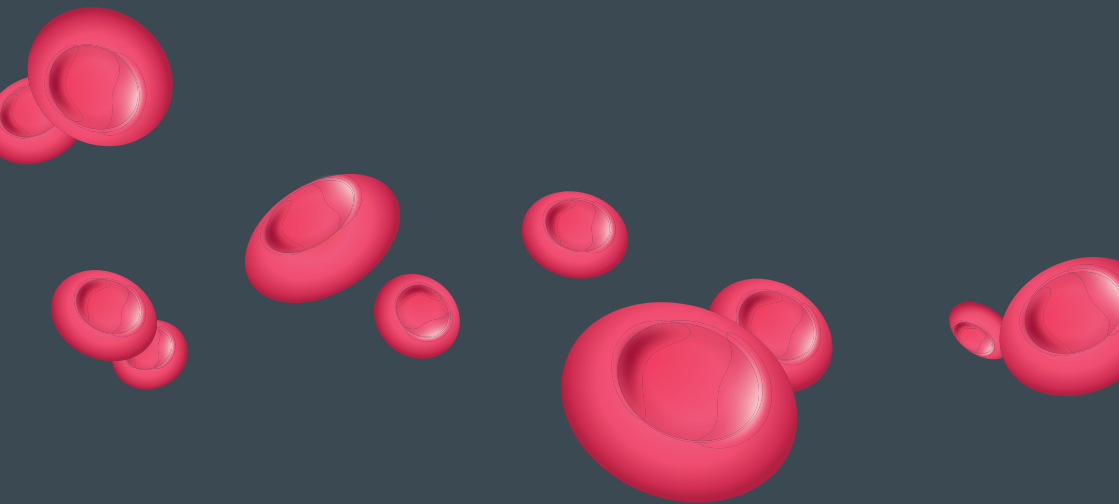
**데피텔리오 주 200밀리그램 (데피브로타이드) Selected Prescribing Information**

**[원료약품 및 구분]** 1mL 중 데피브로타이드 (염기) 80.0mg / 용기체 : 시트르산나트륨수화물, 염산, 수산화나트륨, 주사용수  
**[효능·효과]** 조혈모세포 이상 후 중증 간성폐쇄병의 치료  
**[용법·용량]** 성인 및 소아 (생후 1개월 이상). 이 약의 권장 용량은 6시간 간격으로 6.25mg/kg (25mg/kg/일)으로서 두 시간에 걸쳐 정맥 내 주입한다. 이를 초과하는 용량은 안전성·유효성 자료가 제한적이므로 25mg/kg/일을 초과하여 용량을 증량하는 것은 권장되지 않는다. 이 약은 최소 21일 동안 투여하며 중증 간성폐쇄병의 증상 및 징후가 소실될 때까지 투여를 지속한다. 이 약은 사용 전에 반드시 희석해야 한다. 이 약은 정맥 주사용 5% 포도당 용액 또는 정맥 주사용 9mg/mL (0.9%) 염화나트륨 용액을 사용하여 두 시간에 걸쳐 주입하기)에 적합한 농도로 희석한다. 총 주입량은 개별 환자의 체중에 따라 결정되어야 한다. 이 약의 최종 농도는 4~20mg/mL 범위 이내여야 한다.  
**[주요 사용상의 주의사항]** 1. 다음 환자에는 투여하지 않 것 1) 이 약의 주입용 또는 주입용액의 보관용이 있는 환자 2) 항진균제(카보페네미) 1-PAS를 병용하는 환자 3) 임상적으로 유의한 출혈이 있거나 또는 서로 병용하여 수혈이 필요한 환자 4) 혈액학적으로 불안정한(단일 혈관상조제 사용으로는 평균 동맥압을 유지할 수 없는 환자) 환자 2. 다음 환자에는 신중히 투여할 것 1) 신장에 또는 간장에 환자 2) 혈소판 용집을 유발하는 약물(예: 비스테로이드성 소염제)을 병용하는 환자 3) 임부 또는 수유부 3. 이상반응 1) 핵심 3상 임상시험(2005-01 임상시험)에서 이 약 투여군과 과다조금의 전방적인 이상반응을 발생했을 유사했다. 핵심 3상 임상시험(2005-01 임상시험)에서 이 약에 대해 보고된 이상불응을 기관계 및 빈도별로 아래 표에 정리하였다. 각 빈도군 내에서 이상반응은 중증도가 감소하는 순으로 작성되었다. 흔하게 (≥1/100 ~ <1/10): coagulopathy, cerebral, pulmonary and gastrointestinal haemorrhage, epistaxis, haematuria, catheter site haemorrhage, general haemorrhage, vomiting, hypotension, 혼하지 않게(≥1/1,000 ~ <1/100): hypersensitivity, anaphylactic reaction, cerebral hematoma, conjunctiva, mouth and injection site haemorrhage, haemothorax, haematemesis, melena, diarrhea, nausea, ecchymosis, petechiae, rash, pruritus, pyrexia.

**[제조원자]** Genfarm S.p.A, Piazza XX Settembre 2, Villa Guardia 22079, 이탈리아  
**[대 유통 자]** PATHON(ITALIA S.p.A, 2° Triv. S.V. Via Marcellense 5, 03013 FERENTINO(FR), 이탈리아  
**[수 유통 자]** 유엔텍, 서울특별시 강남구 테헤란로 132

\* 보다 자세한 내용은 제품설명서를 참조하시기 바랍니다.





**ICKSH** 2018  
& 59<sup>th</sup> ANNUAL MEETING