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For patients with **HIGHER-RISK MDS** 

## ISN'T IT TIME FOR TREATMENT INNOVATIONS?

Newly diagnosed patients with higher-risk myelodysplastic syndromes (HR-MDS) face poor outcomes<sup>1</sup>

~40%

will transform to AML<sup>2</sup>

12.4

months mOS in a real-world study<sup>1\*†</sup>

A significant unmet need for the management of HR-MDS still exists1

References: 1. Mozessohn L, Cheung MC, Fallahpour S, et al. Br J Haematol. 2018;181(6):803-815. 2. Bell JA, Galaznik A, Blazer M, et al. Pharmacoeconomics. 2019;3(2):237-245.







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<sup>\*</sup>Observed in adult patients with HR-MDS.1

Hesults are from an observational study that included 1,101 consecutive patients with higher-risk MDS (IPSS intermediate-2/high) and low-blast-count AML (21%-30% blasts) in Ontario, Canada from June 1, 2010 to March 2, 2016.

AML=acute myeloid leukemia, HR-MDS=higher-risk myelodysplastic syndromes, IPSS=international prognostic scoring system, MDS=myelodysplastic syndromes, mOS=median overall survival.

## **NOW AVAILABLE** The Only FDA-Approved Generic

# Deferiprone Tablets 500 mg



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INDICATIONS AND USAGE: Deferiprone is an iron chelator indicated for the treatment of patients with transfusional iron overload due to thalassemia syndromes when current chelation therapy is inadequate.

Limitation of Use: Safety and effectiveness have not been established for the treatment of transfusional iron overload in patients with other chronic anemias

#### IMPORTANT SAFETY INFORMATION

#### WARNING: AGRANULOCYTOSIS/NEUTROPENIA

- Deferiprone can cause agranulocytosis that can lead to serious infections and death. Neutropenia may precede the development of agranulocytosis.
- Measure the absolute neutrophil count (ANC) before starting deferiprone therapy and monitor the ANC weekly on therapy. Interrupt deferiprone therapy if neutropenia develops.
- Interrupt deferiprone if infection develops, and monitor the ANC more frequently.
  - Advise patients taking deferiprone to report immediately any symptoms indicative of infection.

#### WARNINGS AND PRECAUTIONS

If infection occurs while on deferiprone, interrupt therapy and monitor the absolute neutrophil count (ANC) more frequently. Deferiprone can cause fetal harm. Women should be advised of the potential hazard to the fetus and to avoid pregnancy while on this drug.

#### CONTRAINDICATIONS

Hypersensitivity to deferiprone or to any of the excipients in the formulation.

#### ADVERSE REACTIONS

The most common adverse reactions are (incidence ≥ 5%) chromaturia, nausea, vomiting and abdominal pain, alanine aminotransferase increased, arthralgia and neutropenia.

#### DRUG INTERACTIONS

Avoid concomitant use with other drugs known to be associated with neutropenia or agranulocytosis; however, if this is not possible, closely monitor the absolute neutrophil count.

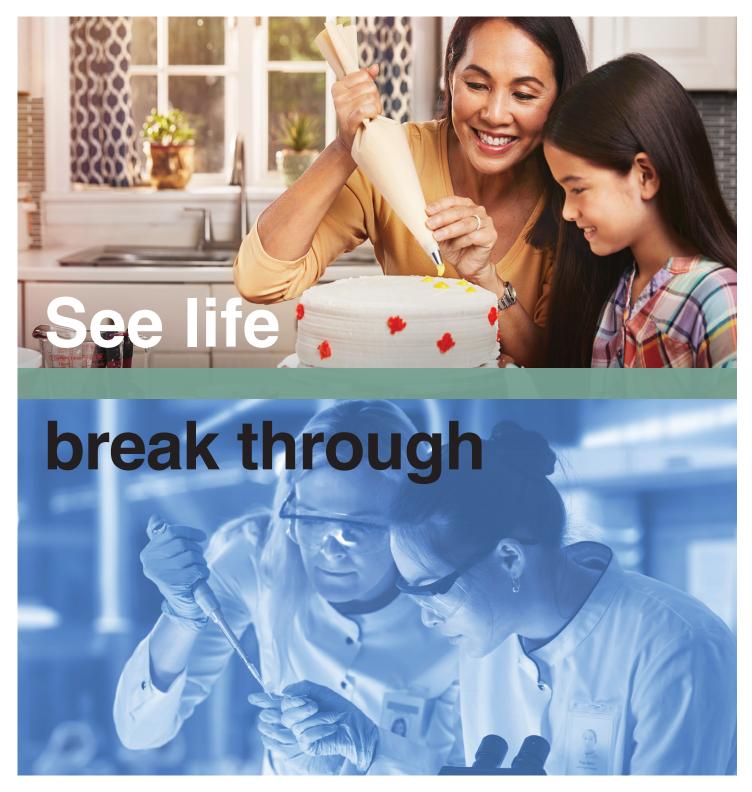
Allow at least a 4-hour interval between deferiprone and mineral supplements, and antacids that contain polyvalent cations (e.g., iron, aluminum, and zinc).

#### **USE IN SPECIFIC POPULATIONS**

Safety and efficacy of deferiprone have not been established in pediatric patients, geriatric patients, or patients with severe hepatic impairment. Nursing mothers should discontinue use of deferiprone or discontinue nursing.



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#### PROGRAM OF THE 62ND ANNUAL MEETING OF

### **AMERICAN SOCIETY OF HEMATOLOGY**



December 5-8, 2020

(Preview Days December 2-4, 2020)

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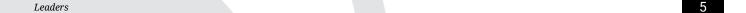
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2019	Richard H. Aster	2014	Kanti Rai	2009	H. Franklin Bunn
2018	Victor Hoffbrand	2013	Sir David John Weatherall	2008	Robert Kyle
2017	Marshall A. Lichtman	2012	James George	2007	Ernest Beutler
2016	Thalia Papayannopoulou	2011	David G. Nathan		

#### **ERNEST BEUTLER LECTURE AND PRIZE**

2020	Courtney DiNardo and Ari Melnick	2016	Hugues de Thé and Zhu Chen	2011	Janet D. Rowley and Brian J. Druker
2019	Sriram Krishnaswamy and Jeffrey I.	2015	Alfred Goldberg and Paul Richardson	2010	Barry S. Coller and Joel S. Bennett
	Weitz	2014	Michael R. DeBaun and Robert P. Hebbel	2009	Yuet Wai Kan and Thomas Maniatis
2018	Alan D'Andrea and Neal Young	2013	Kenneth Kaushansky and David J. Kuter		
2017	Luigi Naldini and Marina Cavazzana	2012	Bruce R. Blazar and Carl H. June		

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2020	Toshio Suda	2010	Leonard I. Zon	2000	David Ginsburg
2019	Philip D. Greenberg	2009	John E. Dick	1999	Irving Weissman
2018	Connie J. Eaves	2008	Neal S. Young	1998	Stuart H. Orkin
2017	James R. Downing	2007	Hal Broxmeyer	1997	Robert Rosenberg
2016	David Scadden	2006	E. Richard Stanley	1996	Stanley Korsmeyer
2015	Barbara C. Furie and Bruce Furie	2005	Rainer Storb	1995	Charles Esmon
2014	Tomas Ganz	2004	Donald Metcalf	1994	Thomas P. Maniatis
2013	Katherine A. High	2003	Ernest Beutler	1993	Thomas P. Stossel
2012	Timothy J. Ley	2002	Kenneth Mann	1992	Stuart Kornfeld
2011	George O. Daley	2001	Samuel F. Lux IV		

#### **WILLIAM DAMESHEK PRIZE**

2020	Adolfo Ferrando	2004	Ronald Levy	1989	Samuel E. Lux IV
2019	Emmanuelle Passegué	2003	Gary Gilliland	1988	Theodore S. Zimmerman
2018	Ross L. Levine	2002	Catherine Verfaillie	1987	Charles Sherr
2017	Benjamin L. Ebert	2001	Brian Druker	1986	Stuart Orkin
2016	Charles Mullighan	2000	David A. Williams	1985	Thomas F. Deuel
2015	John Byrd	1999	Salvador Moncada	1984	Barbara C. and Bruce Furie
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2010	David T. Scadden	1994	George J. Broze, Jr.	1978	Robert D. Rosenberg
2009	Louis M. Staudt	1993	Owen Witte	1977	Yale Nemerson
2008	Kenneth Anderson	1992	Richard D. Klausner	1976	Robert I. Weed
2007	William Vainchenker	1991	Makio Ogawa	1975	Charlotte Friend
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2019 Griffin P. Rodgers 2017 Betty Pace

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2019	William Allen Eaton and Richard A.	2012	David Ginsburg and Richard Aster	2001	Harold R. Roberts H. Franklin Bunn
2017	Larson	2011 2010	Ching-Hon Pui Sanford Shattil	2000	
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#### **HENRY M. STRATTON LECTURE (1970-1991)**

1991	Ralph L. Nachman	1983	Eugene P. Cronkite	1975	E. Donnall Thomas
1990	Malcolm Moore	1982	Ernest A. McCulloch	1974	Ernest Beutler
1989	Aaron J. Marcus	1981	Clement A. Finch	1973	Albert S. Gordon
1988	Robert S. Schwartz	1980	Yuet Wai Kan	1972	Oscar D. Ratnoff
1987	Robert C. Gallo	1979	Henry S. Kaplan	1971	H.G. Kunkel
1986	Bernard Babior	1978	William N. Valentine	1970	W.R. Bruce
1985	Vincent DeVita	1977	Thomas A. Waldmann		
1984	Samuel Rapaport	1976	Wendell F. Rosse		

#### **ASH MENTOR AWARD**

2020	Judith Gasson and Wendy Stock	2015	Curt Civin and Craig Kitchens	2010	Mary M. Horowitz and Harvey F. Lodish
2019	Leonard I. Zon and Michael R. DeBaun	2014	Grover C. Bagby Jr. and John F. DiPersio	2009	Arthur Nienhuis and Stuart H. Orkin
2018	John E. Dick and Reed E. Drews	2013	John Adamson and Stanley Schrier	2008	George R. Buchanan and Timothy J. Ley
2017	Ronald Hoffman and Oliver W. Press	2012	Beverly S. Mitchell and Rainer F. Storb	2007	Edward J. Benz Jr and Harold R.
2016	Laurence Boxer and Ralph L. Nachman	2011	Nancy C. Andrews and Malcolm K.		Roberts
			Brenner	2006	Samuel E. Lux and Deane F. Mosher

#### ABSTRACT ACHIEVEMENT AWARDS

#### ASH OUTSTANDING ABSTRACT ACHIEVEMENT AWARDS

The American Society of Hematology is pleased to recognize the following abstract presenters who received the highest ranking in their categories of undergraduate student, medical student, graduate student, resident physician, and post-doctoral fellow.

#### **UNDERGRADUATE STUDENT**

Georgia Gregory, BS

University of California-San Francisco

#### MEDICAL STUDENT

Yuting Yan

Peking Union Medical College

#### **GRADUATE STUDENT**

Christian Marinaccio, MSc Northwestern University

#### **RESIDENT PHYSICIAN**

Kylee Martens, MD

University of Washington School of Medicine

#### POST-DOCTORAL FELLOW

Xianjiang Lan, PhD

Children's Hospital of Philadelphia

#### ASH-BRITISH SOCIETY OF HEMATOLOGY ABSTRACT ACHIEVEMENT AWARD

This annual award in partnership with the British Society of Haematology (BSH) is granted to up to three British trainees (undergraduate student, medical student, graduate student, resident physician, or post-doctoral (MD or PhD) fellow) who are the first-or-senior author and presenter of the most meritorious submitted abstract. Recipients of this award must be a member of BSH and reside in the United Kingdom.

Deena Iskander, MD Imperial College

Rebecca Shaw, MBChB University of Liverpool

Jayna Mistry, BSc

The University of East Anglia

#### **ABSTRACT ACHIEVEMENT AWARDS**

#### ASH-HEMATOLOGY SOCIETY OF AUSTRALIA AND **NEW ZEALAND ABSTRACT ACHIEVEMENT AWARD**

This annual award in partnership with the Haematology Society of Australia and New Zealand (HSANZ) is granted to up to two Australian or New Zealander trainees (undergraduate student, medical student, graduate student, resident physician, or post-doctoral (MD or PhD) fellow) who are the first or senior author and presenter of the most meritorious submitted abstract. Recipients of this award must be a member of HSANZ and reside in Australia or New 7ealand

Naranie Shanmuganathan, FRACP, FRCPA, MBBS

Royal Adelaide Hospital and SA Pathology

#### ASH-JAPANESE SOCIETY OF HEMATOLOGY ABSTRACT ACHIEVEMENT AWARD

This annual award in partnership with the Japanese Society of Hematology (JSH) is granted to up to three Japanese trainees (undergraduate student, medical student, graduate student, resident physician, or post-doctoral (MD or PhD) fellow) who are the first or senior author and presenter of the most meritorious submitted abstract. Recipients of this award must be members of JSH and reside in Japan.

Yasunori Kogure, MD, PhD National Cancer Center Research Institute

Ryunosuke Saiki, MD Kyoto University

Shunichiro Yasuda, MD

Tokyo Medical and Dental University

#### ASH-IPIG ABSTRACT ACHIEVEMENT AWARD FOR PAROXYSMAL NOCTURNAL HEMOGLOBINURIA (PNH)

This annual award in partnership with International Paroxysmal Nocturnal Hemoglobinuria (PNH) Interest Group (IPIG) is granted to up to two trainees (undergraduate student, medical student, graduate student, resident physician, or post-doctoral (MD or PhD) fellow) who are the first or senior author and presenter of the most meritorious PNH focused abstracts submitted in the fields of Red Cells and Erythropoiesis or Bone Marrow Failure.

Carmelo Gurnari, MD Cleveland Clinic

Noriaki Tsuji, MD Kanazawa University

#### ASH-SOCIETY ITALIANA DI EMATOLOGIA ABSTRACT ACHIEVEMENT AWARD

This annual award in partnership with the Society Italiana di Ematologia (SIE) is granted to up to Italian two trainees (undergraduate student, medical student, graduate student, resident physician, or post-doctoral (MD or PhD) fellow) who are the first or senior author and presenter of the most meritorious submitted abstract. Recipients of this award must be a member of SIE and reside in Italy.

Luca Bertimini, MD

Raffaele Palmieri MD

**GIMEMA** 

University of Rome Tor Vergata

#### JOANNE LEVY, MD, MEMORIAL AWARD FOR OUTSTANDING ACHIEVEMENT

This award was established in 2006 to recognize the current ASH Scholar with the highest scoring abstract for the ASH annual meeting. This award is given in honor of a past Scholar Award recipient and distinguished member of ASH, Joanne Levy, who passed away in 2004. This annual award is made possible by the Levy family to continue her legacy and promote excellence in hematology research.

Annamaria Gulla, MD

**Dana-Farber Cancer Institute** 

#### MARY RODES GIBSON MEMORIAL AWARD IN HEMOSTASIS AND THROMBOSIS

This award was established to recognize the trainee (undergraduate student, medical student, graduate student, resident physician, or post-doctoral fellow) who is the first author and presenter of the highest-scoring abstract submitted in the field of hemostasis and thrombosis. This annual award is made possible by the Mary Rodes Gibson Hemostasis-Thrombosis Foundation to continue the legacy of Mary Rodes Gibson who suffered from severe, type 3 von Willebrand's disease.

Dino Mehic, MD

Medical University of Vienna

#### MINORITY GRADUATE STUDENT ABSTRACT ACHIEVEMENT AWARD

Each year, the American Society of Hematology, offers merit-based Minority Graduate Student Abstract Achievement Awards to select graduate students to acknowledge the accomplishments of and recruit and retain minority graduate students in the field of hematology.

Tre Artis, BA

Harvard University

Mary Figueroa, BS

MD Anderson Cancer Center

Emaan Madany, BS Cedars-Sinai Medical Center

Adedamola Elujoba-Bridenstine, MS

The University of Wisconsin, Madison

Marcus Florez, BS Baylor College of Medicine Zanshe Thompson, MS University of South Carolina

#### **ABSTRACT ACHIEVEMENT AWARDS**

#### **ASH ABSTRACT ACHIEVEMENT AWARDS**

Each year, the American Society of Hematology, offers merit-based Abstract Achievement Awards (formerly Travel Awards) to select individuals to acknowledge the accomplishments of hematologists-in-training. This year's Abstract Achievement Awards recognize undergraduate students, medical students, graduate students, resident physicians, and post-doctoral fellows who are both first author and presenter of an abstract.

Abel Trujillo-Ocampo

Abhay Singh

Abhishek Maiti

Benjamin Diamond

Abhishek Maiti

Benjamin Frost

Abi Vijenthira

Bilgimol Chumappumkal Joseph

Adam Lin

Binbin Zheng

Adam Utley

Binyamin Knisbacher

Ahmad Alotaibi

Bo Zhang

Aisha Jibril Brandon Imber
Akram Mesleh Shayeb Brian Chernak
Akshat Patel Brooks Benard
Albert Kolomansky Bruna Fenerich
Albert Yeh Bruno Oliveira
Aldo Acosta-Medina Bryan Valcarcel

Alex Bataller **Burak Altintas** Alex Niu Carmen Landry Alice Cheuna Caroline Diorio Alina Sadaf Caroline Duault Alissa Visram Caroline Wilson Allison Taylor Catarina Maia Amin Sobh Catherine Gutierrez Amit Subedi Catia Patricia Simoes Cesar Gentille Sanchez Amneet Baiwa **Amy Barber** Chandraditya Chakraborty

Amy Fan Chao Zhang Ana Rio-Machin Charity Oyedeji Anand Patel Charlesantony Aruljothi Anastasia Tsagianni Charlotte Brierley **Andrew Hantel** Charlotte Downes Charlotte Hellmich Andrew Hughes Andrew Johnsrud Chen Wang Andrew Menssen Chen-Cong Wang **Andrew Staron** Chengcheng Liao Andrew Wu Christie Verkleij Andy Zeng Christopher Funk Anil Aktas-Samur Christopher Rushton Anna Hood **Christopher Thom** Anna Luiza Facchetti Vinhaes Cinnie Soekojo

Assumpcao Claudia Perez Carretero Anna Wojcicki Clemence Marcault Annalynn Williams Courtnee Clough Annamaria Aprile Curtis Lachowiez Anne Olazabal-Herrero Cynthia Pelayo Mena Anneke van Diik Dai Chihara Anshul Vagrecha **Daniel Lindsay** Anthos Christofides **Daniel Nathan** Anudishi Tvaqi **Daniel Rivera** Anushka Bhaskar Daniela Hernandez Arata Ishii Danielle Hammond Archana Shrestha Danny Luan Arjun Thapa **David Baker** Ashlesha Odak Debra Van Egeren Ashley Ikwuezunma Deependra Singh

**Devi Sampat** 

Diu Nguyen

Divya Vinjamur

**Dominic Brauer** 

**Dikshat Gopal Gupta** 

**Dimitrios Giannis** 

Ashley Zhang

Ashwin Gupta

**Audrey Sigmund** 

Beatriz Rey Bua

Benedetta Rambaldi

Beau Idler

Donovan Argueta Edward Ayoub Ekaterina Deordieva Elana Thieme Elena Brindley Elena Kum

Elena Monzon Manzano
Eleni Gavriilaki
Elisa Ten Hacken
Elizabeth Krieger
Elizabeth Williams
Ellen Kendall
Elvin Wagenblast
Emily Levy
Emily Limerick
Emma Difilippo
Erin Parry
Esther Cooke
Eugenio Morelli
Evan Chen

Evan Flietner
Evangelia Vlachodimtropoulou
Koumoutsea
Felix Marguez

Fengjiao Wang Feng-qi Liu Ferdows Atiq Fernanda Gutierrez-Rodrigues

Ferran Nadeu
Filip Ionescu
Florian Moik
Fotini Vogiatzi
Francesca Bonello
Franco Castillo Tokumori
Gabriela Sanchez-Petitto

Georgia McCaughan Ghulam Rehman Mohyuddin Giulia Biancon Giulia Maggioni Giulia Petrone Gowtham Annarapu Guohuan Sun

Gao-chao Zhang

George Goshua

Gustavo Sandival-Ampuero Hamza Celik Han Dong Han Zhong Pei Hans Jiro Becker Hanying Wang Harish Eswaran Harry Lesmana Hassan Awada Heejin Cheon

Heidi Schmidt

Helene Duparc

Hennes Tsang

Heng Pan

Hussein Abbas Ifeyinwa Obiorah Igor Novitzky-Basso Ikenna Onyekwere Ilaria Michelozzi Inge Van Der Werf Iris Sheng J. Erika Haydu Jacob Shreve Jamie Oakley

Hind Alotaibi

Hong-Yan Zhao Huimin Zhang

Jan Philipp Bewersdorf Jan Stetka

Jan Stetka Jana Ihlow Jani Huuhtanen Jasmeet Kaur Jeffrey Marsal Jelena Milosevic Feenstra

Jennifer Teichman
Jenny Yoon
Jessica Timms
Jia Chen
Jiajing Qiu
Jianbiao Zhou
Jia-Ning Zhang
Jiarui Liu
Jin-Sup Shin
Jithma Abeykoon
Jiye Liu
Jizhou Zhang
John Baird

John Runge
John-William Sidhom
Jonas Heitmann
Jonathan Day
Jordan Milner
Jordy Van Der Zwet
Jose Alvarez Blanco
Joseph Schroers-Martin
Joshua Fein
Joshua Pritchett
Jovian Yu

Juan Gu
Julia Xu
Juliane Lohmeyer
Juliette Roels
Jun Shen
June Iriondo
June Takeda
Juo-Chin Yao
Justin Jiang
Kai Rejeski
Kai Zhu
Kallesh Jayappa

Karina Barbosa

Kate Dixon

#### **ABSTRACT ACHIEVEMENT AWARDS**

Katharina Waack Metis Hasipek
Katsuyoshi Takata Miaoyan Zhang
Kelly Olsen Michael Slade
Kelsey Temprine Miguel Quijada Alamo

Kenta Yamamoto Min Xia Kerstin Kaufmann Minke Rab Kevin Nuno Minoru Kanaya Kimberly Johansson Misam Zawit Kishan Patel Moayed Ibrahim Kiyomi Morita Mohammed Al Nuaimi Klaudyna Fidyt Momoko Nakamura Monika Kutyna Koji Jimbo Koya Ono Monique Chavez Kristin Larsen Moriah Rabin Kristine Karkoska Moritz Binder

Kylee Maclachlan Muhammad Haroon Shaikh Lakshmi Potluri Muhned Alhumaid Lana Mucalo Na Yoon Paik Larissa Doll Nam Nguyen Laura Eadie Natalia Baran Laura Notarfranchi Nathan Eaton Lauren Merz Nathan Radakovich Leonardo Rivadeneyra Naveed Ali

Lia DeRoin Nayan Jain Nicholas Tschernia Line Lynggaard Ling Tian Nick Anderson Lin-Pierre Zhao Nicole Lopez Linzi Hobbs Nikoleta Bizymi Lisa Marie Kaiser Noemie Leblay Livius Penter Nora Liebers Lorena Panaite Nunki Hassan Luca Biavati Olga Gavrilina Lucie Lanikova Olubusola Oluwole Mackenzie Parker Omar Abughanimeh Madhavi Lakkaraja Othman Al-Sawaf Madison Williams Othmane Jadi Madlen Jentzsch Owais Mian Mahir Khan Pablo Mozas Maliha Ahmad Paige Dausinas Marco Basset Paola Minetto

Parmeshwar Amatya

Patrick Harrington

Patrick Johnson

Patrizia Mondello

Paul Brockelmann

Pavithra Shyamsunder

Marina Martello Peng Zhao

Mareike Rasche

Maria Aivalioti

Mariah Farrell

Marena Niewisch

Maria Selvadurai

Mariateresa Pettinato

Marissa Li

Martin Klatt

Perla Colunga Pedraza

Martin Klatt

Pietro Di Ciaccio

Martin Rodriguez

Poy Theprungsirikul

Masahiro Ikeda

Prajish Iyer

Matteo Da Via'

Prashasti Agrawal

Matthew Cross

Priyanka Pullarkat

Maximilian Alexander Rohnert

Oi Wen

Maximilian Alexander Rohnert Qi Wen

Maximilian Stahl Qiang Liu

Mazie Tsang Qingqing Wu

McKensie Collins Qiu-Sha Huang

Megan Lee Quan Gu

Meghan Pike Radovan Vasic

Meghan Thompson Rafael Alonso Fernandez
Melissa Maltez Raja Prince

Mengyang Di RAM Nampoothiri Meredith Larose Raphael Lutz Renee Cheng
Reona Sakemura
Richa Sharma
Richard Coffey
Robert Kraft
Robert Puckrin
Roberta Azevedo
Rosalinda Termini
Rossella Marullo
Rucha Modak
Ryan Thomas
Ryosuke Shirasaki
Sagar Koduri
Samantha Hershenfeld
Samuel Yamshon

Sanide Fairsion
Sanjal Desai
Sapana Jalnapurkar
Sara Rodriguez
Sara Rubin
Sarah Arthur
Sarah Makhani
Sarah Shaner
Saul Kushinsky
Savanah Gisriel
Senthil Sukumar
Serine Avagyan
Sha Li

Shannon Murphy

Shawn Lee
Shelby Meckstroth
Shelley Herbrich
Shikha Gupta
Shruti Shah
Shuai Chen
Shuang Liang
Shunfeng Hu
Shuting Jiang
Siddharth Kunte
Simona Pagliuca

Simona Pagliuca Siobhan Rice Sobhika Agarwala Solomon Johnson Sophie Herbst Sossena Wood Srikanth Talluri Stephanie Forte Stephanie Luff Stephen Boyle Stephen Chong Sunil Joshi

Sunisa Kongkiatkamon Susan DeWolf Susree Modepalli Swe Mar Linn Swetha Kambhampati

Swe Mar Linn
Swetha Kambham
Sydney Fobare
Taehoon Shin
Tan Sang
Tanaya Shree
Tanzir Ahmed
Tengteng Yu

Thao Trinh

Thiyagaraj Mayuranathan

Thomas Kuczmarski Tiffany Tran Ting Liu **Tingting Hong** Tomasz Kaminski Tristan Lim Tyce Kearl Uri Greenbaum Vaibhav Kumar Valentina Baez Sosa Valentina Cordo' Vanessa Furtado Vanessa Kennedy Vasu Babu Goli Verena Pfister Vickie Kwan Victoria Brooks

Vinicius de Molla Vinicius Molla Vinodhini M Violante Olivari Vitoria Ceni Wei Zuo Wen Zhu Xi Chen Xia Wu Xiaomin Chen Xiaomin Wang Xiaowei Xie Xu Han

Xu Han
Xuan Cai
Xueyan Sun
Ya Zhang
Yan Su
Yang Han
Yang Liang Boo
Yannis Valtis
Yao Yao
Yasmin Alwash
Yazan Migdady
Yazan Numan
Yazan Rouphail

Yejun Wu
Yi Zhao
Yiming Wu
Yiqing Cai
Yiwen Wang
Yongxia Wu
Youjin Wang
Yuki Nishida
Yusuke Isshiki
Yusuke Ito
Yuya Sasaki
Zaid Abdel Rahman

Zaria Williams Zeya Cao Zhongbo Hu Zhuangyi Zhang Zuzana Chyra



## Apply for ASH® training programs and awards.

The American Society of Hematology (ASH) provides many awards and programs to support hematologists in all stages of their careers and to honor those who have helped advance the field of hematology.



Visit www.hematology.org/awards to find your next research opportunity.

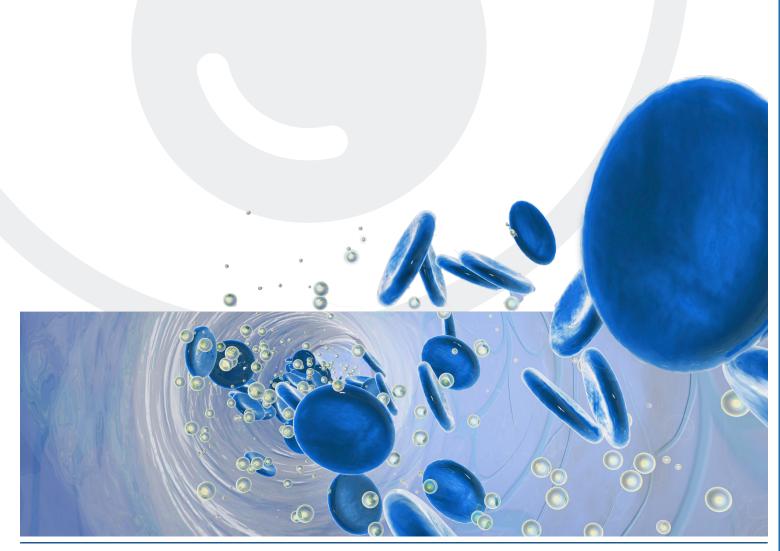
Each year ASH provides more than \$12 million in career development and training awards to early- and mid-career hematologists. Understanding the impact that the global COVID-19 pandemic response has had on the economy and on medical research, the Society continues to provide support and much-needed education and training to our members around the world, including maintaining funding for all 2020-2021 awards.









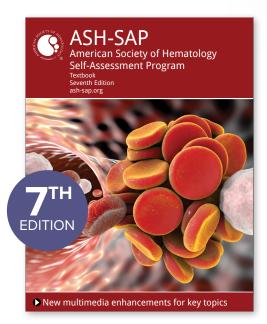


GUIDE TO NAVIGATING MEETING



## American Society of Hematology Self-Assessment Program (ASH\*-SAP)

## THE SEVENTH EDITION OF ASH SAP



The ASH-SAP encompasses both adult and pediatric hematology, including nonmalignant and malignant disorders.

- NEW AND UPDATED CHAPTERS including additional sections on blood cell therapy, immunotherapy and application of CAR T cells
- MULTIMEDIA MODULES including both digital and illustrated animation
- NEW QUESTIONS in the *Question and Answer Book* allow for preparation for the CME or MOC tests
- 75 CME/MOC CREDITS FEATURING 6 TESTS







The Premier Self-Assessment Program for Hematologists

#### **SPECIAL CONFERENCE PRICES**

Premier + CME/MOC Print and online textbook, print Q & A Book, and online CME/MOC exam		20% Off
Member – Active and International	<del>\$530</del> -	\$424
Member – U.S. & International Associate	<del>\$400</del> -	\$320
Member – Graduate/Medical Student/Resident	<del>\$280</del> -	\$224
Non-member	<del>\$680</del>	\$544
<b>Digital + CME/MOC</b> Online textbook and CME/MOC exam		20% Off
	<del>\$430</del> -	20% Off \$344
Online textbook and CME/MOC exam	\$430- \$280-	
Online textbook and CME/MOC exam  Member – Active and International	·	\$344

## VIRTUAL MEETING PLATFORM

Beginning December 2, 2020, the ASH annual meeting will be live at

## annualmeeting.hematology.org

All times are in Pacific time.

Duplication/recording is prohibited.

## All registered attendees are encouraged to log in early

to get acquainted with the site's navigation and experience select meeting content as part of our meeting preview days.

To log into the platform, you will need your ASH username and password that you used to register for the meeting.

## Who to Contact

If you are having difficulty accessing the virtual meeting platform, please contact the ASH Customer Relations Department by emailing customerservice@hematology. org or calling 866-828-1231 (U.S. toll free) or 001-202-776-0544 (for International callers), Monday through Friday, from 8:30 a.m. to 5:00 p.m. Eastern time.

If you have successfully accessed the platform but are having difficulty with one of its features, please use either the online Chatbot, Help, or Contact Us link features within the platform for technical assistance.



All times are in Pacific time. Duplication/recording is prohibited.

## PREVIEW DAYS: December 2-4, 2020

Annual meeting "Preview Days" on the virtual meeting platform will begin on December 2, 2020.

#### **Virtual Platform Orientation Video**

A key feature of the preview will be an orientation video that is designed to provide an overview of the virtual environment so that participants will learn about the best ways to navigate the meeting platform. All participants are encouraged to watch this video in advance.

#### Session Content Available Starting December 2, 2020

#### **On-Demand Education and Scientific Sessions**

Select (pre-recorded) Education and Scientific Program sessions will be available for on-demand viewing starting Wednesday, December 2:

- · Education Sessions
- Education Spotlight Sessions
- · Scientific Committee Sessions
- · Special Scientific Symposia
- · Scientific Spotlight Sessions

#### **Live Q&A Sessions**

Live question-and-answer sessions to accompany the above pre-recorded presentations will be held from Saturday, December 5, through Monday, December 7. These sessions, designated with this icon, will consist of a brief summary of the full-length presentations followed by live interactions with the presenters. Attendees are encouraged to view the pre-recorded presentations during the Preview Days to prepare for the accompanying live Q&A sessions.

#### **On-Demand Special Interest Sessions**

- ASH Choosing Wisely® Campaign: 2020 ASH Choosing Wisely Champions (Live Q&A on December 6)
- How to Get Published in a Peer-Reviewed Journal
- · How to Peer Review a Scientific Paper
- ASH Practice Partnership Lunch Program
- · Grassroots Network Lunch

## Sessions Held Live During Preview Days (see pages 37-39)

- Scientific Workshops @ ASH (December 2-4)
- ASH-a-Palooza (December 3-4)
- Special Symposium on Quality: Blood, Debt and Tears: Tackling Burnout in Hematology (December 3)
- Satellite Symposia (December 4)

## CORE DAYS: December 5-8, 2020

The 62nd ASH Annual Meeting and Exposition officially begins at 7:00 a.m. Pacific time on Saturday, December 5, 2020.

The core meeting days and times are:

Saturday, December 5

7:00 a.m. - 3:30 p.m. Pacific time

Sunday, December 6

7:00 a.m. - 3:30 p.m. Pacific time

Monday, December 7

7:00 a.m. - 3:30 p.m. Pacific time

Tuesday, December 8

7:00 a.m. - 3:00 p.m. Pacific time

During the meeting and for the duration of your subscription to the platform, you will be able to access all annual meeting content including:

- Special-Interest Sessions with Live Q&A
- Education Program and Scientific Program
   On-Demand Presentations and Live Q&A Sessions
- Spotlight Sessions
- Oral Abstract Sessions with Live Q&A
- Poster Presentations
- Award Lectures
- Industry Solutions Center including the Exhibit Hall
- Product Theaters

22 Virtual Meeting Platform

All times are in Pacific time. Duplication/recording is prohibited.

## Post-Meeting Events: December 9-11, 2020

#### Sessions Held Live Post Meeting (see page 49)

After the core dates of the annual meeting, additional sessions will be held Wednesday through Friday, December 9–11, including:

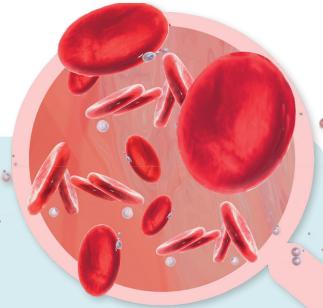
- ASH Poster Walks (December 9–10)
- Company Focus on Disease Posters (December 9–11)
- Satellite Symposia (December 9)

More events to be added! Check the mobile app and online for the latest schedule.

## Binge Watching—Catch Up on Content



Participants will be able to watch presentation recordings on demand for sessions and posters that were presented earlier in the meeting.



## Search For Sessions And Fill Your Calendar

#### **Session Search and Filters**

To help you navigate to the sessions you want to experience, the virtual meeting platform will feature detailed filters that will narrow down available sessions based on your desired areas of interest. Once on the sessions page, choose one or more filters to see all sessions on a specific topic (or topics).

To further narrow your search, use the search bar to look for a specific topic.

#### **Adding Sessions to Calendar**

Some sessions will be available live, while others will be available for on-demand viewing. When you identify a session of interest, select "Add to Calendar" to add the session to your personal Outlook, iCal, or Google Calendar. For live sessions the session's pre-determined air date will populate in the calendar appointment, but for on-demand sessions you have the option of adjusting the session date and time so that you remember to come back and view the session at your convenience.

The annual meeting mobile application will also allow participants to add sessions to their calendar in the mobile application; these favorited sessions will automatically appear under a "My Sessions" filter within the meeting platform sessions page.

Virtual Meeting Platform 23

All times are in Pacific time. Duplication/recording is prohibited.

## Networking

ASH understands that connecting with colleagues is one of the most important reasons that people love attending the ASH annual meeting. Fortunately, ASH's virtual meeting provides several different options for connecting with friends and colleagues during the meeting.

## ASH Community Collage

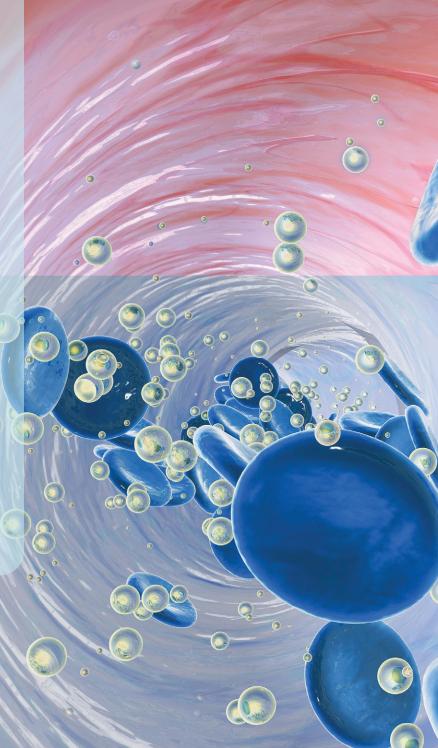
Take a break from the science and visit the ASH Community Collage to view and contribute to a real-time collection of attendee-generated photos, videos, and content posted to social media on a variety of fun topics. ASH will issue daily photo and video challenges for attendees to display live on the ASH Community Collage.

#### **Connect with Participants**

From the virtual meeting main page, visit the "Connect with Participants" page to find your friends and colleagues, engage in direct instant message chat with them or set up virtual video chats on a one-on-one basis, or organize group discussion for up to 50 people. The Connect with Participants feature can also use Artificial Intelligence (AI) matchmaking to find attendees whom you may want to meet.

#### **Hallway Conversations**

Under normal conditions during an in-person meeting, there are very active conversations held in the hallways in between session times. This is intended to stimulate the same type of dialogue and exchanges in a virtual setting. To participate in casual discussion-board-style conversations with large groups of attendees, visit the Hallway Conversations page.













# Visit ASHNewsDaily.org, the official website of ASH News Daily

ASH News Daily is the only official newspaper of the ASH Annual Meeting. Check in with ASHNewsDaily.org for regular coverage of this year's virtual annual meeting, including:

- Previews of sessions, workshops, and special events you won't want to miss
- Expert commentary and highlights from the Education and Scientific Programs
- Coverage from General Sessions, including this year's Plenary Scientific Session, Ham-Wasserman Lecture, and more
- Handy how-to guides for social media and getting the most out of your virtual meeting experience
- Video coverage from ASH News TV
- A daily schedule to help you stay in the know.

## AMERICAN SOCIETY OF HEMATOLOGY 62ND ASH® ANNUAL MEETING AND EXPOSITION

MEETING DATES: DECEMBER 5-8, 2020 PREVIEW DAYS: DECEMBER 2-4, 2020

#### **GENERAL INFORMATION**

All times are in Pacific time. Duplication/recording is prohibited.

#### PURPOSE OF ASH SCIENTIFIC AND EDUCATIONAL MEETINGS

The mission of the American Society of Hematology (ASH) is to further the understanding, diagnosis, treatment, and prevention of disorders affecting the blood, bone marrow, and the immunologic, hemostatic, and vascular systems, by promoting research, clinical care, education, training and advocacy in hematology. In accordance with this mission, the primary purpose of scientific

meetings organized by ASH, including the Society's annual meeting, is to facilitate the exchange of scientific information and clinical results related to the field of hematology. Another important goal of ASH-organized meetings is to assist physicians and scientists in developing and maintaining academic collaborations that will generate new knowledge, ultimately benefiting patients.

#### REGISTRATION

The American Society of Hematology is pleased to offer the 62nd ASH Annual Meeting and Exposition as an all-virtual experience. ASH looks forward to providing attendees with access to an innovative virtual meeting platform built for learning, collaboration, and networking.

ASH is offering new virtual meeting registration packages for members and non-members. The multiple registration options give attendees maximum flexibility with varying length of access to the virtual meeting platform to suit their individual needs. Each registration option provides attendees with access to the virtual meeting platform during the live, key dates of the meeting (December 5–8, 2020) to participate in live sessions, live Q&A, networking, CME/MOC, exhibit halls, and more. In addition, registrants will enjoy ondemand access to all sessions for the duration of their registration package. ASH suggests that you make your choice based upon how long you will access the on-demand content after the core meeting dates.

Registration is available now at hematology.org/meetings/annual-meeting/registration-information. Those who have previously registered may upgrade their subscription selection at any time by contacting the Registration Center.

#### **Virtual Meeting Package Options**

The virtual meeting packages were designed to give attendees maximum flexibility. Each option below provides access to the virtual meeting platform including Preview Days that will begin on December 2, 2020.

- Real-Time Experience: Access for 7 Days, through December 11, 2020 Provides access during peak dates and hours of the meeting with the largest "live" audience at a given time, maximizing opportunities for interactions, networking, and earning CME/MOC credits, which are only available for attending live sessions.
- Added Flexibility: Access for 30 days, through January 4, 2021
  Adds flexibility for you to continue watching on-demand
  sessions after the meeting ends; CME/MOC will be available
  only for participation in live sessions.
- Best Value: Access for 90 days, through March 5, 2021
   Provides maximum flexibility: the ability to participate in all live sessions and networking events during the core dates of the meeting, plus extended access to on-demand content, at the best price per day of access; CME/MOC will be available only for participation in live sessions.

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#### **GENERAL INFORMATION**

All times are in Pacific time. Duplication/recording is prohibited.

#### **Late Purchase Registration Fees (Beginning November 6)**

Registration Category	Real-Time Experience (7-Day Access through December 11, 2020)	Added Flexibility (30-Day Access through January 4, 2021)	Best Value (90-Day Access through March 5, 2021)
Member (Active and International)	\$350	\$450	\$550
Non-Member	\$750	\$850	\$950
ASH Associate Member	\$100	\$150	\$175
ASH Fundamentals for Hematology Fellows Member	\$0	\$50	\$75
International Associate Member	\$100	\$150	\$175
Resident Member	\$100	\$150	\$175
Graduate/Medical Student Member	\$100	\$150	\$175
Non-Member in Training	\$750	\$850	\$950
Allied Health Professional	\$450	\$550	\$650
Honorary/Emeritus (before 1/1/15)	\$0	\$50	\$75
Honorary/Emeritus (after 1/1/15)	\$100	\$150	\$175

#### **CONFLICT-OF-INTEREST POLICY**

ASH is committed to providing quality, objective, balanced, and scientifically rigorous continuing medical education activities that are free from commercial and non-commercial bias. In accordance with the rules of the Accreditation Council for Continuing Medical Education (ACCME), all meeting session chairs, speakers, and moderators are required to disclose in writing any conflicts they may have prior to the meeting. All poster presenters are required to disclose in writing any conflicts they may have prior to the meeting and display their disclosures as a part of their poster presentation. If bias, actual or perceived, occurs during the presentations, session attendees are encouraged to address such bias during the question-and-answer periods following the presentations.

All ASH annual meeting presenters (including chairs, speakers, and moderators) are asked to disclose any relationships of the following types: Employment, Consultancy, Equity Ownership, Research Funding, Honoraria, Patents & Royalties, Speakers Bureau, Membership on an entity's Board of Directors or advisory committee, and any other financial relationship.

Any questions about this policy or concerns regarding disclosures should be directed to CME@hematology.org.

#### CONTINUING MEDICAL EDUCATION INFORMATION

#### **Educational Objectives**

Upon completion of this educational activity, participants should be able to:

- Employ the knowledge gained regarding the diagnosis and treatment of benign and malignant hematologic disorders to improve patient care;
- · Discuss state-of-the-art research in hematology; and
- Analyze the potential contribution of novel, not-yet-approved modalities of therapy to current evidence-based management of hematologic disorders.

#### Accreditation

The American Society of Hematology is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The American Society of Hematology designates this live activity for a maximum of 25 AMA PRA Category 1 Credits<sup>™</sup>. Physicians should

claim only the credit commensurate with their participation in the live activity.

#### **CME Certificate Eligibility**

ASH is accredited to provide AMA PRA Category 1 Credits™ to physicians only. The American Medical Association (AMA) defines physicians as those individuals who have obtained an MD, DO, or equivalent medical degree from another country.

Physicians not licensed in the United States who participate in this CME activity are also eligible for AMA PRA Category 1 Credits™.

#### **How to Obtain a CME Certificate**

A processing fee of \$30 will be charged for CME certificates. Attendees may complete the Annual Meeting Evaluation Surveys to claim their CME credits and print their CME certificates through the ASH website (<a href="https://www.hematology.org">www.hematology.org</a>) by clicking the CME link on the homepage. The online process for claiming CME credits and printing a CME certificate for the 62nd ASH Annual Meeting must be completed no later than April 16, 2021.

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#### **GENERAL INFORMATION**

All times are in Pacific time. Duplication/recording is prohibited.

#### **ABIM MOC**

Participation in this CME activity enables the attendee to earn up to 25 Medical Knowledge MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Attendees will earn MOC points equivalent to the amount of CME credits claimed for the activity. You will be asked to submit a reflective statement on how you intend to change your practice based on the knowledge you gained from participation in the meeting. Upon review and approval, your points will be submitted to the ACCME by ASH and will appear in your ABIM Physician Portal within 24 hours. In order to receive ABIM MOC points for the 62nd ASH Annual Meeting, the online process for claiming CME/ABIM MOC credits must be completed by April 16, 2021.

#### **Certificate of Attendance**

Non-physicians and other health-care professionals attending the meeting can receive a Certificate of Attendance by completing the Annual Meeting Evaluation Surveys through the ASH website (www.hematology.org) beginning Saturday, December 5, 2020.

The online process of filling out the annual meeting survey must be completed no later than April 16, 2021. There is no charge to meeting registrants for this service.

## **European Board of Accreditation in Hematology CME Credit**

ASH is applying for accreditation with the European Board of Accreditation in Hematology (EBAH). If you plan to claim EBAH-CME credit for attending the meeting, please check the appropriate box during the registration process or after the meeting in the online evaluation site. There is no fee required in order to be eligible for EBAH-CME Credit Points. For additional information about EBAH-CME Credit points, visit the EBAH website (http://ebah.org). For information about claiming EBAH CME for the 62nd ASH Annual Meeting email cme@hematology.org.

#### INDUSTRY SOLUTIONS CENTER

The Industry Solutions Center will provide participants with a starting point to access new and exciting industry content. From this area you will be able to find:

#### **Exhibit Hall**

Over 100 pharmaceutical companies, medical suppliers, clinical diagnostic and research-based companies, publishers, and nonprofit organizations will be participating in the 62nd ASH Annual Meeting and Exposition. The virtual exhibit hall will feature the latest technology and research as well as a wide range of products and services. Exhibits will be available beginning on Saturday, December 5, and will remain available for the duration of your registration subscription.

#### **Satellite Symposia**

On Friday, December 4, attendees are invited to participate in the Satellite Symposia. The Satellite Symposia are industry-supported, CME-certified symposia that are offered the day preceding the ASH annual meeting. These sessions are not part of the official ASH annual meeting program and are planned solely by the sponsoring company. Additional Satellite Symposia will be offered on Wednesday, December 9, as well.

#### **New This Year: Company Focus on Disease Posters**

Based on the success of the inaugural ASH Poster Walk session in 2019, ASH is excited to introduce an opportunity for exhibiting companies to feature a curated group of poster presentations. Each Company Focus on Disease Posters will showcase up to six highlighted annual meeting posters as chosen by the sponsoring company and will include a panel discussion with select poster presenters and company representatives. Each session will last one hour and will be held in the following windows:

Wednesday, December 9... 8:00 a.m. – 2:00 p.m. Pacific time Thursday, December 10... 8:00 a.m. – 2:00 p.m. Pacific time Friday, December 11..... 8:00 a.m. – 2:00 p.m. Pacific time

## New This Year: ASH Pharmaceutical Pipelines Directory and Clinical Trials Directories

The new ASH Pharmaceutical Pipelines and Clinical Trials Directories will provide health care professionals access to current information on the status of hematologic pharmaceuticals in development to encourage and stimulate meaningful dialogue with industry.

The Pharmaceutical Pipelines Directory will serve as a resource providing health care providers with current information on the status of hematologic pharmaceuticals in development. This repository is searchable by hematologic disease state, phase, keyword, and company name. Listings will include compound name, compound type, indication, and phase.

The Clinical Trials Directories will be searchable by hematologic disease state, phase, recruitment status, location, company name, and keyword. Listings will include compound name, study title, NCT number with link to *clinicaltrials.gov*, study type, trial locations, and contact information.

#### **Product Theaters**

Product Theaters feature exhibitor presentations on new research findings and products to groups of annual meeting attendees.

The Product Theater sessions offered at the times listed below will be solely promotional in nature; therefore, continuingmedical education credits will not be offered.

Saturday, December 5 . . . . 11:00 a.m. – 12:00 noon Pacific time Sunday, December 6 . . . . . 11:00 a.m. – 12:00 noon Pacific time Monday, December 7 . . . . . 10:30 a.m. – 11:30 a.m. Pacific time

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#### **GENERAL INFORMATION**

All times are in Pacific time. Duplication/recording is prohibited.

#### **POSTER PRESENTATIONS**

#### **New Poster Format**

New This Year: Poster presentations will be shared via a brief Power Point presentation with accompanying audio.

Poster Session I – Saturday, December 5 7:00 a.m. – 3:30 p.m. Pacific time Poster Session II – Sunday, December 6 7:00 a.m. – 3:30 p.m. Pacific time Poster Session III – Monday, December 7 7:00 a.m. – 3:00 p.m. Pacific time

#### **PosterCast**

ASH partners with PosterCast to enhance learning in the Poster Sessions at the ASH Annual Meeting. PosterCast is a free iPhone app that will allow meeting attendees to stream the recorded poster presentations in addition to the recording being presented on the

ASH virtual meeting platform. This delivery method is ideal for times when participants are away from their computer and have access to their mobile phone or tablet.

#### **ASH Poster Walks**

Poster walks with content curated by ASH will highlight six posters on a specified topic. Poster authors and key opinion leaders will engage in a panel discussion on the significance of the research presented followed by a live Q&A.

Wednesday, December 9...7:00 a.m. – 7:45 a.m. Pacific time Wednesday, December 9...3:00 p.m. – 3:45 p.m. Pacific time Thursday, December 10...7:00 a.m. – 7:45 a.m. Pacific time Thursday, December 10...3:00 p.m. – 3:45 p.m. Pacific time Friday, December 11....7:00 a.m. – 7:45 a.m. Pacific time Friday, December 11....3:00 p.m. – 3:45 p.m. Pacific time

#### **ASH FOUNDATION RUN/WALK**

The 2020 ASH Foundation Run/Walk has transitioned to a virtual event. Plan to run or walk your own 3K or 5K route between Friday, November 27, and Friday, December 11, 2020! Register at hematology.org/foundation/run-walk.

To get started, register for the 3K or 5K event. As you run or walk, use the free RaceJoy app or log into your run/walk account to upload

your time and see your results appear on our live leaderboards. Proceeds from all individual and group registration fees, as well as additional individual donations will benefit the ASH Restart Award Fund. The RaceJoy app is available in the App Store or Google Play Store.

#### **ASH-A-PALOOZA**

The "Trainee Day" attendees may know from past annual meetings has been re-imagined as ASH-a-Palooza! What has emerged is a new educational experience that offers a relaxed, open learning environment for trainees with multiple opportunities for micro learning. All registered attendees are welcome but Trainees, especially, will not want to miss out on the fun. The virtual ASH-a-Palooza will be held from 7:00 a.m. – 12:00 noon Pacific time on Thursday, December 3, and Friday, December 4, and will feature traditional ASH-a-Palooza content in addition to some exciting new components including:

ASH Talks: 20-minute TED-style talks

- Blood Drops: rapid-fire, micro-learning sessions covering a range of clinical and career issues of interest to hematology trainees
- Blood Buddies: one-on-one, ten-minute mentoring sessions (trainees only)
- NEW Blood Buddy Forums: virtual spaces where faculty will answer questions from a group of attendees (trainees only)
- Special Symposium on Quality: Blood, Debt and Tears: Tackling Burnout in Hematology
- · Trainee Didactic Sessions

#### **ASH WELLNESS STUDIO**

Between sessions and throughout the day, ASH will feature informal micro-learning on various aspects of resiliency and wellness. We will also offer Daily Zen classes in yoga and tai chi to get you up and

moving. Finally, ASH will close the day with a chance to relax with daily meditation classes.

#### **ADDITIONAL RESOURCES**

#### **ASH Job Center**

The ASH Job Center connects attendees to open hematology and hematology-oncology job opportunities throughout the world. This resource makes it easy to find available positions; search by job title, location, type of employment, or educational requirements. New features include the ability to post your resume and save job listings of interest. Access is available year-round on the ASH website, this service is always free for job seekers.

#### Mobile App

ASH's mobile application will provide program and exhibitor information, messaging capability, and general information happening with the 2020 annual meeting. The application includes the full text of the abstracts and the articles available in *Hematology 2020* (the ASH Education Program). The application will allow users to add a session to their device's calendar which will build their itinerary for the meeting. A login is no longer required to view application content; a login is only required to contact other attendees and view Education Program articles.

The following smartphones are supported: iPhone and Android; the application will also support the iPad and Google tablets.

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#### **MEETING RULES AND REGULATIONS**

## Participation Requirements and Behavior of All Attendees

False certification of individuals as paid ASH annual meeting attendees, any method of assisting unauthorized persons to gain access to the ASH annual meeting virtual platform, or inappropriate conduct, including but not limited to harassment, threatening actions, or disruptive conduct, will not be tolerated and will be just cause for revoking access to the virtual meeting platform and any related components. ASH reserves the right to expel all parties involved and has no obligation to refund registration fees paid.

All attendees will conduct themselves in a professional manner that is welcoming to all participants and free from any form of discrimination, harassment, or retaliation. Attendees will treat each other with respect and consideration to create an atmosphere of inclusiveness, professionalism, and collegiality. If you or anyone you know is being treated inappropriately, please contact customerservice@hematology.org as soon as possible.

#### **Participation of Financial Professionals**

Financial professionals and other individuals whose principal reason for attending the meeting is to seek business opportunities or obtain information affecting investment positions are welcome to register for the meeting. However, the educational and scientific aspects of the meeting are always top priority. Financial professionals are required to identify themselves when interacting with presenters, particularly when asking questions for which the answers may have implications for corporate valuation or positions in equity markets. Speakers and moderators are also asked to give preference to questioners with scientific or clinical inquiries.

#### **Virtual Meeting Platform Data Collection**

As a participant of the meeting, you have read and agreed to ASH's Privacy Policy (hematology.org/about/privacy-policy) and ASH's Terms of Service (hematology.org/about/terms-of-service) that are available on the ASH website. Attendees who have questions or concerns can contact ashregistration@spargoinc.com.

## Photography and Recording of Copyrighted Material at the ASH Annual Meeting

#### A. General

Materials presented at the American Society of Hematology ("ASH") annual meeting, including all slides, written and oral presentations, posters, and other materials displayed, shown, or otherwise published during the ASH annual meeting (the "Meeting Materials"), are protected by copyright and may not be publicly displayed or republished without the express written consent of the copyright owner, except as expressly provided in this Policy.

#### B. Photographs and Audio Recording

 Limited Right to Share: Except as provided in Section B.2 of this Policy (hematology.org/meetings/annual-meeting/ attendee-resources/photography-and-recording#b2), Attendees of the ASH annual meeting may take photographs, screen grabs, and make audio recordings (but no video recordings or live-streaming) of Meeting Materials for personal, non-commercial use, which are licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International license (available in its entirety at <a href="http://creativecommons.org/licenses/by-nc-nd/4.0/legalcode">http://creativecommons.org/licenses/by-nc-nd/4.0/legalcode</a>).

This means that, except as provided in Section B.2 of this Policy, Attendees may share a limited number of photographs, screen grabs, or short audio recordings of the Meeting Materials in a reasonable manner, as determined by ASH, in any medium or format subject to the following terms:

- Attribution: an Attendee must give appropriate credit to the original author, and may not in any way suggest that the original author endorses the Attendee or his or her use.
- b. Non-Commercial: an Attendee may not use the Meeting Materials for commercial purposes; and
- c. No Derivatives: if an Attendee remixes, transforms, or builds upon the Meeting Material, he or she may not distribute or publish the modified material.
- 2. Poster and Exhibit Hall Presentations: Attendees of the ASH annual meeting may take photographs and screen grabs and make recordings of Meeting Materials associated with Poster and Exhibit Hall presentations and displays for personal, non-commercial, use only. Attendees are strictly prohibited from sharing Meeting Materials associated with Poster Presentations or exhibit hall displays without the express consent of the presenter or exhibitor, respectively, and the copyright owner of such Meeting Materials.

#### C. No Video Recording, Live Audio, or Video Streaming

Sharing any recordings of Meeting Materials, including live streaming audio or video recordings, is strictly prohibited.

#### D. Violators

Violators of this Policy may have their access to the virtual meeting platform revoked.

#### E. Disclaimer

Portions of the ASH annual meeting will be recorded. Any photographs or recordings taken during the meeting may be used in future ASH publications, online, or in other ASH materials. Attendance or participation in the meeting constitutes an agreement with ASH by the registrant for the Society to use and distribute the registrant's image or voice in photographs, videotapes, audiotapes, or other electronic media pertaining to the ASH annual meeting events and activities.

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Notes:			

# **NON-CME SESSIONS**

### **NON-CME SESSIONS**

ASH is committed to continuously re-evaluating our policies and processes to ensure that they align with the Accreditation Council for Continuing Medical Education's (ACCME) increasingly stringent standards. The ACCME defines pharmaceutical and biotechnology companies as commercial interests and categorically considers any presentation given by employees of industry to be promotional in nature.

This year ASH will offer a number of non-certified sessions in programs that are usually eligible for CME credit. These sessions contain one or more talks presented by an employee or owner of an ACCME-defined commercial interest.

All times are in Pacific time. Duplication/recording is prohibited.

The following sessions (marked with GOO-CME) ) with industry-employed presenters will not be offered for CME credit:

General Sessions

**Presidential Symposium** 

**Education Program** 

Aggressive Lymphomas: What Novel Approaches Are Ready for Prime Time? Live Q&A

Understanding How to Manipulate the Immune
System in Immunotherapy for Lymphoma Live Q&A

Scientific Committee Sessions

Joint Session: Scientific Committee on Hematopathology and Clinical Laboratory Hematology & Scientific Committee on Lymphoid

Neoplasia: Getting the Most from Minimal Residual Disease Live O&A

Scientific Committee on Epigenetics and Genomics: RNA in Normal and Malignant Hematopoiesis Live Q&A

Scientific Committee on Thrombosis and Vascular Biology: Gut Microbiome and the Endothelium Live Q&A

Scientific Committee on Transplantation Biology and Cellular Therapies: Challenges in Cell Therapy: Relapse and Toxicities Live Q&A

Special Scientific Symposia

Friend or Foe: The Microbiome, Antibiotics, and Death after Transplant Live Q&A

Special Symposium on the Basic Science of Hemostasis and Thrombosis Live Q&A

In addition, **all** sessions in the following programs are not offered for CME credit:

ASH-A-Palooza (except Special Symposium on Quality)

ASH Poster Walks

Company Focus on Disease Posters

Satellite Symposia (accredited via third party)

Poster Viewing Sessions

**Product Theaters** 

Scientific Workshops @ ASH

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Notes:		

Notes:		



As a global hematology community,
ASH understands the importance
of having individuals with diverse
perspectives and experiences in all
areas of the field. Through various
ASH programs and committees,
ASH continues its long-standing
commitment to combating inequities
in hematology, supporting scientists
and clinicians from backgrounds
underrepresented in medicine, and
embracing diverse voices across the
patient and health care communities.

#### How you can help:

- Become a mentor. Serve as a mentor to scientists of underrepresented backgrounds in the ASH Minority Recruitment Initiative.
- Recognize exemplary colleagues. Nominate colleagues who represent or reflect diverse experiences for leadership opportunities at ASH.
- Recruit diverse populations for clinical trials. The more
  we know about underrepresented communities, the more
  we can help. Work to recruit diverse participants in clinical trials
  through the ASH Research Collaborative.
- Join the ASH Grassroots Network. Stay up to date on all of ASH's advocacy efforts, such as the ASH Sickle Cell Disease Initiative.
- Donate. Support the ASH Minority Recruitment Initiative or the ASH Sickle Cell Disease Initiative.
- Research. Apply for ASH funding to support your research on health disparities and the social determinants of health at your home institution.
- Participate in a listening session. Contribute your story and listen the experiences of others traditionally disadvantaged in medicine.

Learn more about ASH's efforts to continue to build and nurture a global hematology community. Visit www.hematology.org/DEI.



MEETING SCHEDULE



# THE BITE UNIVERSE IS EXPANDING WITH THE GOAL OF TARGETING MULTIPLE TUMOR TYPES

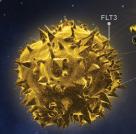
Amgen is contributing to the advancement of cancer treatment with the investigational BiTE® immuno-oncology platform. This versatile technology is engineered to deliver off-the-shelf therapies that direct patients' own T cells to target tumor-associated antigens, activating their cytotoxic potential.<sup>1,2</sup> Currently being investigated in multiple tumor types and extended half-life therapies, BiTE® technology is designed to close the space between patients' T cells and tumors:<sup>1,3</sup>

#### Visit amgenoncology.com to learn more



 $BCMA, B-cell\,maturation\,antigen; CD,\,cluster\,of\,differentiation;\,CLDN18.2,\,Claudin-18\,isoform\,2;\,DLL3,\,delta-like\,protein\,3;\,FLT3,\,FMS-like\,tyrosine\,kinase\,3;\,MUC17,\,mucin\,17;\,PSMA,\,prostate-specific\,membrane\,antigen.$ 

References: 1. Baeuerle PA, Kufer P, Bargou R. Curr Opin Mol Ther. 2009;11:22-30. 2. Frankel SR, Baeuerle PA. Curr Opin Chem Biol. 2013;17:385-392. 3. Amgen. Amgen Pipeline. Accessed May 27, 2020.



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# DAY-AT-A-GLANCE

## AMERICAN SOCIETY OF HEMATOLOGY 62ND ASH® ANNUAL MEETING AND EXPOSITION

#### **DAY-AT-A-GLANCE**

**DECEMBER 2-11, 2020** 

All times are in Pacific time. Duplication/recording is prohibited.

#### WEDNESDAY, DECEMBER 2, 2020

7:00 a.m. - 10:00 a.m. Scientific Workshops @ ASH

Scientific Workshop on Infectious Disease and Coagulation

Scientific Workshop on Myeloid Development Scientific Workshop on Tumor Immune Interactions in Lymphoid Malignancies

#### THURSDAY, DECEMBER 3, 2020

7:00 a.m. - 7:10 a.m. ASH-a-Palooza

Welcome Video and Opening Song

7:00 a.m. - 10:00 a.m. Scientific Workshops @ ASH

Scientific Workshop on Immune Profiling and Minimal Residual Disease Testing in Multiple Myeloma

Scientific Workshop on Interplay between Coagulation and Malignancy

7:15 a.m. – 7:55 a.m. ASH-a-Palooza

Blood Drop: ASH MEI Blood Drop: CRTI

**Blood Drop: Health Disparities** 

Blood Drop: Hemostasis and Thrombosis

Blood Drop: HONORS Blood Drop: MMSAP Blood Drop: PhD Blood Drop: Phy-Sci

Blood Drop: Sickle Cell Disease

8:00 a.m. - 8:40 a.m. ASH-a-Palooza

ASH Talk 1: Leadership

8:45 a.m. - 9:25 a.m. ASH-a-Palooza

Blood Drop: ASH MEI Blood Drop: CRTI

Blood Drop: Health Disparities

Blood Drop: Hemostasis and Thrombosis

Blood Drop: HONORS Blood Drop: MMSAP Blood Drop: PhD Blood Drop: Phy-Sci

Blood Drop: Sickle Cell Disease

9:30 a.m. - 11:00 a.m. ASH-a-Palooza

Special Symposium on Quality: Blood, Debt and Tears: Tackling Burnout in Hematology

10:00 a.m. - 12:00 p.m. ASH-a-Palooza (Open to Trainees Only)

Blood Buddies: Adult Clinical Malignant Hematology Blood Buddies: Adult Clinical Non-Malignant Hematology

Blood Buddies: Lab & Translational Hematology Blood Buddies: Pediatric and Adult BMT

Blood Buddies: Pediatric Clinical Malignant Hematology Blood Buddies: Pediatric Clinical Non-Malignant Hematology

Blood Buddies: PhD Careers

Blood Buddies: Quality Improvement

Blood Buddy Forum: Adult and Pediatric BMT

Blood Buddy Forum: Adult Clinical Malignant Hematology Blood Buddy Forum: Adult Clinical Non-Malignant Hematology Blood Buddy Forum: Clinical Careers in Hematology (Private Practice)

Blood Buddy Forum: Government Careers (NIH and FDA)

Blood Buddy Forum: Industry Careers

Blood Buddy Forum: Laboratory and Translational Hematology

Blood Buddy Forum: Medical Educators in Hematology
Blood Buddy Forum: Pediatric Clinical Malignant Hematology
Blood Buddy Forum: Pediatric Clinical Non-Malignant Hematology

Blood Buddy Forum: PhD Careers

Blood Buddy Forum: Systems Based Hematology

2:00 p.m. - 5:00 p.m. Scientific Workshops @ ASH

Scientific Workshop on Epidemiology: Disparities in Hematologic Diseases: Risk, Outcomes and Care Scientific Workshop on Hematology & Aging: Exploring

Biomarkers, CHIP, CAR-T and Clotting

Scientific Workshop on Translational Molecular Diagnostics in Hematology

#### FRIDAY, DECEMBER 4, 2020

7:00 a.m. - 10:00 a.m. Satellite Symposia

A Case-based Workshop: Clinical and Laboratory Aspects of Hemophilia and Thrombosis

Acute Myeloid Leukemia: Using Available Evidence and Guidelines to Make Sense of a Rapidly Evolving Treatment Paradigm

Advances in Diagnosis and Management of Myelodysplastic Syndromes

An Optimized Approach to Sickle Cell Disease

Care in a New Era of Treatment

Application of Individualized Treatment for CLL/SLL: Novel

Agents, Combinations, and Sequencing Therapy

Consensus or Controversy? Investigators Discuss Clinical Practice Patterns and Available Research Data Guiding the Management of Patients with Multiple Myeloma (Part 1 of a 4-Part Series)

Exploring Antibody Therapy in ALL: How and Why to Integrate Antibody-Based Treatment Into Patient Management

How I Think, How I Treat in the New Age of AML Care: Personal Perspectives on New Evidence and Innovative Therapeutics

Managing Myeloma: Where We Are, Where We're Going, and Where We SHOULD Be Going (Time to Choose Sides!)

Mapping the New Era in CLL Management: Precision Medicine, Optimized Therapeutic Sequencing, and Patient Perspectives in Treatment-Naïve and Relapsed Disease

Mastering the Treatment of Myeloid Malignancies in the Era of Personalized Medicine

Preparing for Personalized Care in MDS: Integrating Innovative Treatments Into a Cohesive Patient Care Model

Understanding Cold Agglutinin Disease: How Do Emerging Treatment

Options Have the Potential to Transform Patient Outcomes?

7:00 a.m. - 10:00 a.m. Scientific Workshops @ ASH

Scientific Workshop on Germline Predisposition to Hematopoietic Malignancies and Bone Marrow Failure

Scientific Workshop on Hematology and Pregnancy

Scientific Workshop on What 'Omics Are Telling Us About

Molecular Mechanisms in Sickle Cell Disease

7:00 a.m. – 7:10 a.m. ASH-a-Palooza

Thank You Video

7:15 a.m. - 7:55 a.m. ASH-a-Palooza

Blood Drop: AMFDP

Blood Drop: Finding Your Career Blood Drop: Quality Improvement

Blood Drop: RTAF Blood Drop: Scholar

**Blood Drop: Special Interest** 

Blood Drop: TRTH Blood Drop: Wellness 8:00 a.m. - 8:40 a.m. ASH-a-Palooza

ASH Talk 2: Racial Disparities in Healthcare

8:45 a.m. – 9:25 a.m. ASH-a-Palooza

Blood Drop: Finding Your Career Blood Drop: Quality Improvement

Blood Drop: RTAF Blood Drop: Scholar Blood Drop: Special Interest

Blood Drop: TRTH
Blood Drop: Wellness

8:45 a.m. - 9:45 a.m. ASH-a-Palooza

Trainee Didactic Session: Academic and Industry Career Pathway

Trainee Didactic Session: How to Transition from a Trainee to Faculty

Trainee Didactic Session: Intermediate Funding Trainee Didactic Session: Quality Improvement,

Quality Research in Hematology

10:00 a.m. - 12:00 p.m. ASH-a-Palooza (Open to Trainees Only)

Blood Buddies: Adult Clinical Malignant Hematology Blood Buddies: Adult Clinical Non-Malignant Hematology

Blood Buddies: Lab & Translational Hematology Blood Buddies: Pediatric and Adult BMT

Blood Buddies: Pediatric Clinical Malignant Hematology

Blood Buddies: Pediatric Clinical Non-Malignant Hematology Blood Buddies: PhD Careers

Blood Buddy Forum: Adult and Pediatric BMT

Blood Buddies: Quality Improvement

Blood Buddy Forum: Adult Clinical Malignant Hematology

Blood Buddy Forum: Adult Clinical Non-Malignant Hematology
Blood Buddy Forum: Clinical Careers in Hematology (Private Practice)

Blood Buddy Forum: Government Careers (NIH and FDA)

Blood Buddy Forum: Industry Careers

Blood Buddy Forum: Laboratory and Translational Hematology

Blood Buddy Forum: Medical Educators in Hematology Blood Buddy Forum: Pediatric Clinical Malignant Hematology Blood Buddy Forum: Pediatric Clinical Non-Malignant Hematology

Blood Buddy Forum: PhD Careers

Blood Buddy Forum: Systems Based Hematology



#### 11:00 a.m. - 2:00 p.m. Satellite Symposia

Accelerating Toward a Cure for Myeloma: Emerging Data, New Agents, and an Evolving Treatment Paradigm

Advances in GvHD: Expert Guidance on the Current Treatment Landscape, Optimizing Prophylaxis, and Integrating Novel Therapies

Advances in Therapy for Inherited Non-Malignant Blood Disorders: Focus on Sickle Cell Disease and Hemophilia.

Building New Management Models for NHL Care: Tumor Board Insights on Innovative Therapies in FL and DLBCL

Clinical Advances in Immune Thrombocytopenia: Integrating New Therapies

Consensus or Controversy? Investigators Discuss Clinical Practice Patterns and Available Research Data Guiding the Management of Patients with Chronic Lymphocytic Leukemia (Part 2 of a 4-Part Series)

D is for Diagnosis: Detecting and Treating Rare Disorders in Hematologic Practice

Individualizing Treatment Plans and Optimizing Outcomes for Patients with MF and PV: Stories Behind the Science

Medical Crossfire®: Bridging Unmet Needs with Emerging Data in Relapsed/Refractory DLBCL to Improve Patient Outcomes

Medical Crossfire®: Exploring the Modern Management of Acute Lymphoblastic Leukemia from AYA to Adult

New Targets, New Data, New Guidelines: Assessing Treatment Options to Personalize Care in B-Cell Lymphomas

Taking Action with Minimal Residual Disease: Technique, Role, and Utilization of MRD to Improve Outcomes in Patients with Hematologic Malignancies

T-Cell Lymphoma Tumor Board: Application of Novel Agents for the Treatment of PTCL and CTCL

The Evolving Role of PI3K Inhibitors for the Management of Hematologic Malignancies: Integration of Recent Data Sets into Clinical Practice

#### 3:00 p.m. – 6:00 p.m. Satellite Symposia

A Fresh Look at CAR T-Cell Therapy: Recent Advances, New Evidence, and Evolving Paradigms to Improve Patient Care Addressing the Medical Need in CLL: How BTK Inhibitors Are Improving Outcomes

 ${\bf Adopting\ New\ Approaches\ for\ Relapsed/Refractory\ Follicular\ Lymphoma}$ 

Advances in CAR T-Cell Therapy: What Does the Future Look Like?

Applying Data to Practice: The Role of BTK Inhibitors for the Treatment of CLL

Consensus or Controversy? Investigators Discuss Clinical Practice Patterns and Available Research Data Guiding the Management of Patients with Acute Myeloid Leukemia (Part 3 of a 4-Part Series)

Contemporary Management of Hemophilia A: Expert Guidance to Improve Patient Outcomes

Evolving the Standard of Care: Rethinking the Treatment Paradigm for Iron Deficiency Anemia

Experts Debate Optimal Approaches to the Treatment of Multiple Myeloma

How to Do It™ Interactive Workshop: Taking Action with Clinical Advances in Chronic Lymphocytic Leukemia

Key Considerations: Advances in Gene Therapy for Hemophilia

New Agents and Therapeutic Strategies in Beta-Thalassemia

Sickle Cell Disease: Targeting Complications to Improve Long-term Implications

Transforming the Treatment Paradigm for Patients With MDS

#### 7:00 p.m. - 10:00 p.m. Satellite Symposia

Consensus or Controversy? Investigators Discuss Clinical Practice Patterns and Available Research Data Guiding the Management of Patients with Hodgkin and Non-Hodgkin Lymphoma (Part 4 of a 4-Part Series)

Improving Outcomes in MDS and MPN: Tailoring Treatment Based on Patient- and Disease-Specific Factors

Leveraging Clinical Data and Trials to Inform Treatment for Patients with GvHD: An Expert Case-Based Discussion

State-of-the-Art Care in Relapsed/Refractory Multiple Myeloma: Novel Targets, Combinations, and Treatment Approaches



#### SATURDAY, DECEMBER 5, 2020

6:30 a.m. - 7:00 a.m.

7.00 4	71011 1101111000 010010
7:00 a.m. – 7:30 a.m.	General Sessions
Fireside Chat with Dr. Anth	nony Fauci
7:00 a.m. – 3:30 p.m.	Visit the Industry Solutions Center (Exhibits and Other Learning)
7:00 a.m. – 3:30 p.m.	Poster Session I - Presentations

ASH Wellness Studio

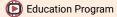
- Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron: Poster I (748–765)
- 102. Regulation of Iron Metabolism: Poster I (766-773)
- 112. Thalassemia and Globin Gene Regulation: Poster I (774-781)
- 113. Hemoglobinopathies, Excluding Thalassemia—New Genetic Approaches to Sickle Cell Disease: Poster I (782–793)
- 114. Hemoglobinopathies, Excluding Thalassemia— Clinical: Poster I (794–813)
- 201. Granulocytes, Monocytes, and Macrophages: Poster I (814-821)
- 203. Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Poster I (822–829)
- Vascular Wall Biology, Endothelial Progenitor Cells, and Platelet Adhesion, Activation, and Biochemistry: Poster I (830–834)
- 311. Disorders of Platelet Number or Function: Poster I (835-850)
- 321. Blood Coagulation and Fibrinolytic Factors: Poster I (851-858)
- 322. Disorders of Coagulation or Fibrinolysis: Poster I (859-878)
- 331. Pathophysiology of Thrombosis: Poster I (879-886)
- 332. Anticoagulation and Antithrombotic Therapy: Poster I (887-896)
- 401. Clinical Sciences in Transfusion Medicine: Poster I (897–905)
- 501. Hematopoietic Stem and Progenitor Biology: Poster I (906-914)
- Hematopoiesis: Regulation of Gene Transcription, Cytokines, Signal Transduction, Apoptosis, and Cell Cycle Regulation: Poster I (915–919)
- 503. Clonal Hematopoiesis: Aging and Inflammation: Poster I (920-923)
- 506. Hematopoiesis and Stem Cells: Microenvironment, Cell Adhesion, and Stromal Stem Cells: Poster I (924–926)
- 508. Bone Marrow Failure: Poster I (927-939)
- Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Poster I (940–948)
- 603. Oncogenes and Tumor Suppressors: Poster I (949-955)
- 604. Molecular Pharmacology and Drug Resistance in Myeloid Diseases: Poster I (956–965)
- 605. Molecular Pharmacology, Drug Resistance—Lymphoid and Other Diseases: Poster I (966–972)
- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Poster I (973-984)
- 613. Acute Myeloid Leukemia: Clinical Studies: Poster I (985-1013)
- 614. Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Poster I (1014–1024)
- Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Poster I (1025–1035)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Poster I (1036–1060)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster I (1061–1089)

- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster I (1090–1100)
- 621. Lymphoma—Genetic/Epigenetic Biology: Poster I (1101–1111)
- 622. Lymphoma Biology-Non-Genetic Studies: Poster I (1112-1119)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma—Clinical Studies: Poster I (1120–1149)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma— Clinical Studies: Poster I (1150–1172)
- 625. Lymphoma: Pre-Clinical—Chemotherapy and Biologic Agents: Poster I (1173–1181)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Prospective Clinical Trials: Poster I (1182–1201)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/Observational Studies: Poster I (1202–1231)
- Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy: Poster I (1232–1233)
- 632. Chronic Myeloid Leukemia: Therapy: Poster I (1234-1247)
- 634. Myeloproliferative Syndromes: Clinical: Poster I (1248-1261)
- 635. Myeloproliferative Syndromes: Basic Science: Poster I (1262-1267)
- 636. Myelodysplastic Syndromes—Basic and Translational Studies: Poster I (1268–1276)
- 637. Myelodysplastic Syndromes-Clinical Studies: Poster I (1277-1294)
- 641. CLL: Biology and Pathophysiology, excluding Therapy: Poster I (1295–1304)
- 642. CLL: Therapy, excluding Transplantation: Poster I (1305-1321)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: Poster I (1322–1357)
- 652. Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy: Poster I (1358–1365)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Poster I (1366–1420)
- 701. Experimental Transplantation: Basic Biology, Pre-Clinical Models: Poster I (1421–1427)
- 703. Adoptive Immunotherapy: Poster I (1428-1439)
- 704. Immunotherapies: Poster I (1440-1450)
- 711. Cell Collection and Processing: Poster I (1451-1455)
- 721. Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities: Poster I (1456–1481)
- 722. Clinical Allogeneic Transplantation: Acute and Chronic GVHD, Immune Reconstitution: Poster I (1482–1494)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence: Poster I (1495–1504)
- 731. Clinical Autologous Transplantation: Results: Poster I (1505–1517)
- 732. Clinical Allogeneic Transplantation: Results: Poster I (1518-1538)
- 801. Gene Editing, Therapy and Transfer: Poster I (1539–1546)
- 802. Chemical Biology and Experimental Therapeutics: Poster I (1547–1551)
- 803. Emerging Diagnostic Tools and Techniques: Poster I (1552-1562)
- 901. Health Services Research—Non-Malignant Conditions: Poster I (1563–1589)
- 902. Health Services Research—Malignant Conditions (Lymphoid Disease): Poster I (1590–1610)
- 903. Health Services Research—Malignant Conditions (Myeloid Disease): Poster I (1611–1621)



- 904. Outcomes Research-Non-Malignant Conditions: Poster I (1622-1639)
- 905. Outcomes Research-Malignant Conditions (Lymphoid Disease): Poster I (1640–1661)
- 906. Outcomes Research-Malignant Conditions (Myeloid Disease): Poster I (1662-1670)

#### 7:30 a.m. - 8:15 a.m.



A Map for the Changing Landscape of CLL - Live Q&A Advances in the Laboratory Assessment of Hemostatic and Thrombotic Disorders - Live O&A

#### 7:30 a.m. - 8:15 a.m.



Scientific Committee on Stem Cells and Regenerative Medicine: Extrinsic Regulation of Hematopoietic Stem Cell Emergence and Homeostasis - Live Q&A

#### 7:30 a.m. - 9:00 a.m.

**Oral Abstract Sessions** 

- 101. Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron: Mechanisms and Regulation of Erythropoiesis (7-12)
- 114. Hemoglobinopathies, Excluding Thalassemia-Clinical: Hydroxyurea for Sickle Cell Disease: Treatment Benefits and Potential Reproductive Risks for Women (13-17)
- 311. Disorders of Platelet Number or Function: Heparin-Induced Thrombocytopenia and Immune Thrombocytopenia (18-23)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Novel combination therapies in treatment of newly diagnosed AML (24-29)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Single Cell Profiling and Novel molecular Markers (30–35)
- 622. Lymphoma Biology-Non-Genetic Studies: Mechanisms of Lymphomagenesis, Progression, and Response (36–38)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma-Clinical Studies: Clinical Studies in T/NK Cell Lymphoma (39-44)
- 632. Chronic Myeloid Leukemia: Therapy-Building The Future CML (45-50)
- 634. Myeloproliferative Syndromes: Clinical: New Therapies and JAKi-based Combinations for Myelofibrosis (51-56)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: From Smoldering Myeloma to Active Myeloma: Innovative Early Detection Approaches, Epigenetic, Genomic and Transcriptome Scenarios. (57–62)
- 704. Immunotherapies: Beyond T to NK (63-68)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence I (69-74)
- 732. Clinical Allogeneic Transplantation: Results I (75-80)

8:15 a.m. – 8:30 a.m.	ASH Wellness Studio
9:00 a.m. – 9:30 a.m.	Learn from Industry by Visiting the Industry Solutions Center
9:00 a.m. – 9:30 a.m.	ASH Wellness Studio

#### 9:30 a.m. - 10:15 a.m.



Education Program

Diagnostic and Prognostic Models in VTE Management: Ready for Primetime? - Live Q&A

Myelodysplastic Syndromes: What We Have and What We Want - Live Q&A

#### 9:30 a.m. - 10:15 a.m.



Joint Session: Scientific Committee on Myeloid Biology & Scientific Committee on Myeloid Neoplasia: Single Cell Analysis of Hematopoietic Development and Clonal Complexity of Malignant Hematopoiesis - Live Q&A

Scientific Committee on Transfusion Medicine: Novel Blood Therapeutics - Live Q&A

Scientific Committee on Transplantation Biology and Cellular Therapies: Challenges in Cell Therapy: Relapse and Toxicities - Live Q&A

#### 9:30 a.m. - 11:00 a.m. **Oral Abstract Sessions**

- 101. Red Cells and Erythropoiesis. Structure and Function. Metabolism, and Survival, Excluding Iron: Mechanisms, Diagnosis and Treatment of Inherited (81–86)
- 113. Hemoglobinopathies, Excluding Thalassemia-New Genetic Approaches to Sickle Cell Disease: Fetal Hemoglobin Regulation And Reticulocyte Maturation In Sickle Cell Disease (87-92)
- 203. Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Pathogenesis and Immunotherapy (93-98)
- 401. Basic Science and Clinical Practice in Blood Transfusion: COVID-19 Convalescent Plasma, Antigen Typing and the Prothrombin Complex II (99-104)
- 602. Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Aberrant Nuclear Architecture and Chromatin Remodeling (105-110)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Novel promising therapies for relapsed/refractory AML (111-116)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma-Clinical Studies: Mantle Cell Lymphoma Clinical Trials (117-122)
- 642. CLL: Therapy, excluding Transplantation (123-128)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation; CAR T Therapies for Myeloma: Novel Approaches and Longer-Term Follow Up Data (129-134)
- 721. Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities (135-140)
- 731. Clinical Autologous Transplantation: Autologous Transplantation: Still the Backbone of Modern Myeloma Therapies (141–146)
- 904. Outcomes Research-Non-Malignant Conditions: Bleeding, Immune Thrombocytopenia, and Other Hematologic Disorders (147-152)

10:15 a.m. –	10:30 a.m.	ASH Wellness Studio

11:00 a.m. - 12:00 p.m. Learn from Industry by Visiting the Industry Solutions Center

#### 11:00 a.m. - 12:00 p.m. Product Theaters

A Discussion of Efficacy and Safety on a Treatment Option for Adults With Relapsed or Refractory (R/R) Acute Lymphoblastic Leukemia (ALL) Advances in the Treatment of Cold Agglutinin Disease

A New Treatment Option for Patients with Acute Myeloid Leukemia

Introducing BLENREP (belantamab mafodotinblmf) for Injection, for Intravenous Use

NGS Solutions That Help Simplify Your Journey to Answers in Hemato-oncology Research

POLIVY+BR: Advance the Possibilities in R/R DLBCL, NOS, After at Least 2 Prior Therapies

12:00 p.m. - 12:15 p.m. ASH Wellness Studio

Anxiety Provoking Hematology Consults, Second Edition - Live Q&A Beyond the Marrow: Major Non-Hematologic Complications of Inherited Bone Marrow Failure Syndromes - Live Q&A

Handling Challenging Questions in the Management of CML - Live Q&A

12:00 p.m. – 12:45 p.m. Scientific Program

Scientific Committee on Epigenetics and Genomics: RNA in Normal and Malignant Hematopoiesis - Live Q&A

12:00 p.m. – 12:45 p.m. Education Spotlight Sessions

Appropriate Use of Imaging in Patients with Lymphoma - Live Q&A Emicizumab's Impact on the Landscape of Hemophilia A Treatment: Two Artists Debate the View - Live Q&A

12:00 p.m. - 1:30 p.m. Oral Abstract Sessions

- 112. Thalassemia and Globin Gene Regulation (153-158)
- Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Chimeric Antigen Receptor T Cell Therapy (159–164)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Advances in immunotherapeutics for management of AML (165–170)
- 625. Lymphoma: Pre-Clinical—Chemotherapy and Biologic Agents: Novel Approaches to Overcome Resistance (171–176)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Novel Therapies Targeting B Cell Maturation Antigen in Relapsed/Refractory Multiple Myeloma (177–182)
- 711. Cell Collection and Processing (183-188)
- Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities (189–194)
- 803. Emerging Diagnostic Tools and Techniques II (195-200)
- 904. Outcomes Research Non-Malignant Conditions: Venous Thromboembolism Associated with Cancer and/or COVID-19 (201–206)
- 905. Outcomes Research—Malignant Conditions (Lymphoid Disease): Outcomes Research Real World Data Healthcare Disparities (207–212)
- Outcomes Research—Malignant Conditions (Myeloid Disease):
   Real World Management And Outcome (213–218)

12:00 p.m. - 1:30 p.m. Special Interest Session

Special Scientific Session on Race and Science

1:30 p.m. – 2:00 p.m. ASH Wellness Studio

1:30 p.m. – 2:00 p.m. Learn from Industry by Visiting the Industry Solutions Center

2:00 p.m. – 2:45 p.m. Education Program

Challenging Situations for Patients with Aggressive Lymphomas - Live Q&A

Managing Toxicities of Targeted Therapies in CLL - Live Q&A

The Emerging Role of Targeted Therapies and Cell Therapy in Transplant - Live Q&A

2:00 p.m. - 3:00 p.m. General Sessions

Ham-Wasserman Lecture: Therapeutic Development and Current Uses of BCL-2 Inhibition

2:00 p.m. - 3:30 p.m. Oral Abstract Sessions

- 102. Regulation of Iron Metabolism (219-223)
- 113. Hemoglobinopathies, Excluding Thalassemia—New Genetic Approaches to Sickle Cell Disease: New Insights Into Sickle Cell Disease Pathophysiology (224–229)
- 322. Disorders of Coagulation or Fibrinolysis: Hemophilia: Genes, Joints, and PK (230–235)
- Anticoagulation and Antithrombotic Therapy: Novel Agents, Reversal Drugs and Indications (236–241)
- 401. Basic Science and Clinical Practice in Blood Transfusion: COVID-19 Convalescent Plasma and Transfusion Immunology I (242–247)
- 501. Hematopoietic Stem and Progenitor Biology: New Insights into the Molecular Regulation of Hematopoietic Stem Cells (248–253)
- 508. Bone Marrow Failure: Advancing Our Biologic Understanding in Inherited and Acquired Bone Marrow Failure Disorders (254–259)
- 604. Molecular Pharmacology and Drug Resistance in Myeloid Diseases (260–265)
- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Innovative Chemotherapy and Immunotherapy Strategies in Frontline and Relapsed Disease (266–271)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: MRD and Novel molecular Markers (272–277)
- 621. Lymphoma—Genetic/Epigenetic Biology: Genetic and epigenetic profiling of malignant lymphomas (278–283)
- 636. Myelodysplastic Syndromes—Basic and Translational Studies (284–289)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Bispecific T Cell Engager Therapies and Novel Targeting Agents (290–295)
- 732. Clinical Allogeneic Transplantation Results III (296-301)
- 901. Health Services Research-Non-Malignant Conditions I (302-305)
- 902. Health Services Research—Malignant Conditions (Lymphoid Disease) I (306–311)

2:45 p.m. – 3:00 p.m. ASH Wellness Studio

3:30 p.m. - 4:30 p.m. General Sessions

**ASH Awards Presentation** 

#### SUNDAY, DECEMBER 6, 2020

6:30 a.m. – 7:00 a.m.	ASH Wellness Studio
7:00 a.m. – 3:30 p.m.	Visit the Industry Solutions Center (Exhibits and Other Learning)
7:00 a.m. – 3:30 p.m.	Poster Session II – Presentations

- Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron: Poster II (1671–1687)
- 102. Regulation of Iron Metabolism: Poster II (1688-1694)
- 112. Thalassemia and Globin Gene Regulation: Poster II (1695-1702)
- Hemoglobinopathies, Excluding Thalassemia—Basic and Translational Science: Poster II (1703–1713)
- 114. Hemoglobinopathies, Excluding Thalassemia— Clinical: Poster II (1714–1733)
- 201. Granulocytes, Monocytes, and Macrophages: Poster II (1734-1741)
- Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Poster II (1742–1749)
- Vascular Wall Biology, Endothelial Progenitor Cells, and Platelet Adhesion, Activation, and Biochemistry: Poster II (1750–1753)
- 311. Disorders of Platelet Number or Function: Poster II (1754-1771)
- 321. Blood Coagulation and Fibrinolytic Factors: Poster II (1772-1779)
- 322. Disorders of Coagulation or Fibrinolysis: Poster II (1780-1800)
- 331. Pathophysiology of Thrombosis: Poster II (1801-1808)
- 332. Anticoagulation and Antithrombotic Therapy: Poster II (1809-1819)
- 401. Basic Science and Clinical Practice in Blood Transfusion: Poster II (1820–1828)
- 501. Hematopoietic Stem and Progenitor Biology: Poster II (1829-1836)
- 502. Hematopoiesis: Regulation of Gene Transcription, Cytokines, Signal Transduction, Apoptosis, and Cell Cycle Regulation: Poster II (1837–1841)
- 503. Clonal Hematopoiesis: Aging and Inflammation: Poster II (1842–1845)
- 506. Hematopoiesis and Stem Cells: Microenvironment, Cell Adhesion, and Stromal Stem Cells: Poster II (1846–1848)
- 508. Bone Marrow Failure: Poster II (1849–1861)
- 602. Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Poster II (1862–1870)
- 603. Oncogenes and Tumor Suppressors: Poster II (1871-1877)
- 604. Molecular Pharmacology and Drug Resistance in Myeloid Diseases: Poster II (1878–1886)
- 605. Molecular Pharmacology, Drug Resistance—Lymphoid and Other Diseases: Poster II (1887–1893)
- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Poster II (1894–1903)
- 613. Acute Myeloid Leukemia: Clinical Studies: Poster II (1904-1931)
- 614. Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Poster II (1932–1942)
- 615. Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Poster II (1943–1953)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Poster II (1954–1977)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster II (1978–2006)

- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster II (2007–2016)
- 621. Lymphoma-Genetic/Epigenetic Biology: Poster II (2017-2027)
- 622. Lymphoma Biology-Non-Genetic Studies: Poster II (2028-2035)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma—Clinical Studies: Poster II (2036–2064)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma— Clinical Studies: Poster II (2065–2086)
- 625. Lymphoma: Pre-Clinical—Chemotherapy and Biologic Agents: Poster II (2087–2095)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Prospective Clinical Trials: Poster II (2096–2114)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/Observational Studies: Poster II (2115–2143)
- 631. Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy: Poster II (2144–2145)
- 632. Chronic Myeloid Leukemia: Therapy: Poster II (2146-2158)
- 634. Myeloproliferative Syndromes: Clinical: Poster II (2159-2172)
- 635. Myeloproliferative Syndromes: Basic Science: Poster II (2173-2178)
- 636. Myelodysplastic Syndromes—Basic and Translational Studies: Poster II (2179–2187)
- 637. Myelodysplastic Syndromes-Clinical Studies: Poster II (2188-2205)
- 641. CLL: Biology and Pathophysiology, excluding Therapy: Poster II (2206–2215)
- 642. CLL: Therapy, excluding Transplantation: Poster II (2216-2232)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: Poster II (2233–2267)
- 652. Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy: Poster II (2268–2275)
- 653. Myeloma: Therapy, excluding Transplantation: Poster II (2276-2328)
- 701. Experimental Transplantation: Basic Biology, Pre-Clinical Models: Poster II (2329–2332)
- 703. Adoptive Immunotherapy: Mechanisms and New Approaches: Poster II (2333–2344)
- 704. Immunotherapies: Poster II (2345-2357)
- 711. Cell Collection and Processing: Poster II (2358-2362)
- 721. Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities: Poster II (2363–2387)
- 722. Clinical Allogeneic Transplantation: Acute and Chronic GVHD, Immune Reconstitution: Poster II (2388–2400)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence: Poster II (2401–2411)
- 731. Clinical Autologous Transplantation: Results: Poster II (2412–2424)
- 732. Clinical Allogeneic Transplantation: Results: Poster II (2425-2445)
- 801. Gene Editing, Therapy and Transfer: Poster II (2446–2453)
- 802. Chemical Biology and Experimental Therapeutics: Poster II (2454–2458)
- 803. Emerging Diagnostic Tools and Techniques: Poster II (2459-2470)
- 901. Health Services Research—Non-Malignant Conditions: Poster II (2471–2497)
- 902. Health Services Research—Malignant Conditions (Lymphoid Disease): Poster II (2498–2517)

- 903. Health Services Research—Malignant Conditions (Myeloid Disease): Poster II (2518–2527)
- 904. Outcomes Research—Non-Malignant Conditions: Poster II (2528–2545)
- 905. Outcomes Research—Malignant Conditions (Lymphoid Disease): Poster II (2546–2566)
- 906. Outcomes Research—Malignant Conditions (Myeloid Disease): Poster II (2567–2574)

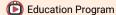
7:00 a.m. – 9:00 a.m. General Sessions

Plenary Scientific Session

8:00 a.m. – 8:15 a.m.	ASH Wellness Studio
9:00 a.m. – 9:30 a.m.	Learn from Industry by Visiting the Industry Solutions Center

9:30 a.m. – 10:15 a.m.

9:00 a.m. - 9:30 a.m.



ASH Wellness Studio

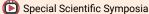
Immunotherapy in Multiple Myeloma - Live Q&A Platelet Transfusions for Hematology / Oncology Patients: Taking a More Granular Look - Live Q&A

9:30 a.m. - 10:15 a.m.

9:30 a.m. - 10:15 a.m.



Scientific Committee on Red Cell Biology: Location, Location, Location - Live Q&A



Friend or Foe: The Microbiome, Antibiotics and Death After Transplant - Live Q&A

9:30 a.m. – 10:30 a.m. General Sessions

ASH-EHA Joint Symposium: Failure of Targeted Cellular Immunotherapy and Hematopoietic Cell Transplant: Mechanisms and Mitigating Strategies

9:30 a.m. - 11:00 a.m. Special Interest Session

The 2020 Pandemic: Latest Insights on COVID-19

9:30 a.m. - 11:00 a.m. Oral Abstract Sessions

- Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Hematologic Malignancies and COVID-19 (312–317)
- 301. Vascular Wall Biology, Endothelial Progenitor Cells, and Platelet Adhesion, Activation, and Biochemistry (318–323)
- 502. Hematopoiesis: Regulation of Gene Transcription, Cytokines, Signal Transduction, Apoptosis, and Cell Cycle Regulation: Molecular regulation of cell fate and regeneration (324–329)
- 613. Acute Myeloid Leukemia: Novel Therapies and Treatment Approaches (330–335)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma—Clinical Studies: Clinical studies in Waldenstrom's Macroglobulinemia, Marginal Zone Lymphoma and Hairy Cell Leukemia (336–341)
- 634. Myeloproliferative Syndromes: Clinical: Translational Science in MPN— Hitting the Mark (342–347)

- 641. CLL: Biology and Pathophysiology, excluding Therapy: Treatment Resistance and Prognosis (348–352)
- 722. Clinical Allogeneic Transplantation; Acute and Chronic GvHD, Immune Reconstitution: Phase I and II Trials (353–358)
- 803. Emerging Diagnostic Tools and Techniques I (359-363)
- 904. Outcomes Research Non-Malignant Conditions: Sickle Cell Disease and Beta Thalassemia (364–369)
- 905. Outcomes Research—Malignant Conditions (Lymphoid Disease): Outcomes Research Real World Data Lymphoma (370–375)

10:15 a.m. - 10:30 a.m. ASH Wellness Studio

11:00 a.m. – 12:00 p.m. Learn from Industry by Visiting the Industry Solutions Center

11:00 a.m. - 12:00 p.m. Product Theaters

An Anti-CD38 Directed Antibody for the Treatment for Appropriate Patients with Relapsed Refractory Multiple Myeloma

A Targeted Therapeutic Approach for Relapsed or Refractory FLT3m+ AML Patients

A Treatment Option for Adult Patients With Newly Diagnosed CP Ph+CML or Patients With CML Resistant/Intolerant to Prior TKI Therapy

Bristol Myers Squibb Product Theater

Developing the Future of CAR-T Cell Therapy Today

Redefining Approaches in Early-Line Multiple Myeloma Treatment

Review of Efficacy and Safety of Monjuvi (tafasitamabcxix): FDA-Approved Monoclonal Antibody in Combination with Lenalidomide for Adult Patients with R/R DLBCL Who Have Received at Least One Prior Therapy

12:00 p.m. - 12:15 p.m. ASH Wellness Studio

Indolent Lymphomas: Answers to Smoldering Questions - Live Q&A Selected Hemostasis and Thrombosis Topics in Women - Live Q&A

12:00 p.m. – 12:45 p.m. Scientific Program

Joint Session: Scientific Committee on Blood Disorders in Childhood & Scientific Committee on Immunology and Host Defense: What the Children Can Teach Us: Congenital Immunodeficiencies Shed Light on Immunity, Hematopoiesis, and Cancer - Live Q&A

ASH Choosing Wisely® Campaign: 2020 ASH Choosing Wisely Champions - Live Q&A

Cellular Breakups: Transfusion and Hyperhemolysis in Sickle Cell Disease - Live Q&A

Checkpoint Blockade: Defining A New Treatment Paradigm in Hodgkin Lymphoma and Allogeneic Transplantation - Live Q&A

12:00 p.m. – 1:30 p.m. Oral Abstract Sessions

- Disorders of Platelet Number or Function: Thrombotic Thrombocytopenic Purpura and Platelet Dysfunction (376–381)
- 503. Clonal Hematopoiesis: Aging and Inflammation (382–387)

- 613. Acute Myeloid Leukemia: Molecular Mutations and Their Prognostic Implications (388-393)
- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis II (394–399)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Prospective Clinical Trials: Updates and advances in bispecific antibody therapies and autologous CAR-T approaches (400-405)
- 636. Myelodysplastic Syndromes Basic and Translational Studies (406-411)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Relapsed/Refractory Multiple Myeloma (412-417)
- 722. Clinical Allogeneic Transplantation; Acute and Chronic GvHD, Immune Reconstitution: Pathobiology and Predictive Biomarkers (418-423)
- 901. Health Services Research-Non-Malignant Conditions II (424-429)
- 903. Health Services Research-Malignant Conditions (Myeloid Disease): Barriers to Cancer Care Delivery in Myeloid Malignancies (430-435)
- 905. Outcomes Research—Malignant Conditions (Lymphoid Disease): Outcomes Research Real World Data Myeloma (436-441)

ASH Wellness Studio 1:30 p.m. - 2:00 p.m.

Learn from Industry by Visiting the Industry 1:30 p.m. - 2:00 p.m. Solutions Center

2:00 p.m. - 2:45 p.m.



Caring for Patients with Acute Leukemia in Community Hospitals: Who, What, and When to Refer? - Live Q&A

Monoclonal Gammopathies of Determined Significance - Live Q&A

The Brain and Pain in Sickle Cell Disease: Understanding the Role of Sensory, Cognition and Neuropathic Pathways in the SCD Chronic Pain Experience - Live Q&A

2:00 p.m. - 2:45 p.m.



Joint Session: Scientific Committee on Hematopathology and Clinical Laboratory Hematology & Scientific Committee on Lymphoid Neoplasia: Getting the Most from Minimal Residual Disease - Live Q&A

Scientific Committee on Megakaryocytes and Platelets: Molecular Basis of Platelet/Megakaryocyte Dysfunction: Novel Approaches - Live Q&A

2:00 p.m. - 2:45 p.m.



Special Scientific Symposia

Special Joint Education-Scientific Symposium: Hormones and Hematology - Live Q&A

2:00 p.m. - 3:30 p.m.

Special Interest Session

Blood & Beyond: Medical Mistakes and Miracles: Surviving Hemophilia, HIV and Hepatitis C

2:00 p.m. - 3:30 p.m.

**Oral Abstract Sessions** 

- 331. Pathophysiology of Thrombosis I (442–447)
- 506. Hematopoiesis and Stem Cells: Microenvironment, Cell Adhesion, and Stromal Stem Cells (448-451)
- 602. Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Altered Transcription Factor Regulation (452-457)
- 613. Acute Myeloid Leukemia: Potpourri of Potential Practice Changing Studies (458-463)
- 614. Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Targeted Therapies (464-469)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma-Clinical Studies: Clinical Studies in Hodgkin Lymphoma (470-475)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/ Observational Studies: PCNSL Treatment and Prognosis and CNS Prophylaxis in High-Risk Aggressive Lymphomas (476–478)
- 634. Myeloproliferative Syndromes: Clinical: Clinical Trials in Polycythemia Vera (479–484)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: The Role of the Bone Marrow Microenvironment in the Pathogenesis and Therapy of Multiple Myeloma and Waldenstrom's Macroglobulinemia. (485-490)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence II (491-496)
- 801. Gene Editing, Therapy and Transfer (497-501)

2:45 p.m. - 3:00 p.m.

ASH Wellness Studio



#### MONDAY, DECEMBER 7, 2020

6:30 a.m. – 7:00 a.m.	ASH Wellness Studio
7:00 a.m. – 3:30 p.m.	Visit the Industry Solutions Center (Exhibits and Other Learning)
7:00 a.m. – 3:00 p.m.	Poster Session III – Presentations

- Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron: Poster III (2575–2591)
- 102. Regulation of Iron Metabolism: Poster III (2592-2599)
- 112. Thalassemia and Globin Gene Regulation: Poster III (2600-2607)
- Hemoglobinopathies, Excluding Thalassemia—Basic and Translational Science: Poster III (2608–2618)
- 114. Hemoglobinopathies, Excluding Thalassemia— Clinical: Poster III (2619–2638)
- 201. Granulocytes, Monocytes, and Macrophages: Poster III (2639-2646)
- Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Poster III (2647–2653)
- Vascular Wall Biology, Endothelial Progenitor Cells, and Platelet Adhesion, Activation, and Biochemistry: Poster III (2654–2658)
- 311. Disorders of Platelet Number or Function: Poster III (2659-2677)
- 321. Blood Coagulation and Fibrinolytic Factors: Poster III (2678-2684)
- 322. Disorders of Coagulation or Fibrinolysis: Poster III (2685-2704)
- 331. Pathophysiology of Thrombosis: Poster III (2705-2711)
- 332. Anticoagulation and Antithrombotic Therapy: Poster III (2712-2721)
- Basic Science and Clinical Practice in Blood Transfusion: Poster III (2722–2729)
- 501. Hematopoietic Stem and Progenitor Biology: Poster III (2730-2737)
- 502. Hematopoiesis: Regulation of Gene Transcription, Cytokines, Signal Transduction, Apoptosis, and Cell Cycle Regulation: Poster III (2738–2742)
- 503. Clonal Hematopoiesis: Aging and Inflammation: Poster III (2743–2746)
- 506. Hematopoiesis and Stem Cells: Microenvironment, Cell Adhesion, and Stromal Stem Cells: Poster III (2747–2748)
- 508. Bone Marrow Failure: Poster III (2749-2761)
- 602. Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Poster III (2762–2769)
- 603. Oncogenes and Tumor Suppressors: Poster III (2770-2776)
- 604. Molecular Pharmacology and Drug Resistance in Myeloid Diseases: Poster III (2777–2785)
- 605. Molecular Pharmacology, Drug Resistance—Lymphoid and Other Diseases: Poster III (2786–2792)
- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Poster III (2793–2803)
- 613. Acute Myeloid Leukemia: Clinical Studies: Poster III (2804-2832)
- 614. Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Poster III (2833–2842)
- Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Poster III (2843–2853)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Poster III (2854–2877)
- Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster III (2878–2906)

- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster III (2907–2915)
- 621. Lymphoma—Genetic/Epigenetic Biology: Poster III (2916-2926)
- 622. Lymphoma Biology-Non-Genetic Studies: Poster III (2927-2933)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma—Clinical Studies: Poster III (2934–2963)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma— Clinical Studies: Poster III (2964–3006)
- 625. Lymphoma: Pre-Clinical—Chemotherapy and Biologic Agents: Poster III (3007–3015)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Prospective Clinical Trials: Poster III (3016–3034)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/Observational Studies: Poster III (3035–3063)
- 631. Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy: Poster III (3064–3064)
- 632. Chronic Myeloid Leukemia: Therapy: Poster III (3065-3078)
- 634. Myeloproliferative Syndromes: Clinical: Poster III (3079-3092)
- 635. Myeloproliferative Syndromes: Basic Science: Poster III (3093-3098)
- 636. Myelodysplastic Syndromes—Basic and Translational Studies: Poster III (3099–3107)
- 637. Myelodysplastic Syndromes-Clinical Studies: Poster III (3108-3125)
- 641. CLL: Biology and Pathophysiology, excluding Therapy: Poster III (3126–3135)
- 642. CLL: Therapy, excluding Transplantation: Poster III (3136-3152)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: Poster III (3153–3187)
- 652. Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy: Poster III (3188–3195)
- 653. Myeloma: Therapy, excluding Transplantation: Poster III (3196-3248)
- 701. Experimental Transplantation: Basic Biology, Pre-Clinical Models: Poster III (3249–3254)
- Adoptive Immunotherapy: Mechanisms and New Approaches: Poster III (3255–3265)
- 704. Immunotherapies: Poster III (3266-3278)
- 711. Cell Collection and Processing: Poster III (3279-3283)
- 721. Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities: Poster III (3284–3308)
- 722. Clinical Allogeneic Transplantation: Acute and Chronic GVHD, Immune Reconstitution: Poster III (3309–3320)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence: Poster III (3321–3330)
- 731. Clinical Autologous Transplantation: Results: Poster III (3331–3343)
- 732. Clinical Allogeneic Transplantation: Results: Poster III (3344–3365)
- 801. Gene Editing, Therapy and Transfer: Poster III (3366–3373)
- 802. Chemical Biology and Experimental Therapeutics: Poster III (3374–3378)
- 803. Emerging Diagnostic Tools and Techniques: Poster III (3379-3389)
- 901. Health Services Research—Non-Malignant Conditions: Poster III (3390–3416)
- 902. Health Services Research—Malignant Conditions (Lymphoid Disease): Poster III (3417–3436)



- 903. Health Services Research-Malignant Conditions (Myeloid Disease): Poster III (3437-3446)
- 904. Outcomes Research-Non-Malignant Conditions: Poster III (3447-3464)
- 905. Outcomes Research-Malignant Conditions (Lymphoid Disease): Poster III (3465-3485)
- 906. Outcomes Research-Malignant Conditions (Myeloid Disease): Poster III (3486-3493)

#### 7:00 a.m. - 7:45 a.m.



Acute Myeloid Leukemia - So Many Treatment Options; How Do You Decide? - Live Q&A

Improving Symptom Control for Children with Hematological Malignancies - Live Q&A

Infection Risk, Immunization Recommendations, and Antimicrobial Prophylaxis Needs when Treating Non-Malignant Hematologic Disorders - Wash Your Hands and What Else? - Live Q&A

Understanding How to Manipulate the Immune System in Immunotherapy for Lymphoma - Live Q&A

What Hematologists Need to Know About Giving and Stopping Aspirin - Live Q&A

#### 7:00 a.m. - 7:45 a.m.



Education Spotlight Sessions

Vascular Anomalies 101: Case-Based Discussion on the Diagnosis, Treatment and Lifelong Care of These Patients - Live Q&A

#### 7:00 a.m. - 8:30 a.m.

**Oral Abstract Sessions** 

- 114. Hemoglobinopathies, Excluding Thalassemia-Clinical: Assessment and Prevention of End-Organ Injury in Sickle Cell Disease (502-506)
- 322. Disorders of Coagulation or Fibrinolysis: Hemophilia: Treatment and Inhibitors (507-511)
- 331. Pathophysiology of Thrombosis II (512-517)
- 603. Oncogenes and Tumor suppressors: Pre-clinical models and Novel Targets (518-523)
- 605. Molecular Pharmacology, Drug Resistance-Lymphoid and Other Diseases: Molecular pharmacology and drug resistance mechanisms in lymphoproliferative disorders (524-529)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/ Observational Studies: Biomarkers and Prognostication in Aggressive B-Cell Non-Hodgkin Lymphomas (530-535)
- 637. Myelodysplastic Syndromes-Clinical Studies: Personalized Clinical-Decision Tools and treatment of lower risk MDS (536-541)
- 642. CLL: Therapy, excluding Transplantation (542-547)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Initial Therapy (548-553)
- 703. Adoptive Immunotherapy: Mechanisms and New Approaches: Optimizing CAR T cells for Improved Outcomes (554-558)
- 732. Clinical Allogeneic Transplantation Results II (559-564)
- 802. Chemical Biology and Experimental Therapeutics: Innovations in Therapy and Drug Screening (565-570)

#### 7:45 a.m. - 8:00 a.m.

ASH Wellness Studio

8:30 a.m. - 9:00 a.m.

Learn from Industry by Visiting the Industry Solutions Center

8:30 a.m. - 9:00 a.m.

ASH Wellness Studio

9:00 a.m. - 9:45 a.m.



Education Program

Myeloproliferative Disorders: Too Many Cells, Too Few Therapies - How Do We Choose? - Live Q&A

Updates on the Role of Non-Anticoagulant Interventions in Venous Thromboembolism - Live Q&A

Yin and Yang of Autoimmunity and Immunodeficiencies in Hematology - Live Q&A

9:00 a.m. - 9:45 a.m.



Scientific Program

Scientific Committee on Hematopoiesis: Hematopoietic Aging: Mechanisms and Consequences - Live Q&A

Scientific Committee on Hemostasis: Mechanisms and Modifiers of Bleeding - Live Q&A

Scientific Committee on Thrombosis and Vascular Biology: Gut Microbiome and the Endothelium - Live Q&A

9:00 a.m. - 9:45 a.m.



Education Spotlight Sessions

How to Manage Common Challenging Situations in Patients with Multiple Myeloma - Live Q&A

Transfusion and Anemia in Global Health - Live Q&A

9:00 a.m. - 10:00 a.m.

**General Sessions** 

Ernest Beutler Lecture and Prize: Targeting the Aberrant Leukemia Epigenome

#### 9:00 a.m. - 10:30 a.m.

**Oral Abstract Sessions** 

- 322. Disorders of Coagulation or Fibrinolysis: Von Willebrand Disease and Bleeding (571-575)
- 332. Anticoagulation and Antithrombotic Therapy: COVID-19, Obesity and Hemorrhagic Complications (576-581)
- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Insights in Genomics, MRD, and Toxicities (582-587)
- 615. Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Commercially Available Therapy, excluding Transplantation I (588-593)
- 622. Lymphoma Biology-Non-Genetic Studies: Microenvironment and Immune Response in Hodgkin Lymphoma (594-596)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)-Results from Prospective Clinical Trials: Incorporating novel agents and new adoptive cell therapy approaches (597–601)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy (602-607)
- 703. Adoptive Immunotherapy: Mechanisms and New Approaches: Adoptive Cell Therapy beyond CAR T cells (608-613)
- 731. Clinical Autologous Transplantation: Building Better Transplant Platforms in Lymphoid Malignancies (614-619)
- 903. Health Services Research-Malignant Conditions (Myeloid Disease): Treatment and Publication Patterns in Myeloid Malignancies (620-625)

9:45 a.m. – 10:00 a.m.	ASH Wellness Studio
10:30 a.m. – 11:30 a.m.	Learn from Industry by Visiting the Industry Solutions Center
10:30 a.m. – 11:30 a.m.	Product Theaters

clonoSEO and The Future of MRD

Epcoritamab, a Novel Subcutaneous Bi-specific CD3xCD20 Antibody for the Treatment of Patients with B-NHL: From Bench to Bedside and Beyond

Exploring Outcomes With Fixed-Duration Treatment in CLL and New Evidence in First-Line AML Pivotal Clinical Trial Data That Supports Treatment Decisions and Patient Care

PNH: Key Clinical Considerations for a Terminal Complement-Mediated Disease

Scientific Exploration of Novel Targets for AML, MM, and NHL: A Glimpse into Areas of Research and Development

Trust the Experience of a rFVIIa Product Used for a Wide Range of Indications

11:30 a.m. – 12:15 p.m.	<b>Education Program</b>

Aggressive Lymphomas: What Novel Approaches Are Ready for Prime Time? - Live Q&A

Chronic Transfusion Support: Challenging Cases - Live Q&A Junior Faculty Career Development Education Session - Live Q&A Pediatric Hematological Malignancies: CARs for Kids - Live Q&A

#### 11:30 a.m. – 12:15 p.m. Scientific Program

Scientific Committee on Bone Marrow Failure: Precision Medicine Approaches to Leukemia Predisposition in Bone Marrow Failure - Live Q&A Scientific Committee on Iron and Heme: Well-Regulated vs Malfunctioning Mechanisms of Iron Metabolism - Live Q&A Scientific Committee on Plasma Cell Neoplasia: The

Immune System in Multiple Myeloma - Live Q&A

11:30 a.m. – 1:00 p.m. Oral Abstract Sessions

- 321. Blood Coagulation and Fibrinolytic Factors: Coagulation and Fibrinolytic Factors: Regulation of Coagulation (626–631)
- 615. Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Commercially Available Therapy, excluding Transplantation II (632–637)
- 621. Lymphoma—Genetic/Epigenetic Biology: Clinical implications of biological insights in lymphoma (638–643)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma—Clinical Studies: Immunotherapy in T/NK Cell Lymphoma (644–646)
- 632. Chronic Myeloid Leukemia: Therapy: CML: New and Beyond (647–652)
- 637. Myelodysplastic Syndromes—Clinical Studies: Treatment of Higher Risk Myelodysplastic syndromes (653–658)
- 641. CLL: Biology and Pathophysiology, excluding Therapy: Genetic Models and Genomic Landscape of CLL and Richter Transformation (659–664)
- 652. Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy (665–670)
- 801. Gene Editing, Therapy and Transfer I (671-676)

12:15 p.m. – 12:30 p.m.	ASH Wellness Studio
1:00 p.m. – 1:30 p.m.	ASH Wellness Studio
1:00 p.m. – 1:30 p.m.	Learn from Industry by Visiting the Industry Solutions Center
1:30 p.m. – 2:15 p.m.	Education Program

Genetic Testing for Heritable Hematologic Disorders 101 - Live Q&A
Out of Balance: Anemias Due to Disordered Iron Homeostasis - Live Q&A

Special Symposium on the Basic Science of Hemostasis and Thrombosis - Live Q&A

1:30 p.m. – 2:30 p.m. General Sessions

E. Donnall Thomas Lecture and Prize: Quiescence and Cell Metabolism in Hematopoietic Stem Cells

1:30 p.m. – 3:00 p.m. Oral Abstract Sessions

- 114. Hemoglobinopathies, Excluding Thalassemia—Clinical: Novel Treatments for Sickle Cell Disease (677–681)
- 201. Granulocytes, Monocytes, and Macrophages (682-687)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Dissecting AML heterogeneity to refine treatment approaches (688–693)
- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis I (694–699)
- 623. Mantle Cell and Indolent B-Cell Lymphoma CAR-T and immunotherapy clinical studies (700–704)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/ Observational Studies: Front-Line Treatment and Prognostication of Burkitt Lymphoma, Plasmablastic Lymphoma, and DLBCL (705–708)
- 631. CML: Biology and Pathophysiology, excluding Therapy: Mechanisms of Resistance and Progression in CML (709–712)
- 635. Myeloproliferative Syndromes: Basic Science (713-718)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy (719–723)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation; Novel Approaches for Relapsed/ Refractory Myeloma and Amyloidosis (724–729)
- 701. Experimental Transplantation: Basic Biology, Pre-Clinical Models (730–735)
- 704. Immunotherapies: Therapeutic T cell Manipulation (736–741)
- 902. Health Services Research—Malignant Conditions (Lymphoid Disease) I (742–747)

2:15 p.m. – 2:30 p.m. ASH Wellness Studio

#### TUESDAY, DECEMBER 8, 2020

6:30 a.m. – 7:00 a.m. ASH Wellness Studio	11:15 a.m. – 11:30 a.m. General Sessions
	Business Meeting
7:00 a.m. – 3:00 p.m. Visit the Industry Solutions Center (E	
and Other Learning)	11:30 a.m. – 1:00 p.m. Special Interest Session
7:00 a.m. – 9:00 a.m. General Sessions	Modeling COVID-19: From the Lab to the World
7.00 a.m. 9.00 a.m. General Sessions	
Late-Breaking Abstracts Session	1:00 p.m. – 1:30 p.m. ASH Wellness Studio
8:00 a.m. – 8:15 a.m. ASH Wellness Studio	1:30 p.m. – 3:00 p.m. General Sessions
	Best of ASH
9:00 a.m. – 9:15 a.m. ASH Wellness Studio	Dest of ASh
	2:00 p.m. – 2:15 p.m. ASH Wellness Studio
9:30 a.m. – 11:00 a.m. General Sessions	
Presidential Symposium: Universal Donor Solutions in Hematolo	gy 3:00 p.m. – 3:30 p.m. ASH Wellness Studio

#### WEDNESDAY, DECEMBER 9, 2020

11:00 a.m. - 11:15 a.m. ASH Wellness Studio

7:00 a.m. – 8:00 a.m. ASH Poster Walks	8:00 a.m. – 9:00 a.m. Company Focus on Disease Posters
Current Challenges in Treating Hematologic Malignancies	AstraZeneca's Focus on B-Cell Malignancy Posters
Germline Predisposition to Hematopoietic	
Malignancies and Bone Marrow Failure	

#### THURSDAY, DECEMBER 10, 2020

7:00 a.m. – 8:00 a.m. ASH Poster Walks	2:00 p.m. – 3:00 p.m. ASH Poster Walks
A Walk Down Immunotherapy Lane: Watch Out for the CARs Blood and Bone—From Hematopoiesis to Hemostasis	Hemostasis & Thrombosis Health Care Equity Matters
Clinical Trials in Progress	neattii Care Equity Matters
Hematology and Aging	
Novel Diagnostics and Treatments for Sickle Cell Disease: A New Era	
Quality Improvement Poster Walk	

#### FRIDAY, DECEMBER 11, 2020

More events to be added! Check the mobile app and online for the latest schedule.

Notes:		

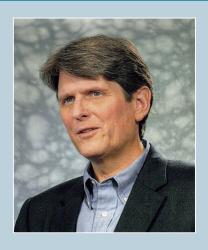
Notes:		



# 62<sup>nd</sup> ASH®Annual Meeting and Exposition December 5-8, 2020 Virtual

# Solve blood Invites You to Attend: Blood and Beyond

#### **GUEST SPEAKER**



Featuring:
Robert K. Massie, MA, PhD
Activist, Author, Politician
Boston. MA



Chair:
Nancy Berliner, MD
Editor-in-Chief, *Blood*,
Brigham and Women's Hospital
Boston, MA

#### Medical Mistakes and Miracles: Surviving Hemophilia, HIV and Hepatitis C

Medicine demands an engagement in clinical science that can lead physicians to lose sight of the impact of disease on patients and their families. This session will showcase the personal journey of one patient and shines a unique light on the intersection of medicine and humanity.

Bob Massie was born with severe classic hemophilia. Because of his childhood health issues, Massie spent ages six through twelve in leg braces and a wheelchair. His family spent a few years living in France, where Massie's healthcare was covered by the French government, and he was able to regain the ability to walk. In this talk, Massie chronicles his story in five moving and compelling parts that illuminate the progress, as well as the tragic mistakes, that have transformed the care of patients with hemophilia.

#### SUNDAY, DECEMBER 6\* 2:00 P.M. - 3:30 P.M.

\* This session is part of the ASH Annual Meeting program and requires a meeting subscription to access this session.

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INVITED SESSIONS

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# GENERAL SESSIONS

## **GENERAL SESSIONS**

These signature sessions are designed to be of interest to a broad and diverse audience and include the prestigious Plenary Scientific Session, Best of ASH, and the Presidential Symposium. Many of the General Sessions also honor distinguished leaders in the field through awards and special lectures.

All times are in Pacific time. Duplication/recording is prohibited.

#### SATURDAY

#### Fireside Chat with Dr. Anthony Fauci 4

Saturday 7:00 a.m. - 7:30 a.m.

#### Moderator:

Stephanie J. Lee, MD, MPH, President, American Society of Hematology, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA

#### Speaker:

Anthony S. Fauci, MD, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD

#### Ham-Wasserman Lecture 4

Saturday 2:00 p.m. - 3:00 p.m.

Therapeutic Development and Current Uses of BCL-2 Inhibition

#### Chair:

Stephanie J. Lee, MD, MPH, President, American Society of Hematology, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA

#### Speaker:

Andrew W. Roberts, MBBS, Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia

#### **ASH Awards Presentation**

Saturday 3:30 p.m. - 4:30 p.m.

#### Chair:

Stephanie J. Lee, MD, MPH, President, American Society of Hematology, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA

#### **SUNDAY**

#### Plenary Scientific Session 4

Sunday 7:00 a.m. - 9:00 a.m.

#### Chair:

Stephanie J. Lee, MD, MPH, President, American Society of Hematology, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA

# ASH-EHA Joint Symposium: Failure of Targeted Cellular Immunotherapy and Hematopoietic Cell Transplant: Mechanisms and Mitigating Strategies **2**

Sunday 9:30 a.m. - 10:30 a.m.

#### Co-Chairs:

Stephanie J. Lee, MD, MPH, President, American Society of Hematology, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA

JOHN G. GRIBBEN, MD, DSc, FRCP, FRCPATH, FMEDSCI, Barts Cancer Institute, London, United Kingdom

#### **Speakers:**

CRYSTAL L. MACKALL, MD, Stanford University School of Medicine, Stanford, CA

North American Perspective: Targeted Cellular Immunotherapy

Luca Vago, MD, PhD, IRCCS San Raffaele Scientific Institute, Milano, Italy

European Perspective: Hematopoietic Cell Transplant

#### **MONDAY**

#### Ernest Beutler Lecture and Prize 4

Monday 9:00 a.m. - 10:00 a.m.

Targeting the Aberrant Leukemia Epigenome

#### Chair:

Stephanie J. Lee, MD, MPH, President, American Society of Hematology, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA

#### Speakers:

ARI MELNICK, MD, Weill Cornell Medical College, New York, NY Basic Science

COURTNEY D. DINARDO, MD, MSc, University of Texas MD Anderson Cancer Center, Houston, TX Clinical Science/Translational Research

#### E. Donnall Thomas Lecture and Prize 4

Monday 1:30 p.m. – 2:30 p.m.

Quiescence and Cell Metabolism in Hematopoietic Stem Cells

#### Chair:

Stephanie J. Lee, MD, MPH, President, American Society of Hematology, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA

#### Speaker:

Toshio Suda, MD, PhD, National University of Singapore, Singapore

#### **TUESDAY**

#### **Late-Breaking Abstracts Session**

Tuesday 7:00 a.m. - 9:00 a.m.

#### Co-Chairs:

Christopher R. Flowers, MD, MS, University of Texas MD Anderson Cancer Center, Houston, TX

Sioban Keel, MD, University of Washington, Seattle, WA

# Presidential Symposium: Universal Donor Solutions in Hematology CONTROL

Tuesday 9:30 a.m. - 11:00 a.m.

#### Chair:

Stephanie J. Lee, MD, MPH, President, American Society of Hematology, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA

#### Speakers:

GAY M. CROOKS, MB, BS, University of California–Los Angeles, Los Angeles, CA Off-the-Shelf Cellular Immunotherapy

Bronwen E. Shaw, PhD, MRCP, FRCPATH, Medical College of Wisconsin, Milwaukee, WI A Stem Cell Donor for Every Patient

Stella P. Chou, MD, Boston Children's Hospital, Boston, MA Universal Platelets and Red Cells

#### **Business Meeting**

Tuesday 11:15 a.m. - 11:30 a.m.

#### Chair:

Stephanie J. Lee, MD, MPH, President, American Society of Hematology, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA

#### Best of ASH 2

Tuesday 1:30 p.m. - 3:00 p.m.

#### **Co-Chairs:**

ALISA S. WOLBERG, PhD, University of North Carolina at Chapel Hill, Chapel Hill, NC

Leslie Kean, MD, PhD, Boston Children's Hospital, Boston, MA

# SPECIAL INTEREST SESSIONS

## SPECIAL INTEREST SESSIONS

These smaller sessions provide the opportunity for ASH's various communities to focus on specific topics of interest.

All times are in Pacific time. Duplication/recording is prohibited.

#### **THURSDAY**

# Special Symposium on Quality: Blood, Debt and Tears: Tackling Burnout in Hematology

Thursday 9:30 a.m. - 11:00 a.m.

#### **Co-Chairs:**

SARAH H. O'BRIEN, MD, Nationwide Children's Hospital, Columbus, OH

NATHAN T. CONNELL, MD, MPH, Brigham and Women's Hospital, Boston, MA

#### Speaker:

SHELLY DEV, Sunnybrook Health Sciences Center, Toronto, Ontario, Canada *Physician Burnout* 

#### **Trainee Competitors:**

AMAR H. KELKAR, MD, University of Florida Health Shands Hospital, Gainesville, FL Wilson Andres Vasconez, MD, University of Miami/ Jackson Memorial Hospital, Miami, FL JAFAR AL-MONDHIRY, MD, MA, University of California—Los Angeles, Los Angeles, CA Andrea Anampa-Guzmán, Universidad Nacional Mayor de San Marcos, Lima, Peru

#### **SATURDAY**

#### Special Scientific Session on Race and Science 2

Saturday 12:00 p.m. - 1:30 p.m.

#### **Co-Chairs:**

ALAN E. MAST, MD, PhD, Blood Center of Wisconsin, Milwaukee, WI

Wally R. Smith, MD, Virginia Commonwealth University, Richmond, VA

#### **SUNDAY**

#### The 2020 Pandemic: Latest Insights on COVID-19

Sunday 9:30 a.m. - 11:00 a.m.



ASH Choosing Wisely® Campaign: 2020 ASH Choosing Wisely Champions - Live Q&A

Sunday 12:00 p.m. - 12:45 p.m.

#### Chair:

ANITA RAJASEKHAR, MD, University of Florida – Shands Hospital, Gainesville, FL

#### Panelists:

Sriman Swarup, MD, MBBS, Texas Tech University Health Science Center, Lubbock, TX

HIND SALAMA, King Abdulaziz Medical City, Riyadh, Saudi Arabia

Arielle L. Langer, MD, MPH, Brigham and Women's Hospital, Wellesley, MA

#### **Blood & Beyond**

Sunday 2:00 p.m. - 3:30 p.m.

Medical Mistakes and Miracles: Surviving Hemophilia, HIV and Hepatitis C

#### Chair:

Nancy Berliner, MD, Editor-in-Chief, *Blood*, Brigham and Women's Hospital, Boston, MA

#### Speaker:

ROBERT K. MASSIE, MA, PhD

#### **TUESDAY**

#### Modeling COVID-19: From the Lab to the World

Tuesday 11:30 a.m. - 1:00 p.m.



# **ASH-A-PALOOZA**

#### **ASH-A-PALOOZA**

The "Trainee Day" attendees may know from past annual meetings has been re-imagined as ASH-a-Palooza! What has emerged is a new educational experience that will offer a relaxed, open learning environment for trainees with multiple opportunities for micro learning. Trainees won't want to miss this fun, interactive, two-day event, complete with engaging ASH Talks, "speed mentoring," and more!

ASH-a-Palooza is open for all registered attendees, but Blood Buddies and Blood Buddy Forums are reserved for trainee attendees only.

All times are in Pacific time. Duplication/recording is prohibited.

#### **THURSDAY**

#### **Welcome Video and Opening Song**

7:00 a.m. - 7:10 a.m. Thursday

#### Blood Drops: 2

Thursday 7:15 a.m. - 7:55 a.m. 8:45 a.m. - 9:25 a.m. Thursday

These micro-learning sessions will be presented with one-, two-, or three-speaker panels. Each Blood Drop will be presented twice.

ASH MEI

**CRTI** 

**Health Disparities** 

**HONORS** 

**MMSAP** 

PhD

Phy-Sci

Sickle Cell Disease

Special Interest

#### ASH Talk 1: Leadership 2

Thursday 8:00 a.m. - 8:40 a.m.

#### Special Symposium on Quality: Blood, Debt and **Tears: Tackling Burnout in Hematology**

9:30 a.m. - 11:00 a.m. Thursday

#### Co-Chairs:

SARAH H. O'BRIEN, MD, Nationwide Children's Hospital, Columbus, OH

NATHAN T. CONNELL, MD, MPH, Brigham and Women's Hospital, Boston, MA

#### Speaker:

SHELLY DEV, Sunnybrook Health Sciences Center, Toronto, Ontario, Canada Physician Burnout

#### **Trainee Competitors:**

AMAR H. KELKAR, MD, University of Florida Health Shands Hospital, Gainesville, FL WILSON ANDRES VASCONEZ, MD, University of Miami/ Jackson Memorial Hospital, Miami, FL JAFAR AL-MONDHIRY, MD, MA, University of California—Los Angeles, Los Angeles, CA Andrea Anampa-Guzmán, Universidad Nacional Mayor de San Marcos, Lima, Peru

#### Blood Buddies 4

Thursday 10:00 a.m. - 12:00 p.m.

Blood Buddies are one-on-one, ten-minute sessions to discuss career tracks and seek advice from faculty mentors. Blood Buddy sessions are reserved for trainee attendees only.

Adult Clinical Malignant Hematology Adult Clinical Non-Malignant Hematology Lab & Translational Hematology Pediatric Clinical Malignant Hematology Pediatric Clinical Non-Malignant Hematology Pediatric and Adult BMT

PhD Careers

Quality Improvement



#### Blood Buddy Forums 2

Thursday 10:00 a.m. - 12:00 p.m.

Blood Buddy Forums are virtual spaces where faculty will answer questions from a group of attendees. *Blood Buddy Forums are reserved for trainee attendees only.* 

Adult and Pediatric BMT

Adult Clinical Malignant Hematology

Adult Clinical Non-Malignant Hematology

Clinical Careers in Hematology (Private Practice)

Government Careers (NIH and FDA)

**Industry Careers** 

Laboratory and Translational Hematology

Pediatric Clinical Malignant Hematology

Pediatric Clinical Non-Malignant Hematology

PhD Careers

**Systems Based Hematology** 

#### **FRIDAY**

#### ASH-a-Palooza Thank You Video

Friday 7:00 a.m. – 7:10 a.m.

#### Blood Drops 2

Friday 7:15 a.m. – 7:55 a.m. Friday 8:45 a.m. – 9:25 a.m.

These micro-learning sessions will be presented with one-, two-, or three-speaker panels. Each Blood Drop will be presented twice.

**AMFDP** 

**Finding Your Career** 

Hemostasis and Thrombosis

**Quality Improvement** 

**RTAF** 

Scholar

TRTH

Wellness

#### ASH Talk 2: Racial Disparities in Healthcare 4

Friday 8:00 a.m. - 8:40 a.m.

#### Trainee Didactic Sessions 2

Friday 8:45 a.m. – 9:45 a.m.

Academic and Industry Career Pathway

How to Transition from a Trainee to Faculty

Intermediate Funding

Quality Improvement, Quality Research in Hematology

#### Blood Buddies 2

Friday 10:00 a.m. – 12:00 p.m.

Blood Buddies are one-on-one, ten-minute sessions to discuss career tracks and seek advice from faculty mentors. Blood Buddy sessions are reserved for trainee attendees only.

Adult Clinical Malignant Hematology

Adult Clinical Non-Malignant Hematology

Lab & Translational Hematology

Pediatric and Adult BMT

Pediatric Clinical Malignant Hematology

Pediatric Clinical Non-Malignant Hematology

PhD Careers

**Quality Improvement** 

#### **Blood Buddy Forums**

Friday 10:00 a.m. – 12:00 p.m.

Blood Buddy Forums are virtual spaces where faculty will answer questions from a group of attendees. *Blood Buddy Forums are reserved for trainee attendees only.* 

Adult and Pediatric BMT

Adult Clinical Malignant Hematology

Adult Clinical Non-Malignant Hematology

Clinical Careers in Hematology (Private Practice)

Government Careers (NIH and FDA)

**Industry Careers** 

Laboratory and Translational Hematology

Medical Educators in Hematology

Pediatric Clinical Malignant Hematology

Pediatric Clinical Non-Malignant Hematology

PhD Careers

Systems Based Hematology

Notes:		



# 62nd ASH®Annual Meeting and Exposition

December 5-8, 2020 Virtual

# blood Invites You to Attend:

# How to Get Published in a Peer-Reviewed Journal



CHAIR:
Nancy Berliner , MD
Editor-in-Chief, Blood,
Brigham and Women's Hospital
Boston, MA

Early Access Beginning on Wednesday, December 2\*

\* This session is part of the ASH Annual Meeting program and requires a meeting subscription to access this session.

The ability to communicate one's work effectively by publication in high-impact journals is a benchmark for success in academic medicine. Even high-quality work may not be accepted if not presented in a well-crafted manuscript. Dr. Berliner will lead a panel discussion that will provide insight into the elements of a high-quality manuscript worthy of publication in *Blood* and tips on avoiding common errors that might result in rejection.

hematology.org | bloodjournal.org





5-7 Dec 2020 Saturday

### EDUCATION SESSIONS

NEW THIS YEAR: All Education Program session presentations are pre-recorded and can be viewed beginning Tuesday, December 2 (designated with ( )). Live question-and-answer sessions to accompany each session will held from Saturday, December 5, through Monday, December 7 at the times below. The Live Q&A sessions will consist of a brief summary of the full-length presentations followed by live interactions with the presenters.

Attendees are encouraged to view the pre-recorded presentations prior to the Live Q&A session.

Chapters based on these presentations will be published in *Hematology 2020*, the ASH Education Program.

#### **Education Program Co-Chairs:**

CHRIS R. FLOWERS, MD, MS, University of Texas MD Anderson Cancer Center, Houston, TX

SIOBAN KEEL, MD, University of Washington, Seattle, WA

All times are in Pacific time. Duplication/recording is prohibited.

#### SATURDAY



A Map for the Changing Landscape of CLL - Live O&A

Saturday 7:30 a.m. - 8:15 a.m.

#### Chair:

Jacqueline C. Barrientos, MD, MS, Northwell Health Cancer Institute, Zucker School of Medicine at Hofstra/Northwell, Lake Success, NY

#### **Speakers:**

CAROL MORENO, MD, PhD, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain Standard Approaches to Relapsed CLL after Frontline Chemoimmunotherapy

Jacqueline C. Barrientos, MD, MS, Department of Medicine, Hofstra North Shore–Long Island Jewish School of Medicine, Great Neck, NY Chemotherapy-Free Frontline Therapy for CLL: Is It Worth It?

Anthony R. Mato, MD, Memorial Sloan Kettering Cancer Center, New York, NY Approaches for Relapsed CLL After Chemotherapy-Free Frontline Regimens



Advances in the Laboratory Assessment of Hemostatic and Thrombotic Disorders - Live 0&A

Saturday 7:30 a.m. - 8:15 a.m.

#### Chair:

MICHELE P. LAMBERT, MD, Children's Hospital of Philadelphia, Philadelphia, PA

#### **Speakers:**

JOHANNA A. KREMER HOVINGA STREBEL, MD, University Hospital Bern, Bern, Switzerland The Laboratory Evaluation of Patients with Microangiopathic Hemolytic Anemia

MICHELE P. LAMBERT, MD, Children's Hospital of Philadelphia, Philadelphia, PA Improving Interpretation of Genetic Testing for Hereditary Hemorrhagic, Thrombotic, and Platelet Disorders

RITA SELBY, MBBS, FRCPC, University Health Network & Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada Expanding Clinical Roles for Viscoelastic Testing



Diagnostic and Prognostic Models in VTE Management: Ready for Primetime? - Live O&A

Saturday 9:30 a.m. - 10:15 a.m.

#### Chair:

FIONNUALA NI AINLE, MD, PhD, University College Dublin, Dublin, Ireland

#### Speakers:

Frederikus A. Klok, MD, PhD, Leiden University Medical Center, Leiden, Netherlands When Is it Safe to Treat PE at Home?

FIONNUALA NI AINLE, MD, PhD, University College Dublin, Dublin, Ireland Who Are the Patients at High Risk of Recurrent Thrombosis?

WEE SHIAN CHAN, MSc, MD, FRCPC, FACP, BC Children's Hospital, Vancouver, British Columbia, Canada

Can Pregnancy-Adapted Algorithms Avoid Diagnostic Imaging for Pulmonary Embolism?



Myelodysplastic Syndromes: What We Have and What We Want - Live O&A

Saturday 9:30 a.m. - 10:15 a.m.

#### Chair:

Hetty E. Carraway, MD, MBA, Cleveland Clinic, Cleveland, OH

#### Speakers:

Uwe Platzbecker, MD, University Hospital Leipzig, Leipzig, Germany Risk Stratification in MDS

HETTY E. CARRAWAY, MD, MBA, Cleveland Clinic, Cleveland, OH Therapy for Lower Risk MDS

Bart L. Scott, MD, Fred Hutchinson Cancer Center, Seattle, WA

Existing Agents, Novel Agents, or Transplantation for High Risk MDS



Anxiety Provoking Hematology Consults, Second Edition - Live Q&A

Saturday 12:00 p.m. - 12:45 p.m.

#### Chair:

Jeffrey Szer, MBBS, Royal Melbourne Hospital, Melbourne, Victoria, Australia

#### **Speakers:**

Kenneth L. McClain, MD, PhD, Texas Children's Cancer and Hematology Centers, Houston, TX Histiocytic Disorders: Novel Insights into Biology and Implications for Therapy (Langerhans and Erdheim-Chester)

MICHAEL LINENBERGER, MD, University of Washington, Fred Hutchinson Cancer Research Center, Seattle, WA

Updates on the Diagnosis and Management of the Most Common Porphyrias – AIP and EPP

Arı Zimran, MD, Shaare Zedek Medical Center, Jerusalem, Israel *Gaucher Disease* 



Beyond the Marrow: Major Non-Hematologic Complications of Inherited Bone Marrow Failure Syndromes - Live Q&A

Saturday 12:00 p.m. - 12:45 p.m.

#### Chair:

Neelam Giri, MD, National Cancer Institute, National Institutes of Health, Bethesda, MD

#### Speakers:

Kristen E. Schratz, MD, Johns Hopkins University School of Medicine, Baltimore, MD The Many Sequelae of Telomere Biology Disorders

Neelam Giri, MD, National Cancer Institute, National Institutes of Health, Bethesda, MD Non-Hematologic Cancer in Marrow Failure

CARMEM M. S. BONFIM, MD, PhD, Federal University of Parana, Curitiba, Parana, Brazil Special Considerations for Pre-and Post-Transplant in Inherited Marrow Failure Syndromes



Handling Challenging Questions in the Management of CML - Live O&A

Saturday 12:00 p.m. - 12:45 p.m.

#### Chair:

VIVIAN G. OEHLER, MD, Fred Hutchinson Cancer Research Center, Seattle, WA

#### Speakers:

VIVIAN G. OEHLER, MD, Fred Hutchinson Cancer Research Center, Seattle, WA First Generation vs. Second Generation TKI: Which is Best At Diagnosis of Chronic Phase CML?

Delphine Rea, MD, PhD, Saint Louis University Hospital, Paris, France When is it safe to stop TKIs?

JORGE E. CORTES, MD, Georgia Cancer Center, Augusta University, Augusta, GA How to manage CML patients with comorbidities?



Challenging Situations for Patients with Aggressive Lymphomas - Live Q&A

Saturday 2:00 p.m. - 2:45 p.m.

#### Chair:

Oreofe O. Odejide, MD, MPH, Dana-Farber Cancer Institute, Boston, MA



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#### Speakers:

Nancy Bartlett, MD, Siteman Cancer Center, Washington University School of Medicine, St. Louis, MO

Approaches for Unfit Patients with Aggressive Lymphomas

Lauren C. Pinter-Brown, MD, University of California–Irvine, Orange, CA Strategies for T-Cell Lymphomas

Oreofe O. Odejide, MD, MPH, Dana-Farber Cancer Institute. Boston. MA

Strategies for Management of Relapse after Aggressive B-cell and T-cell Lymphomas and How to Introduce Palliative Care



### The Emerging Role of Targeted Therapies and Cell Therapy in Transplant - Live Q&A **£**

Saturday 2:00 p.m. - 2:45 p.m.

#### Chair:

KATAYOUN REZVANI, MD, PhD, University of Texas MD Anderson Cancer Center, Houston, TX

#### **Speakers:**

STEPHAN MIELKE, MD, Karolinska Institute & University Hospital, Stockholm, Sweden The Evolving Field of Hematopoietic Stem Cell Transplantation: The Emerging Role of Cell Therapy

Jesus G. Berdeja, MD, Sarah Cannon Research Institute and Tennessee Oncology, Nashville, TN Practical Aspects of Building a New Immunotherapy Program: The Future of Cell Therapy

Katayoun Rezvani, MD, PhD, University of Texas MD Anderson Cancer Center, Houston, TX Next Generation cell therapies: beyond CAR T



### Managing Toxicities of Targeted Therapies in CLL - Live Q&A

Saturday 2:00 p.m. - 2:45 p.m.

#### Chair:

NICOLE LAMANNA, MD, Columbia University Medical Center, New York, NY

#### Speakers:

Kirsten Fischer, MD, University Hospital Cologne, Cologne, Germany

Preventing and Monitoring For Tumor Lysis Syndrome and Other Toxicities of Venetoclax

NICOLE LAMANNA, MD, Columbia University Medical Center, New York, NY

Managing Toxicities of Bruton Tyrosine Kinase Inhibitors

Danielle M. Brander, MD, Duke University, Durham, NC Managing Toxicities of PI3K Inhibitors

#### **SUNDAY**



### Immunotherapy in Multiple Myeloma - Live O&A &

Sunday 9:30 a.m. - 10:15 a.m.

#### Chair:

AJAI CHARI, MD, Mount Sinai School of Medicine, New York, NY

#### Speakers:

NIELS W. C. J. VAN DE DONK, MD, VU University Medical Center, Amsterdam, Netherlands Sequencing Multiple Myeloma Therapies With and After Antibody Therapies

Eric L. Smith, MD, PhD, Dana-Farber Cancer Institute, Boston, MA

The Future of CAR T Cells in Multiple Myeloma

AJAI CHARI, MD, Mount Sinai School of Medicine, New York, NY

Talk 3 Bispecific, Trispecific, and Other Novel Immune Treatments in Myeloma



#### Platelet Transfusions for Hematology / Oncology Patients: Taking a More Granular Look - Live Q&A

Sunday 9:30 a.m. - 10:15 a.m.

#### Chair:

Darrell J. Triulzi, MD, Institute for Transfusion Medicine, University of Pittsburgh Medical Center, Pittsburgh, PA

#### **Speakers:**

DARRELL J. TRIULZI, MD, Institute for Transfusion Medicine, University of Pittsburgh Medical Center, Pittsburgh, PA

How Well Do Platelets Prevent Bleeding?

Nancy M. Dunbar, MD, Dartmouth Hitchcock Medical Center, Lebanon, NH Does ABO and RhD Matching Matter for Platelet Transfusion?

CLAUDIA S. COHN, MD, PhD, University of Minnesota, Minneapolis, MN

Platelet Transfusion Refractoriness - How Do I Diagnose and Manage?



**Indolent Lymphomas: Answers to Smoldering Questions - Live Q&A** 

12:00 p.m. - 12:45 p.m. Sunday

#### Chair:

GILLES SALLES, MD, PHD, Centre Hospitalier Lyon-Sud, Lyon, France

#### Speakers:

GILLES SALLES, MD, PhD, Centre Hospitalier Lyon-Sud, Lyon, France

How Do I Sequence Therapy for Follicular Lymphoma?

PIER LUIGI ZINZANI, MD, PhD, University of Bologna, Bologna, Italy

How Do I Sequence Therapy for Marginal Zone Lymphomas?

Sonali M. Smith, MD, University of Chicago, Chicago, IL

Transformed Lymphoma - What Should I Do Now?



Selected Hemostasis and Thrombosis Topics in Women - Live O&A

Sunday 12:00 p.m. - 12:45 p.m.

#### Chair:

CLAIRE McLintock, MD, Redhealth, Auckland City Hospital, Auckland, New Zealand

#### Speakers:

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CLAIRE McLINTOCK, MD, Redhealth, Auckland City Hospital, Auckland, New Zealand Prevention and Treatment of Postpartum Hemor-

PAULA D. JAMES, MD, FRCPC, Queen's University, Kingston, Ontario, Canada

Women and Bleeding Disorders: Diagnostic Challenges

BETHANY T. SAMUELSON BANNOW, MD, Oregon Health & Science University, Portland, OR Management of Heavy Menstrual Bleeding on Anticoagulation



The Brain and Pain in Sickle Cell Disease: Understanding the Role of Sensory, **Cognition and Neuropathic Pathways in the** SCD Chronic Pain Experience - Live Q&A

Sunday 2:00 p.m. - 2:45 p.m.

#### Chair:

IFEYINWA OSUNKWO, MD, MPH, Levine Cancer Institute, Charlotte, NC

#### Speakers:

AMANDA M. BRANDOW, DO, MS, Medical College of Wisconsin, Milwaukee, WI

Neuropathic Pain in Sickle Cell Disease: Measurement and Management

IFEYINWA OSUNKWO, MD, MPH, Levine Cancer Institute, Charlotte, NC

Optimizing the Management of Chronic Pain in Sickle Cell Disease

LAWRENCE LONG, MD, UCSF Benioff Children's Hospital, Oakland, CA

Building a Contemporary Pain Management Strategy for SCD Patients in Your Practice in 2021



Caring for Patients with Acute Leukemia in Community Hospitals: Who, What, and When to Refer? - Live O&A

Sunday 2:00 p.m. - 2:45 p.m.

#### Chair:

Anna B. Halpern, MD, University of Washington, Seattle, WA

#### Speakers:

Anna B. Halpern, MD, University of Washington, Seattle, WA

Practice patterns and Outcomes for Patients with Acute [Myeloid] Leukemia

Anand .P Jillella, MD, Medical College of Georgia At Augusta University, Augusta, GA

Optimizing [AML] Management in Community Centers and When to Refer

RANDY TAPLITZ, MD, University of California-San Diego, La Jolla, CA

Supportive Care for Patients with Acute Leukemias



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### Monoclonal Gammopathies of Determined Significance - Live Q&A

Sunday 2:00 p.m. – 2:45 p.m.

#### Chair:

GIOVANNI PALLADINI, MD, PhD, Università Degli Studi Di Pavia, Pavia, Italy

#### Speakers:

Giovanni Palladini, MD, PhD, Università Degli Studi Di Pavia, Pavia, Italy

Management of AL Amyloidosis in 2020

JORGE J. CASTILLO, MD, Dana-Farber Cancer Institute, Boston, MA

Management of Waldenström Macroglobulinemia in 2020

Angela Dispenzieri, MD, Mayo Clinic, Rochester, MN Monoclonal Gammopathies of Clinical Significance

#### MONDAY



Acute Myeloid Leukemia - So Many Treatment Options; How Do You Decide? -Live Q&A

Monday 7:00 a.m. - 7:45 a.m.

#### Chair:

ALISON R. WALKER, MD, The Ohio State University Medical Center, Columbus, OH

#### **Speakers:**

Jacqueline S. Garcia, MD, Dana-Farber Cancer Institute, Boston, MA

Does Patient Fitness Play a Role in Determining First-Line Treatment for AML

ALISON R. WALKER, MD, The Ohio State University Medical Center, Columbus, OH

How to Approach Shared Decision Making in Determining Maintenance, Consolidation Therapy and Transplant

Eunice S. Wang, MD, Roswell Park Comprehensive Cancer Center, Buffalo, NY

Management of Toxicities Associated with Targeted Therapies: When to Push Through and When to Stop



Improving Symptom Control for Children with Hematological Malignancies - Live Q&A

Monday 7:00 a.m. - 7:45 a.m.

#### Chair:

LILLIAN SUNG, MD, PhD, The Hospital for Sick Children, Toronto, Ontario, Canada

#### **Speakers:**

LILLIAN SUNG, MD, PHD, The Hospital for Sick Children, Toronto, Ontario, Canada Symptom Screening in Routine Care - Time to Move Beyond Research? Tamara P. Miller, MD, MSc, Emory University School of Medicine/Children's Healthcare of Atlanta, Atlanta, GA

Capturing Treatment Toxicities in Clinical Practice

ROBERT PHILLIPS, MD, Leeds Children's Hospital, Leeds, United Kingdom Interventions to Improve Symptoms

Infection Risk, Immunization
Recommendations, and Antimicrobial
Prophylaxis Needs when Treating NonMalignant Hematologic Disorders - Wash Your
Hands and What Else? - Live Q&A

Monday 7:00 a.m. - 7:45 a.m.

#### Chair:

Stephan Moll, MD, University of North Carolina School of Medicine, Chapel Hill, NC

#### Speakers:

Grace Lee, MD, Lucile Packard Children's Hospital Stanford, Stanford, CA

Surgical splenectomy and Autosplenectomy when Treating Non-Malignant Hematologic Disorders: Infection Risk, Immunization Recommendations, Antimicrobial Prophylaxis Needs

Luis E. Malpica Castillo, MD, University of North Carolina at Chapel Hill, Chapel Hill, NC Practical Approach to Monitoring, Prevention, and Management of Infectious Complications Associated with Systemic Steroid and Other Immunosuppressive Agent Therapies in Non-Malignant Hematology

Jolan E. Walter, MD, PhD, University of South Florida/ Johns Hopkins All Children Hospital, St. Petersburg, FL

Rituximab and Eculizumab when Treating Non-Malignant Hematologic Disorders: Infection Risk, Immunization Recommendations, Antimicrobial Prophylaxis Needs



Understanding How to Manipulate the Immune System in Immunotherapy for Lymphoma - Live Q&A 2 GON-CME)

Monday 7:00 a.m. - 7:45 a.m.

#### Chair:

Stephen M. Ansell, MD, PhD, Mayo Clinic, Rochester, MN  $\,$ 

#### Speakers:

Stephen M. Ansell, MD, PhD, Mayo Clinic, Rochester, MN

Fundamentals of Immunology for Understanding Immunotherapy

CATHERINE DIEFENBACH, MD, New York University School of Medicine, NYU Cancer Institute, New York, NY

Immunotherapy with Drugs

DAVID L. PORTER, MD, University of Pennsylvania, Philadelphia, PA Immunotherapy with Cells



What Hematologists Need to Know About Giving and Stopping Aspirin - Live Q&A

Monday 7:00 a.m. - 7:45 a.m.

#### Chair:

DAVID A. GARCIA, MD, University of Washington, Seattle, WA

#### **Speakers:**

ERIN D. MICHOS, MD, MHS, Johns Hopkins University School of Medicine, Baltimore, MD Does ASA Still Have a Role as Primary Prevention for Acute Coronary Syndrome

Geoffrey D. Barnes, MD, MSc, University of Michigan, Ann Arbor, MI Combining Antiplatelet and Anticoagulant Therapy in Cardiovascular Disease

David A. Garcia, MD, University of Washington, Seattle, WA

ASA to Treat or Prevent VENOUS Thrombosis: Is There a Role in 2020?



Myeloproliferative Disorders: Too Many Cells, Too Few Therapies - How Do We Choose? - Live Q&A

Monday 9:00 a.m. - 9:45 a.m.

#### Chair:

ALISON R. MOLITERNO, MD, Johns Hopkins University School of Medicine, Baltimore, MD

#### Speakers:

MRINAL M. PATNAIK, MD, MBBS, Mayo Clinic, Rochester, MN

Myeloproliferative/Myelodysplastic Overlap Syndromes: Diagnosis and Treatment

ALISON R. MOLITERNO, MD, Johns Hopkins University School of Medicine, Baltimore, MD Applied Genomics in MPD

OLATOYOSI ODENIKE, MD, University of Chicago, Chicago, IL

Myelofibrosis: When to Refer for Allogeneic Transplantation



Updates on the Role of Non-Anticoagulant Interventions in Venous Thromboembolism - Live O&A

Monday 9:00 a.m. - 9:45 a.m.

#### Chair:

ANITA RAJASEKHAR, MD, University of Florida–Shands Hospital, Gainesville, FL

#### Speakers:

Kenneth A. Bauer, MD, Harvard Medical School, Beth Israel Deaconess Medical Center, Boston, MA Thrombolytic Therapy in Patients with VTE

Anita Rajasekhar, MD, University of Florida–Shands Hospital, Gainesville, FL

Inferior Vena Cava Filters: A Framework for Evidence-based Use

KAREN A. BREEN, MD, Guys and St Thomas; NHS Foundation Trust, London, United Kingdom Role of Venous Stenting for VTE



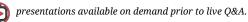
Yin and Yang of Autoimmunity and Immunodeficiencies in Hematology - Live Q&A ♣

Monday 9:00 a.m. - 9:45 a.m.

#### Chair:

Roshini Sarah Abraham, PhD, Nationwide Children's Hospital, Columbus, OH





#### Speakers:

Roshini Sarah Abraham, PhD, Nationwide Children's Hospital, Columbus, OH

How to Evaluate for Immunodeficiency in Patients with Cytopenias

MARKUS G. SEIDEL, MD, Medical University of Graz, University Clinics of Pediatrics and Adolescent Medicine, Graz, Austria

Treatment of Immune-Mediated Cytopenias in Adults with PIDs

Emma C. Morris, University College London, Royal Free London Hospital, London, United Kingdom Allogeneic hematopoietic stem cell transplantation in adults with primary immunudeficiency



Aggressive Lymphomas: What Novel Approaches Are Ready for Prime Time? - Live Q&A CONCENTRALE

Monday 11:30 a.m. - 12:15 p.m.

#### Chair:

Jennifer E. Amengual, MD, Columbia University, New York, NY

#### **Speakers:**

MICHAEL R. GREEN, PhD, University of Texas MD Anderson Cancer Center, Houston, TX Epigenetics of Lymphomas

Jennifer E. Amengual, MD, Columbia University, New York, NY

Can We Use Epigenetics to Prime Chemoresistant Lymphomas?

Kami J. Maddocks, MD, Ohio State University Hospital, Columbus, OH Novel Targets in Aggressive Lymphomas



Chronic Transfusion Support: Challenging Cases - Live Q&A

Monday 11:30 a.m. – 12:15 p.m.

#### Chair:

JENNIFER WEBB, MD, Children's National Health System, Washington, DC

#### **Speakers:**

Ashutosh Lal, MD, Children's Hospital & Research Center Oakland, Oakland, CA
Chronic Transfusion for Patients with Hemoglob-

Chronic Transfusion for Patients with Hemoglobinopathies

ERICA M. WOOD, MBBS, FRACP, FRCPA, Monash University, Melbourne, Victoria, Australia Outpatient Transfusions for Myelodysplastic Syndrome

Jennifer Webb, MD, Children's National Health System, Washington, DC The Social Aspects of a Chronic Transfusion Program



Junior Faculty Career Development Education Session - Live O&A

Monday 11:30 a.m. - 12:15 p.m.

#### Chair:

Leslie Ellis, MD, MSHPED, Wake Forest University School of Medicine, Winston Salem, NC

#### Speakers:

MARTINA C. MURPHY, MD, University of Florida, Gainesville, FL Leading Yourself

Marvin T. Nieman, PhD, Case Western Reserve University, Cleveland, OH Leading Yourself

RUTH GOTIAN, EdD, MS, Weill Cornell Medicine, New York, NY Leading Others

ALISON W. LOREN, MD, Perelman Center for Advanced Medicine, Philadelphia, PA *Leading Others* 

Ruben Mesa, MD, UT Health San Antonio Cancer Center, San Antonio, TX Leading Organizations

LINDA J. BURNS, MD, Center for International Blood and Marrow Transplant Research, Milwaukee, WI Leading Organizations

Pediatric Hematological Malignancies: CARs for Kids - Live Q&A

Monday 11:30 a.m. - 12:15 p.m.

#### Chair:

RAYNE H. ROUCE, MD, Texas Children's Hospital, Houston, TX

#### Speakers:

SHANNON L. MAUDE, MD, PhD, Children's Hospital of Philadelphia, Philadelphia, PA CAR-T Cells vs. Allogeneic HSCT for Poor Risk ALL

RAYNE H. ROUCE, MD, Texas Children's Hospital, Houston, TX

CAR-T Cells for Mature B Cell Lympohoma and Burkitt Lymphoma

Rebecca A. Gardner, MD, Seattle Children's Hospital, Seattle, WA

CAR-T Cells for Other Pediatric Hematological Malignancies Including AML



Genetic Testing for Heritable Hematologic Disorders 101 - Live O&A **♣** 

Monday 1:30 p.m. - 2:15 p.m.

#### Chair:

Lucy A. Godley, University of Chicago Medical Center, Chicago, IL

#### Speakers:

DAVID WU, MD, PhD, University of Washington, Seattle. WA

Next Generation Sequencing and Variant Interpretation for Germline Hematologic Disorders for the Practicing Provider

Lucy A. Godley, University of Chicago Medical Center, Chicago, IL

Somatic Mutation Panels: Recognizing Germline Findings in Tumor Testing

JONATHAN M. MARRON, MD, MPH, Boston Children's Hospital/Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA

Informed Consent for Genetic Testing in Hematology



Out of Balance: Anemias Due to Disordered Iron Homeostasis - Live Q&A 4

Monday 1:30 p.m. - 2:15 p.m.

#### Chair:

Maria Domenica Cappellini, Foundation IRCCS Ca' Granda Policlinico Milano–University of Milan, Milan, Italy

#### Speakers:

KLEBER YOTSUMOTO FERTRIN, MD, PhD, University of Washington, Seattle, WA

Iron Deficiency Across Chronic Inflammatory Conditions

Maria Domenica Cappellini, Foundation IRCCS Ca' Granda Policlinico Milano–University of Milan, Milan, Italy

Congenital Microcytic Anemias and Their Treatments

MICHAEL BRUCE ZIMMERMANN, MD, ETH Zurich, Zurich, Switzerland

Global Look at Nutritional and Functional Iron Deficiency

### **EDUCATION SPOTLIGHT SESSIONS**

Education Spotlight Sessions are intended to provide an in-depth review on specific scientific topics. Speakers will discuss current challenges and controversies in two exciting topics, addressing the current state of knowledge, translational and clinical applications, and future directions.

Attendees are encouraged to view the pre-recorded presentations prior to the Live Q&A session.

NEW THIS YEAR: All Education Spotlight Session presentations are pre-recorded and can be viewed Tuesday, December 2 (designated with ). Live question-and-answer sessions to accompany each session will be held Saturday, December 5, and Monday, December 7, at the times below. The Live Q&A sessions will consist of a brief summary of the full-length presentations followed by live interactions with the presenters.

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#### SATURDAY



Appropriate Use of Imaging in Patients with Lymphoma - Live Q&A **♣** 

Saturday 12:00

12:00 p.m. - 12:45 p.m.

#### Chair:

Judith Trotman, FRACP, Concord Hospital, Concord, Australia

#### Speakers:

JUDITH TROTMAN, FRACP, Concord Hospital, Concord, Australia

Modern Use of Imaging Studies in Non-Hodgkin Lymphoma: Algorithm for Initial Staging, Assessment of Response, and Monitoring for Relapse

Andrea Gallamini, MD, Azienda Ospedaliera S. Croce e Carle, Cuneo, Italy Modern Use of Imaging Studies in Hodgkin Lymphoma: Algorithm for Initial Staging, Assessment of Response, and Monitoring for Relapse



Emicizumab's Impact on the Landscape of Hemophilia A Treatment: Two Artists Debate the View - Live Q&A

Saturday 12

12:00 p.m. - 12:45 p.m.

#### Chair:

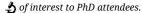
STACY E. CROTEAU, MD, Boston Children's Hospital, Boston, MA

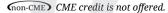
#### **Speakers:**

Guy Young, MD, Children's Hospital Los Angeles, Los Angeles, CA

ROBERT F. SIDONIO JR., MD, MSc, Emory University, Atlanta, GA







#### **MONDAY**



Vascular Anomalies 101: Case-Based Discussion on the Diagnosis, Treatment and Lifelong Care of These Patients - Live Q&A

Monday 7:00 a.m. - 7:45 a.m.

#### Chair:

Francine Blei, MD, Northwell Health, New York, NY

#### Speakers:

Denise M. Adams, MD, Children's Hospital of Philadelphia, Philadelphia, PA Miikka Vikkula, MD, PhD, Universite Catholique De Louvain, Brussels, Belgium Case #1. Thrombotic Painful Event in a Venous Malformation

Case #2. Multifocal Bone Lesions and Profound Lymphopenia That Is Not Langerhans Histiocytosis



How to Manage Common Challenging Situations in Patients with Multiple Myeloma - Live Q&A

Monday 9:00 a.m. - 9:45 a.m.

#### Chair:

Francesca Gay, MD, GIMEMA, Torino, Torino, Italy

#### **Speakers:**

Francesca Gay, MD, GIMEMA, Torino, Torino, Italy Management of Multiple Myeloma for Patients with Renal Failure

Laura Rosinol, MD, PhD, Hospital Clinic i Provincial, Barcelona, Spain Difficult Conditions to Manage: Plasma Cell Leuke-

mia, Extramedullary Disease, CNS Involvement



Transfusion and Anemia in Global Health - Live O&A

Monday 9:00 a.m. - 9:45 a.m.

#### Chair:

Meghan Delaney, DO, Children's National Medical Center, Washington, DC

#### Speakers:

KATHRYN MAITLAND, Imperial College London, London, United Kingdom, and KEMRI/Wellcome Programme, Kilifi, Kenya Pediatric Anemia in Africa: Evidence-Based Approach to Transfusion

CHRISTINA FITZMAURICE, MD MPH, Fred Hutchinson Cancer Research Center, Seattle, WA The Unmet Global Need for Blood Transfusion



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## ASH® Clinical Practice Guidelines

Stay up to date with these evidence-based guidelines covering the prevention, diagnosis, and treatment of blood disorders.

ASH Clinical Practice Guidelines are developed by leading clinical, methodological, and patient experts through a rigorous process of reviewing evidence and writing actionable recommendations.

Our use of state-of-the-art GRADE methodology ensures that the guidelines meet the highest standards for trustworthiness and transparency. The guidelines, published in Blood Advances, provide extensive details about the quality of evidence that was evaluated for each recommendation.



Sickle Cell Disease (SCD) **NEW GUIDELINES AVAILABLE!** 



Venous Thromboembolism (VTE) **NEW GUIDELINES AVAILABLE!** 



Immune Thrombocytopenia (ITP)



Von Willebrand Disease (VWD)
NEW GUIDELINES AVAILABLE!

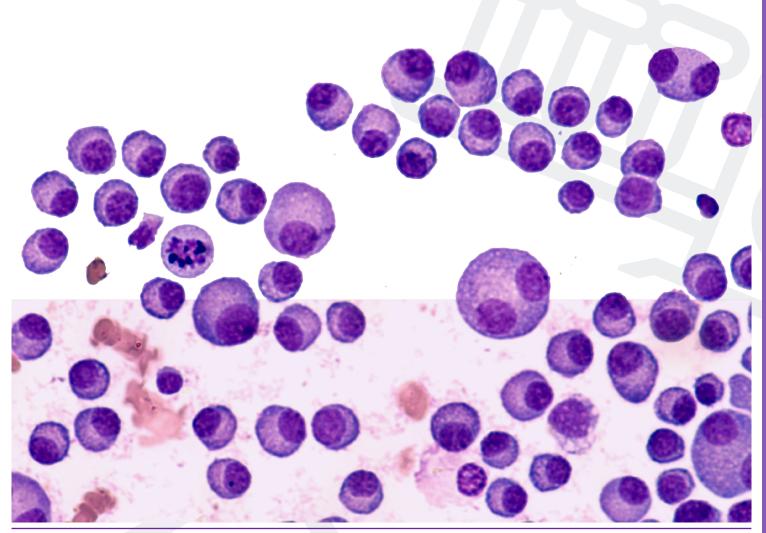


Acute Myeloid Leukemia (AML)

NEW GUIDELINES AVAILABLE!

Visit www.hematology.org/guidelines to stay informed about newly published guidelines and relevant resources.





SCIENTIFIC SESSIONS

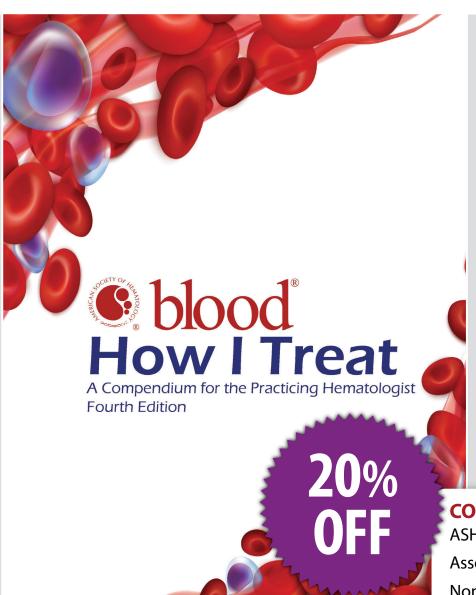
## blood®

# How I Treat

CURRENT EDITION

A Compendium for the Practicing Hematologist, 4th Edition

A collection of top "How I Treat" articles from *Blood*, many of which are updated to reflect the most recent scientific and clinically relevant information.



# Featuring <u>31 articles</u> with clinical updates in the following areas:

- Aplastic Anemia
- Chronic Lymphocytic Leukemia
- Malignant Lymphoma
- Myeloid Neoplasia
- Myeloma
- Red Cell Disorders
- Thrombosis and Hemostasis
- Transplantation

#### **CONFERENCE SPECIAL**

ASH Member \$50.00 ▶ \$40.00

Associate Member \$45.00 ▶ \$36.00

Non-member \$75.00 ▶ \$60.00

5–7 Dec 2020 Saturday

### SCIENTIFIC COMMITTEE SESSIONS

NEW THIS YEAR: All Scientific Committee Session presentations are pre-recorded and can be viewed beginning Tuesday, December 2 (designated with ( ). Live question-and-answer sessions to accompany each session will held from Saturday, December 5, through Monday, December 7 at the times below. The Live Q&A sessions will consist of a brief summary of the full-length presentations followed by live interactions with the presenters.

Attendees are encouraged to view the pre-recorded presentations prior to the Live Q&A session.

**Scientific Program Co-Chairs:** 

ALISA S. WOLBERG, PhD, University of North Carolina at Chapel Hill, Chapel Hill, NC

Leslie Kean, MD, PhD, Boston Children's Hospital, Boston, MA

All times are in Pacific time. Duplication/recording is prohibited.

#### **SATURDAY**

#### Scientific Committee on Stem Cells and Regenerative Medicine



Extrinsic Regulation of Hematopoietic Stem Cell Emergence and Homeostasis - Live Q&A

Saturday 7:30 a.m. - 8:15 a.m.

#### Chair:

Suneet Agarwal, MD, PhD, Boston Children's Hospital, Dana-Farber Cancer Institute, Harvard Stem Cell Institute, Harvard Medical School, Boston, MA

#### Speakers:

Trista E. North, PhD, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA Extrinsic Factors Governing Hematopoietic Stem Cell Development

JOHN P. CHUTE, MD, University of California–Los Angeles, Los Angeles, CA Regenerative Niche-Hematopoietic Stem Cell Interactions

LAURA M. CALVI, MD, University of Rochester School of Medicine, Rochester, NY Role of the Niche in Hematopoietic Stem Cell Aging

#### Scientific Committee on Transplantation Biology and Cellular Therapies



Challenges in Cell Therapy: Relapse and Toxicities - Live Q&A (NON-CME)

Saturday 9:30 a.m. - 10:15 a.m.

#### Chair:

Catherine Wu, MD, Dana-Farber Cancer Institute, Boston, MA

#### Speakers:

JOHN F. DIPERSIO, MD, PHD, Washington University School of Medicine, Saint Louis, MO Addressing Relapsed Disease Following Hematopoietic Stem Cell Transplantation

Aude G. Chapuis, MD, Fred Hutchinson Cancer Research Center, Seattle, WA Addressing Relapsed Disease Following Cellular Therapy

CHIARA BONINI, MD, Ospedale San Raffaele, Milan, Italy
Addressing Toxicities Following Cellular Therapy

#### Scientific Committee on Transfusion Medicine



**Novel Blood Therapeutics - Live Q&A** 

Saturday 9:30 a.m. - 10:15 a.m.

#### **Co-Chairs:**

Simone Glynn, MD, MPH, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD

Stella Chou, MD, Children's Hospital of Philadelphia, Philadelphia, PA

#### Speakers:

VLADIMIR MUZYKANTOV, PHD, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA Drug Delivery by Red Cells

HIDDE L. PLOEGH, PhD, Boston Children's Hospital, Boston, MA Immune Tolerance by Red Cells

Leticia Hosta-Rigau, PhD, Technical University of Denmark, Kongens Lyngby, Hovedstaden, Denmark

Synthetic Red Cells

#### Joint Session: Scientific Committee on Myeloid Biology & Scientific Committee on Myeloid Neoplasia



Single Cell Analysis of Hematopoietic Development and Clonal Complexity of Malignant Hematopoiesis - Live Q&A

Saturday 9:30 a.m. - 10:15 a.m.

#### **Co-Chairs:**

Soheil Meshinchi, MD, PhD, Fred Hutchinson Cancer Research Center, Seattle, WA

SANDRA ZINKEL, MD, PhD, Vanderbilt University School of Medicine, Nashville, TN

#### **Speakers:**

VIJAY G. SANKARAN, MD, PhD, Boston Children's Hospital, Boston, MA

Single Cell Understanding of Hematopoiesis and Myeloid Lineage Commitment

TIMM SCHROEDER, PhD, ETH Zurich, Basel, Switzerland

Single Cell Analysis of the Bone Marrow Niche -Quantitative Understanding of Stem/Progenitor Niche Interactions

Margaret Goodell, PhD, Center for Cell and Gene Therapy, Baylor College of Medicine, Houston, TX Subclonal Complexity in Myeloid Malignancies and Mechanism of Selection and Resistance

Konstanze Döhner, MD, University Hospital of Ulm, Ulm, Germany

Measuring Disease Burden in Myeloid Malignancies/Residual Disease

### Scientific Committee on Epigenetics and Genomics



RNA in Normal and Malignant
Hematopoiesis - Live Q&A (non-CME)

Saturday 12:00 p.m. – 12:45 p.m.

#### Chair:

Kathrin Bernt, MD, Children's Hospital of Philadelphia, Philadelphia, PA

#### **Speakers:**

Chris B. Burge, MD, PhD, Massachusetts Institute of Technology, Cambridge, MA

Basic Mechanisms and Significance of Altered Splicing in Cancer and Hematology

OMAR ABDEL-WAHAB, MD, Memorial Sloan Kettering Cancer Center, New York, NY

Understanding and Targeting Spliceosomal Gene Mutations in Leukemia

Kristin Hope, PhD, McMaster University, Hamilton, Ontario, Canada

RNA Processing in Benign and/or Malignant Hematology



#### **SUNDAY**

#### Scientific Committee on Red Cell Biology



Location, Location - Live Q&A

Sunday 9:30 a.m. - 10:15 a.m.

#### Chair:

Miguel Abboud, MD, American University of Beirut, Beirut, Lebanon

#### Speakers:

Ke Xu, PhD, University of California–Berkeley, Berkeley, CA

Phase Resolution in Erythropoiesis

JOHAN FLYGARE, MD, PHD, Lund University, Lund, Sweden

Molecules Involved in the Generation of Definitive Hematopoiesis

Velia M. Fowler, PhD, University of Delaware, Newark, DE

Cytoskeletal Control of Erythroid Properties and Enucleation

Joint Session: Scientific Committee on Blood Disorders in Childhood & Scientific Committee on Immunology and Host Defense



What the Children Can Teach Us: Congenital Immunodeficiencies Shed Light on Immunity, Hematopoiesis, and Cancer - Live Q&A

Sunday 12:00 p.m. – 12:45 p.m.

#### Co-Chairs:

ROBERT SIDONIO JR., MD, MSc, Children's Hospital of Atlanta, Atlanta, GA

Sung-Yun Pai, MD, Boston Children's Hospital, Boston, MA

#### **Speakers:**

Carrie L. Lucas, PhD, Yale, New Haven, CT Human PI3K Mutations: Immunodeficiency and Malignancy

Andrew L. Snow, PhD, Uniformed Services University, Bethesda, MD The Biology of CARMA Proteins in Immunity and Malignancy Sylvain Latour, PhD, Institut IMAGINE, Hôpital Necker, Paris, France

The Complete Spectrum of IKZF1 Defects: Immunodeficiency, Immune Dysregulation, Abnormal Hematopoiesis and Leukemia

Steven M. Holland, MD, Laboratory of Clinical Infectious Diseases, National Institutes of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD

GATA2: MonoMac and Beyond

Joint Session: Scientific Committee on Hematopathology and Clinical Laboratory Hematology & Scientific Committee on Lymphoid Neoplasia



Getting the Most from Minimal Residual Disease - Live Q&A GOD-CME

Sunday 2:00 p.m. – 2:45 p.m.

#### **Co-Chairs:**

ERIC HSI, MD, Cleveland Clinic, Cleveland Clinic Foundation, Cleveland, OH

LISA ROTH, MD, Weill Cornell Medical College, New York, NY

#### Speakers:

Davide Rossi, MD, PhD, Amedeo Avogadro University of Eastern Piedmont, Bellinzona, Italy Use of Minimal Residual Disease and Advances in Clinical Trials

KATIE THOREN, PHD, MEMORIAL SLOAN KETTERING CANCER CENTER, NEW YORK, NY

Advances in Mass Spectrometry for Myeloma Minimal Residual Disease

Ash A. Alizadeh, MD, PhD, Stanford University, Stanford, CA

Newest Discoveries Using Next Generation Sequencing Approaches for Minimal Residual Disease

Scott R. Manalis, PhD, Massachusetts Institute of Technology, Cambridge, MA

Bioengineering Strategies to Phenotypically Define Minimal Residual Disease

### Scientific Committee on Megakaryocytes and Platelets



Molecular Basis of Platelet/Megakaryocyte Dysfunction: Novel Approaches - Live Q&A

Sunday 2:00 p.m. - 2:45 p.m.

#### Chair:

ANGARA KONETI RAO, MBBS, Temple University, Philadelphia, PA

#### Speakers:

BETHAN PSAILA, MD, PHD, MRC Molecular Haematology Unit, University of Oxford, Oxford, United Kingdom

Single Cell Approaches to Elucidate Novel and Aberrant Pathways in Megakaryocytes

MORTIMER PONCZ, MD, Children's Hospital of Philadelphia, Philadelphia, PA Exploiting Induced Pluripotent Stem Cells to Unravel Mechanisms in Inherited Platelet/Megakaryocyte Disorders

Kathleen Freson, PhD, University of Leuven, Leuven, Belgium Insights into Platelet-Megakaryocyte Biology through Next-Generation Sequencing

#### MONDAY

### Scientific Committee on Thrombosis and Vascular Biology



Gut Microbiome and the Endothelium - Live Q&A (NOTH-CME)

Monday 9:00 a.m. – 9:45 a.m.

#### Chair:

Wolfram Ruf, MD, Johannes Gutenberg University Medical Center, Mainz, Germany

#### Speakers:

Martin Kriegel, MD, PhD, Yale School of Medicine, New Haven, CT Microbiota and Thrombosis

Mark L. Kahn, MD, University of Pennsylvania, Philadelphia, PA

Microbiome Regulation of Toll-Like Receptor Signaling and Vascular Malformation

Weifel Zhu, PhD, Cleveland Clinic Foundation, Cleveland, OH

Microbiome-Derived Metabolites Affecting Vascular Function

#### Scientific Committee on Hematopoiesis



Hematopoietic Aging: Mechanisms and Consequences - Live Q&A

Monday 9:00 a.m. - 9:45 a.m.

#### Chair:

Jose Cancelas, MD, University of Cincinnati, Cincinnati, OH

#### **Speakers:**

Danica Chen, PhD, University of California–Berkley, Berkeley, CA

Hematopoietic Stem Cell Aging and its Impact on Lifespan

Maria Carolina Florian, PhD, Institute of Molecular Medicine, Ulm University, Barcelona, Spain Aging of the Stem Cell Niche

Hartmut Geiger, PhD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH Hematopoietic Aging on Hematopoietic Stem Cell Activity



#### Scientific Committee on Hemostasis



Mechanisms and Modifiers of Bleeding - Live Q&A

Monday 9:00 a.m.

9:00 a.m. - 9:45 a.m.

#### Chair:

SHANNON MEEKS, MD, Emory University, Atlanta, GA

#### Speakers:

MITCHELL J. COHEN, MD, Denver Health Medical Center/University of Colorado, Denver, CO Understanding the Dynamics of Bleeding in Trauma

VALERIE O'DONNELL, PHD, CARDIFF UNIVERSITY, CARDIFF, UNITED KINGDOM

Innate Immune Cell-Derived Phospholipids and Hemostasis

Karin Leiderman, PhD, Colorado School of Mines, Golden, CO

A Systems Biology Approach to Identifying Modifiers of Bleeding in Hemophilia

#### Scientific Committee on Plasma Cell Neoplasia



The Immune System in Multiple Myeloma - Live Q&A

Monday 11:30 a.m. – 12:15 p.m.

#### Chair:

SAAD USMANI, MD, MBBS, MBA, Levine Cancer Institute, Charlotte, NC

#### **Speakers:**

MARK J. SMYTH, PhD, FAA, QIMR Berghofer Medical Research Institute, Herston, Brisbane, Australia The Immune System and Progression from Precursor Condition to Active Myeloma

Paola Neri, MD, University of Calgary, Calgary, Alberta, Canada

Immune Deregulation in Active Multiple Myeloma

MADHAV V. DHODAPKAR, MBBS, Emory University, Atlanta, GA

Immune Monitoring in Myeloma

### Scientific Committee on Bone Marrow Failure



Precision Medicine Approaches to Leukemia Predisposition in Bone Marrow Failure - Live Q&A

Monday 11:30 a.m. – 12:15 p.m.

#### Chair:

Акіко Shimamura, MD, PhD, Boston Children's Hospital, Boston, MA

#### Speakers:

H. Leighton Grimes, PhD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH Neutrophil Development and Neutropenia

R. Coleman Lindsley, MD, PhD, Dana-Farber Cancer Institute, Boston, MA  $\,$ 

Germline and Somatic Genomics in Ribosomopathies

Paula Rio, PhD, CIEMAT/CIBERER/IIS-Fundación Jiménez Díaz, Universidad Autónoma de Madrid, Madrid, Spain

Clonal Tracking Post-Gene Therapy for Fanconi Anemia

#### Scientific Committee on Iron and Heme



Well-Regulated vs Malfunctioning
Mechanisms of Iron Metabolism - Live Q&A

Monday 11:30 a.m. - 12:15 p.m.

#### Chair:

MATTHEW HEENEY, MD, Boston Children's Hospital, Boston, MA

#### Speakers:

Yatrik Shah, PhD, University of Michigan, Ann Arbor, MI

Update on Ferroportin Regulation

Francesca Vinchi, PhD, New York Blood Center, New York, NY

Iron Handling by Macrophages

Norbert Gattermann, MD, Heinrich-Heine-Universitat, Dusseldorf, Germany Prognostic Impact of Iron Overload and Iron Chelation in Myelodysplastic Syndromes

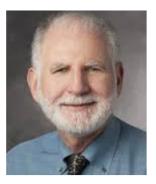


# 62nd ASH®Annual Meeting and Exposition

December 5-8, 2020 Virtual

### blood advances Invites You to Attend:

## How to Peer Review a Scientific Paper



Chair:
Robert S. Negrin, MD
Editor-In-Chief, Blood Advances
Stanford University Medical Center,
Stanford, CA

The *Blood Advances* Editor-in-Chief, Dr. Robert Negrin, will lead a panel discussion on *How to Peer Review a Scientific Paper*. The session will provide valuable information on the best practices of peer review from the editorial perspective for both basic and clinically relevant manuscripts. There are multiple professional benefits to becoming a reviewer. It allows the hematologist to stay current on research and developments in the field and can help in patient care, in the lab, and in the classroom. It also has the additional benefits of allowing the reviewer to be recognized by their colleagues, and the reviewer can use the experience to demonstrate professional development with their institution.

#### **Panelists:**



Margaret V. Ragni , MD,MPH University of Pittsburgh Pittsburgh, PA



Constantine S. Tam , MBBS
Peter MacCallum Cancer Center,
Royal Melbourne Hospital, and
University of Melbourne
Melbourne, VIC, Australia

### Early Access Beginning on Wednesday, December 2\*

\* This session is part of the ASH Annual Meeting program and requires a meeting subscription to access this session.

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### SPECIAL SCIENTIFIC SYMPOSIA

Special Scientific Symposia feature transformative research with implications for scientific investigation and clinical practice across the field of hematology.

Attendees are encouraged to view the pre-recorded presentations prior to the Live Q&A session.

NEW THIS YEAR: All Special Scientific Symposia presentations are pre-recorded and can be viewed beginning Tuesday, December 2 (designated with ). Live question-and-answer sessions to accompany each session will be held Sunday, December 6, and Monday, December 7 at the times below. The Live Q&A sessions will consist of a brief summary of the full-length presentations followed by live interactions with the presenters.

All times are in Pacific time. Duplication/recording is prohibited.

#### SUNDAY



Friend or Foe: The Microbiome, Antibiotics and Death After Transplant - Live O&A (ROBLE)

Sunday 9:30 a.m. - 10:15 a.m.

#### Chair:

MARCEL R.M. VAN DEN BRINK, MD, PHD, Memorial Sloan Kettering Cancer Center, New York, NY

#### Speakers:

Ami S. Bhatt, MD, PhD, Stanford University, Stanford, CA Basic Biology of the Microbiome Universe

Marcel R.M. van den Brink, MD, PhD, Memorial Sloan Kettering Cancer Center, New York, NY *The Microbiome and Graft Versus Host Disease* 

M. D. HAZENBERG, MD, PhD, Amsterdam UMC, Amsterdam, Netherlands Fecal Microbiota Transplants



Special Joint Education-Scientific Symposium: Hormones and Hematology -Live Q&A

Sunday 2:00 p.m. – 2:45 p.m.

#### Chair:

Lydia H. Pecker, MD, Johns Hopkins University, Baltimore, MD

#### Speakers:

Jean M. Connors, MD, Brigham & Women's Hospital/ Dana -Farber Cancer Institute, Boston, MA Coagulation Issues in Transgender Individuals

E. Dale Abel, MD, PhD, University of Iowa, Iowa City, IA

OPA1 A Novel Regulator of Sex-Dependent Differences in Thrombosis

ROBERT RICHARD, MD, PhD, University of Washington, Seattle, WA

Steroids and Erythropoeisis: We're Going to Pump You Up

#### MONDAY



Special Symposium on the Basic Science of Hemostasis and Thrombosis - Live O&A

Monday 1:30 p.m. - 2:15 p.m.

#### Co-Chairs:

Shannon L. Meeks, MD, Emory University, Atlanta, GA

WOLFRAM RUF, MD, The Scripps Research Institute, La Jolla, CA, and Johannes Gutenberg University Medical Center, Mainz, Germany

Angara Koneti Rao, MBBS, Lewis Katz School of Medicine, Temple University, Philadelphia, PA

#### Speakers:

Rafal Pawlinski, PhD, University of North Carolina, Chapel Hill, NC

Hemostasis: Coagulation and Inflammation

Mark H. Ginsberg, MD, University of California—San Diego, La Jolla, CA

Thrombosis/Vascular Biology: Cavernous Malformations and Thrombosis

Gowthami M. Arepally, MD, Duke University Medical Center, Durham, NC

Complement Activation in Heparin Induced Thrombocytopenia

Notes:		

### SCIENTIFIC SPOTLIGHT SESSIONS

Scientific Spotlight Sessions are intended to provide an in-depth review on specific scientific topics. Speakers will discuss current challenges and controversies in two exciting topics, addressing the current state of knowledge, translational and clinical applications, and future directions.

NEW THIS YEAR: All Scientific Spotlight Session presentations are pre-recorded and can be viewed beginning Tuesday, December 2 (designated with ( )). Live question-and-answer sessions to accompany each session will be held Sunday, December 6 at the times below. The Live Q&A sessions will consist of a brief summary of the full-length presentations followed by live interactions with the presenters.

Attendees are encouraged to view the pre-recorded presentations prior to the Live Q&A session.

All times are in Pacific time. Duplication/recording is prohibited.

#### SUNDAY



Cellular Breakups: Transfusion and Hyperhemolysis in Sickle Cell Disease - Live O&A &

Sunday 12:00 p.m. - 12:45 p.m.

#### Chair:

Karina Yazdanbakhsh, PhD, New York Blood Center, New York, NY

#### Speakers:

LUBKA T. ROUMENINA, PHD, Centre De Recherche Des Cordeliers, Paris, France

Pathophysiology of Sickle Cell Disease: Complement in Bystander Hemolysis

Karina Yazdanbakhsh, PhD, New York Blood Center, New York, NY

Pathophysiology of Sickle Cell Disease: Role of Hemolysis



Checkpoint Blockade: Defining A New Treatment Paradigm in Hodgkin Lymphoma and Allogeneic Transplantation - Live Q&A ♣

Sunday 12:00 p.m. – 12:45 p.m.

#### Chair:

Leslie Kean, MD, PhD, Boston Children's Hospital, Boston, MA

#### Speakers:

MARGARET A. SHIPP, MD, Dana-Farber Cancer Institute, Boston, MA

It's All In The Genes: What Hodgkin Lymphoma Teaches Us About Checkpoint Blockade

Miguel-Angel Perales, MD, Memorial Sloan Kettering Cancer Center, New York, NY Why Allo-Transplant Still Matters For Hodgkin Lymphoma In The Era Of Checkpoint Blockade

Notes:		

### SCIENTIFIC WORKSHOPS @ ASH

The Scientific Workshops @ ASH are interactive discussions of the latest science developments in a particular field of hematology. These three-hour workshops will be held Wednesday, December 2, through Friday, December 4.

Scientific Workshops @ ASH are not offered for CME Credit.

All times are in Pacific time. Duplication/recording is prohibited.

#### WEDNESDAY, DEC 2

#### Infectious Disease and Coagulation 2 (non-CME)

Wednesday, Dec 2	7:00 a.m 10:00 a.m.
Wednesday, Dec 2	7.00 a.iii. 10.00 a.iii.

#### Co-Chairs:

AMANDA B. PAYNE, PHD, MPH, Centers for Disease Control and Prevention, Atlanta, GA

ROBERT F. SIDONIO JR., MD, MSc, Emory University, Altana, GA

Shannon L. Meeks, MD, Emory University, Atlanta, GA

WILLIAM C. HOOPER, PhD, Centers for Disease Control and Prevention, Atlanta, GA

7:00 a.m. – 7:05 a.m.	Opening Remarks
7.00 a.m. 7.05 a.m.	Opening remains

7:05 a.m. – 8:30 a.m. The Immunohemostatic Re-

sponse to Infection

8:35 a.m. – 9:35 a.m. Prevention and Monitoring

9:35 a.m. – 9:50 a.m. Full Panel Discussion

9:50 a.m. – 10:00 a.m. Closing Remarks

#### Myeloid Development **4** (non-CME)

Wednesday, Dec 2 7:00 a.m. - 10:00 a.m.

#### Co-Chairs:

Ross Levine, MD, Memorial Sloan Kettering Cancer Center, New York, NY

Patricia Ernst, PhD, University of Colorado, Aurora, CO

### Tumor Immune Interactions in Lymphoid Malignancies 2 (non-CME)

147 I I		7.00	10.00
Wednesday.	Dec 2	7:00 a.m	- 10:00 a.m.

#### **Co-Chairs:**

Stephen M. Ansell, MD, PhD, Mayo Clinic, Rochester, MN  $\,$ 

RONALD LEVY, MD, Stanford University School of Medicine, Stanford, CA

7:00 a.m. – 7:05 a.m. Opening Remarks

7:05 a.m. – 8:20 a.m. Immune Engaging Molecules in

the management of Lymphoid

Malignancies

8:20 a.m. – 9:55 a.m. Engineered Immune Cells in

the management of Lymphoid

Malignancies

9:55 a.m. – 10:00 a.m. Closing Remarks

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#### THURSDAY, DEC 3

### Immune Profiling and Minimal Residual Disease Testing in Multiple Myeloma 2 (non-CME)

Thursday, Dec 3 7:00 a.m. - 10:00 a.m.

#### Co-Chairs:

Philip L. McCarthy, MD, Roswell Park Cancer Institute, Buffalo, NY

SAAD Z. USMANI, MD, MBBS, MBA, Levine Cancer Institute, Charlotte, NC

7:00 a.m. – 7:02 a.m.	Opening Remarks
7:02 a.m. – 7:42 a.m.	Integrating MRD into Clinical Trial Design and Clinical Practice
7:42 a.m. – 8:22 a.m.	The Molecular and Immunobiology of Disease Evolution and Progression in Multiple Myeloma
8:32 a.m. – 9:12 a.m.	Adaption of Next Generation Sequencing, Next Generation Flow Cytometry, and CyTOF: Diverse Ways of Detection
9:12 a.m. – 9:57 a.m.	CAR-T and Other Cellular Therapy for Multiple Myeloma
9:57 a.m. – 10:00 a.m.	Closing Remarks

### Interplay between Coagulation and Malignancy **£**

Thursday, Dec 3	7:00 a.m	10:00 a.m.
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#### Co-Chairs:

Lisa B. Kreuziger, MD, MS, Blood Research Institute, Versiti, Milwaukee, WI

Jeffrey I. Zwicker, MD, Beth Israel Deaconess Medical Center Harvard Medical School, Boston, MA

7:00 a.m. – 7:05 a.m.	Opening Remarks
7:05 a.m. – 7:29 a.m.	MicroRNA and role in cancer associated thrombosis
7:29 a.m. – 8:17 a.m.	Interplay between the hema- tologic system and solid tumor progression
8:17 a.m. – 8:55 a.m.	Modeling predictors and out- comes in myeloproliferative neoplasms and thrombosis
8:55 a.m. – 9:56 a.m.	Late-Breaking Research Presentations
9:56 a.m. – 10:00 a.m.	Closing Remarks

### Epidemiology: Disparities in Hematologic Diseases: Risk, Outcomes and Care 2 (non-CME)

Thursday, Dec 3 2:00 p.m. - 5:00 p.m.

#### Co-Chairs:

Wendy Cozen, DO, MPH, University of Southern California Norris Cancer Center, Los Angeles, CA

James M. Foran, MD, Mayo Clinic Florida, Jacksonville, FL

James R. Cerhan, MD, PhD, Mayo Clinic, Rochester, MN

NEIL A. ZAKAI, MD, MSc, Fletcher Allen Health Care, University of Vermont, Burlington, VT

2:00 p.m. – 2:05 p.m.	Opening Remarks
2:05 p.m. – 3:30 p.m.	Disparities in Malignant Hematology
3:30 p.m. – 4:30 p.m.	Disparities in Benign Hematology
4:30 p.m. – 4:45 p.m.	Disparities in COVID-19- related hematology
4:55 p.m. – 5:00 p.m.	Closing Remarks

### Hematology & Aging: Exploring Biomarkers, CHIP, CAR-T and Clotting 2 (non-CME)

Thursday, Dec 3	2:00 p.m. – 5:00 p.m.
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#### Co-Chairs:

Andrew S. Artz, MD, University of Chicago, Chicago, II.

Ashley Rosko, MD, The Ohio State University, Columbus, OH

Opening Remarks
Thrombosis + Aging
CAR-T
Biomarkers of Aging
CHIPing away at the Hematopoietic Stem Cell Niche
Closing Remarks

Translational Molecular Diagnostics in Hematology	2:00 p.m. – 2:05 p.m. Opening Remarks	
₫ (non-CME)	2:05 p.m. – 2:45 p.m.	Overcoming Challenges in Delivering Diagnostic Genomics in Hematology
Thursday, Dec 3 2:00 p.m 5:00 p.m.		
Co-Chairs: Piers Blombery, MBBS, University of Melbourne, East Melbourne, Australia Torsten Haferlach, MD, MLL Munchner Leukamie Labor Gmbh, Munchen, Germany	2:45 p.m. – 3:24 p.m.	Novel Diagnostic Genomic Tools and Technologies
	3:24 p.m. – 4:19 p.m.	Variant Curation: How Should We Interpret What We Find?
	4:19 p.m. – 4:59 p.m.	Molecular Tumour Board
	4:59 p.m. – 5:00 p.m.	Closing Remarks
ERIDAY DEC 4		

#### FRIDAY, DEC 4

7.00 a m

7.05 a m

#### **Germline Predisposition to Hematopoietic** Malignancies and Bone Marrow Failure **A** GOON-CME

Friday, Dec 4	7:00 a.m 10:00 a.m.	0.05	Laterales CD consequent
Co-Chairs:	8:05 a.m. – 8:50 a.m.	Interplay of Pregnancy and Sickle Cell Disease	
ter, Chicago, IL	, University of Chicago Medical Cen- L	8:50 a.m. – 9:50 a.m.	Complement Activation and Thrombotic Microangiopathies

MARCIN W. WLODARSKI, MD, PHD, St. Jude Children's Research Hospital, Memphis, TN 9:50 a.m. – 10:00 a.m.

/:00 a.m. – /:05 a.m.	Opening Remarks
7:05 a.m. – 7:52 a.m.	Germline Predisposition Syndrome Modeling
7:52 a.m. – 8:32 a.m.	SAMD9/SAMD9L syndrome: clinical and biological aspects
8:32 a.m. – 9:05 a.m.	Socioeconomic considerations and quality of life issues in patients with germline predis- position
9:05 a.m. – 9:52 a.m.	New insights into germline pre- disposition
9:52 a.m. – 10:00 a.m.	Closing Remarks

On aning Damanles

#### What 'Omics Are Telling Us About Molecular Mechanisms in Sickle Cell Disease 4 (non-CME)

Friday, Dec 4	7:00 a.m. – 10:00 a.m.
Co-Chaire	

**Opening Remarks** 

Pregnancy

in Pregnancy

**Closing Remarks** 

Thrombosis and Bleeding in

7:00 a.m. – 7:05 a.m.

7:05 a.m. – 8:05 a.m.

Marilyn J. Telen, MD, Duke University Medical Center, Durham, NC

ALLISON ASHLEY-KOCH, PhD, Duke University, Durham, NC

VICTOR R. GORDEUK, MD, University of Illinois at Chicago, Carol Stream, IL

Hematology and Pregnancy 2 GOON-CM	7:00 a.m. – 7:05 a.m. 7:05 a.m. – 8:10 a.m.
Friday, Dec 4 7:00 a.m. – 10	:00 a.m.
Co-Chairs: Irina Murakhovskaya, MD, Albert Ein Medicine, Bronx, NY	stein College of 8:15 a.m. – 9:05 a.m.
HENNY H. BILLETT, MD, Montefiore M Albert Einstein College of Medicine,	

#### Disease Exploring the 'Omics of Cardioa.m. vascular and Renal Sequelae of SCD

**Opening Remarks** 

'Omics Approaches to Eryth-

rocyte Biology in Sickle Cell

9:10 a.m. – 9:55 a.m.	Mechanistic Insights into Neuro- logical Disease and Pain
9:55 a.m. – 10:00 a.m.	Closing Remarks

#### **Moderator:**

SHANNON BATES, MDCM, MSc, McMaster University, Hamilton, Ontario, Canada

Notes:		

### **ASH POSTER WALKS**

ASH Poster Walks as of November 2, 2020. Check the mobile app or the ASH Annual Meeting Website for a detailed list of posters that will be discussed.

The ASH Poster Walks are curated groups of poster presentations selected by ASH Committees, Task Forces, and volunteers, which focus on a specific disease state or scientific research topic. These sessions will provide an opportunity to

view up to six pre-selected poster presentations accompanied by a moderated discussion with the authors and key opinion leaders in the field. These one-hour sessions will be held Wednesday, December 9, through Thursday, December 10.

ASH Poster Walks are not offered for CME credit.

All times are in Pacific time. Duplication/recording is prohibited.

#### WEDNESDAY, DEC 9

**Current Challenges in Treating Hematologic Malignancies Malignancies** 

Wednesday, Dec 9 7:00 a.m. - 8:00 a.m.

Germline Predisposition to Hematopoietic Malignancies and Bone Marrow Failure (non-CME)

Wednesday, Dec 9 7:00 a.m. - 8:00 a.m.

#### THURSDAY, DEC 10

Blood and Bone—From Hematopoiesis to Hemostasis (non-CME)

Thursday, Dec 10 7:00 a.m. - 8:00 a.m.

Clinical Trials in Progress (non-CME)

Thursday, Dec 10 7:00 a.m. - 8:00 a.m.

Hematology and Aging Gnon-CME

Thursday, Dec 10 7:00 a.m. - 8:00 a.m.

Novel Diagnostics and Treatments for Sickle Cell Disease: A New Era GON-CME

Thursday, Dec 10 7:00 a.m. – 8:00 a.m.

Quality Improvement Poster Walk (non-CME)

Thursday, Dec 10 7:00 a.m. - 8:00 a.m.

A Walk Down Immunotherapy Lane: Watch Out for the CARs (NOR-CME)

Thursday, Dec 10 7:00 a.m. - 8:00 a.m.

**Health Care Equity Matters CONTINUE** 

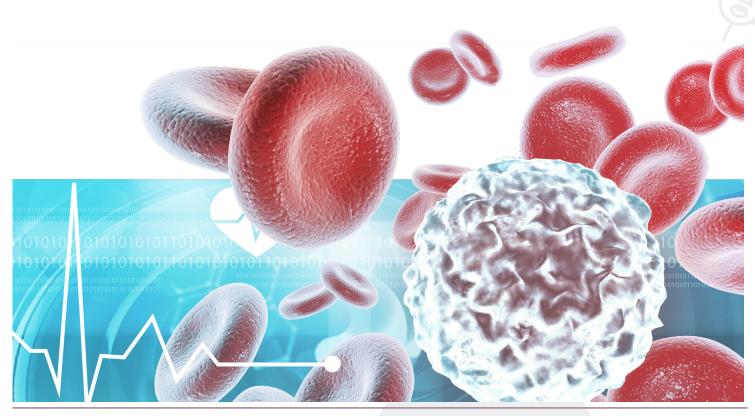
Thursday, Dec 10 2:00 p.m. - 3:00 p.m.

Hemostasis & Thrombosis (non-CME)

Thursday, Dec 10 2:00 p.m. – 3:00 p.m.

ASH Poster Walks 91



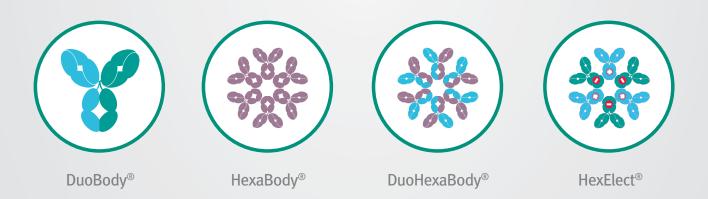


ABSTRACT SESSIONS



# Rooted in science and driven by data, we are transforming the future of antibody therapeutics

At Genmab, we believe in improving the lives of patients by creating innovative and differentiated antibody therapeutics. This relentless drive, our in-depth knowledge of antibody biology, and a passion for innovation has led us to develop four proprietary technologies, as well as 21 products in clinical development.



See how we're engineering a transformative tomorrow at our booth or Genmab.com



# 2020 SCIENTIFIC CATEGORIES

For the 2020 62nd ASH Annual Meeting, abstracts were submitted in 66 different scientific categories in 9 larger topics. For your ease in finding the oral and poster abstracts on topics of interest to you, the abstract program has been organized by category number.

Oral Sessions' titles begin with the category number and name. They are listed in the Program at a Glance by date, time, and then by category number. The Virtual Poster Hall is arranged by category number.

### 100s-Red Cell Physiology and Disorders

- 101 Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron
- 102 Regulation of Iron Metabolism
- 112 Thalassemia and Globin Gene Regulation
- 113 Hemoglobinopathies, Excluding Thalassemia— Basic and Translational Science
- 114 Hemoglobinopathies, Excluding Thalassemia— Clinical

### 200s-Leukocytes, Inflammation, and Immunology

- 201 Granulocytes, Monocytes, and Macrophages
- 203 Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections

# 300s—Hemostasis, Thrombosis, and Vascular Wall Biology

- 301 Vascular Wall Biology, Endothelial Progenitor Cells, and Platelet Adhesion, Activation, and Biochemistry
- 311 Disorders of Platelet Number or Function
- 321 Blood Coagulation and Fibrinolytic Factors
- 322 Disorders of Coagulation or Fibrinolysis
- 331 Pathophysiology of Thrombosis
- 332 Anticoagulation and Antithrombotic Therapy

### 400s-Transfusion Medicine

401 Basic Science and Clinical Practice in Blood Transfusion

### 500s-Hematopoiesis

- 501 Hematopoietic Stem and Progenitor Biology
- 502 Hematopoiesis: Regulation of Gene Transcription, Cytokines, Signal Transduction, Apoptosis, and Cell Cycle Regulation
- 503 Clonal Hematopoiesis: Aging and Inflammation
- 506 Hematopoiesis and Stem Cells: Microenvironment, Cell Adhesion, and Stromal Stem Cells
- 508 Bone Marrow Failure

### 600s-Hematologic Malignancy

- 602 Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation
- 603 Oncogenes and Tumor Suppressors
- 604 Molecular Pharmacology and Drug Resistance in Myeloid Diseases
- 605 Molecular Pharmacology, Drug Resistance— Lymphoid and Other Diseases
- 612 Acute Lymphoblastic Leukemia: Clinical Studies
- 613 Acute Myeloid Leukemia: Clinical Studies
- 614 Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation
- 615 Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation
- 616 Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation
- 617 Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis
- 618 Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis

### 2020 SCIENTIFIC CATEGORIES

- 621 Lymphoma—Genetic/Epigenetic Biology
- 622 Lymphoma Biology—Non-Genetic Studies
- 623 Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma—Clinical Studies
- 624 Hodgkin Lymphoma and T/NK Cell Lymphoma— Clinical Studies
- 625 Lymphoma: Pre-Clinical—Chemotherapy and Biologic Agents
- 626 Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Prospective Clinical Trials
- 627 Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/ Observational Studies
- 631 Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy
- 632 Chronic Myeloid Leukemia: Therapy
- 634 Myeloproliferative Syndromes: Clinical
- 635 Myeloproliferative Syndromes: Basic Science
- 636 Myelodysplastic Syndromes—Basic and Translational Studies
- 637 Myelodysplastic Syndromes—Clinical Studies
- 641 CLL: Biology and Pathophysiology, excluding Therapy
- 642 CLL: Therapy, excluding Transplantation
- 651 Myeloma: Biology and Pathophysiology, excluding Therapy
- 652 Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy
- 653 Myeloma/Amyloidosis: Therapy, excluding Transplantation

### 700s—Transplantation

- 701 Experimental Transplantation: Basic Biology, Pre-Clinical Models
- 703 Adoptive Immunotherapy: Mechanisms and New Approaches
- 704 Immunotherapies
- 711 Cell Collection and Processing
- 721 Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities
- 722 Clinical Allogeneic Transplantation: Acute and Chronic GVHD, Immune Reconstitution
- 723 Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence
- 731 Clinical Autologous Transplantation: Results
- 732 Clinical Allogeneic Transplantation: Results

### 800s—Gene Therapy and Transfer, Chemical Biology, Diagnostics, and Experimental Therapeutics

- 801 Gene Editing, Therapy and Transfer
- 802 Chemical Biology and Experimental Therapeutics
- 803 Emerging Diagnostic Tools and Techniques

### 900s-Health Services and Outcomes Research

- 901 Health Services Research—Non-Malignant Conditions
- 902 Health Services Research—Malignant Conditions (Lymphoid Disease)
- 903 Health Services Research—Malignant Conditions (Myeloid Disease)
- 904 Outcomes Research—Non-Malignant Conditions
- 905 Outcomes Research—Malignant Conditions (Lymphoid Disease)
- 906 Outcomes Research—Malignant Conditions (Myeloid Disease)

Saturday

## ORAL ABSTRACT SESSIONS

**NEW THIS YEAR:** Oral Abstract Sessions will be held live from Saturday, December 5, through Monday, December 7, at the times below. Each oral abstract presentation will be followed immediately by a live question-and-answer period with the presenter.

The Plenary Scientific Session will be held Sunday, December 6, from 7:00 a.m. - 9:00 a.m.

All times are in Pacific time. Duplication/recording is prohibited.

### SATURDAY

### 7:30 a.m. - 9:00 a.m.

- Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron: Mechanisms and Regulation of Erythropoiesis (7–12)
- 114. Hemoglobinopathies, Excluding Thalassemia—Clinical: Hydroxyurea for Sickle Cell Disease: Treatment Benefits and Potential Reproductive Risks for Women (13–17)
- 311. Disorders of Platelet Number or Function: Heparin-Induced Thrombocytopenia and Immune Thrombocytopenia (18–23)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Novel combination therapies in treatment of newly diagnosed AML (24–29)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Single Cell Profiling and Novel molecular Markers (30–35)
- 622. Lymphoma Biology—Non-Genetic Studies: Mechanisms of Lymphomagenesis, Progression, and Response (36–38)

- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma—Clinical Studies: Clinical Studies in T/NK Cell Lymphoma (39–44)
- 632. Chronic Myeloid Leukemia: Therapy— Building The Future CML (45–50)
- 634. Myeloproliferative Syndromes: Clinical: New Therapies and JAKi-based Combinations for Myelofibrosis (51–56)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: From Smoldering Myeloma to Active Myeloma: Innovative Early Detection Approaches, Epigenetic, Genomic and Transcriptome Scenarios. (57–62)
- 704. Immunotherapies: Beyond T to NK (63-68)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence I (69–74)
- 732. Clinical Allogeneic Transplantation: Results I (75–80)

### 9:30 a.m. - 11:00 a.m.

- Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron: Mechanisms, Diagnosis and Treatment of Inherited (81–86)
- 113. Hemoglobinopathies, Excluding Thalassemia—New Genetic Approaches to Sickle Cell Disease: Fetal Hemoglobin Regulation And Reticulocyte Maturation In Sickle Cell Disease (87–92)
- 203. Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Pathogenesis and Immunotherapy (93–98)
- 401. Basic Science and Clinical Practice in Blood Transfusion: COVID-19 Convalescent Plasma, Antigen Typing and the Prothrombin Complex II (99–104)
- 602. Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Aberrant Nuclear Architecture and Chromatin Remodeling (105–110)

- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Novel promising therapies for relapsed/refractory AML (111–116)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma— Clinical Studies: Mantle Cell Lymphoma Clinical Trials (117–122)
- 642. CLL: Therapy, excluding Transplantation (123-128)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation; CAR T Therapies for Myeloma: Novel Approaches and Longer-Term Follow Up Data (129–134)
- 721. Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities (135–140)
- 731. Clinical Autologous Transplantation: Autologous Transplantation: Still the Backbone of Modern Myeloma Therapies (141–146)
- 904. Outcomes Research—Non-Malignant Conditions: Bleeding, Immune Thrombocytopenia, and Other Hematologic Disorders (147–152)

### 12:00 p.m. - 1:30 p.m.

- 112. Thalassemia and Globin Gene Regulation (153-158)
- 614. Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Chimeric Antigen Receptor T Cell Therapy (159–164)
- Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Advances in immunotherapeutics for management of AML (165–170)
- 625. Lymphoma: Pre-Clinical—Chemotherapy and Biologic Agents: Novel Approaches to Overcome Resistance (171–176)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Novel Therapies Targeting B Cell Maturation Antigen in Relapsed/Refractory Multiple Myeloma (177–182)
- 711. Cell Collection and Processing (183-188)

- 721. Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities (189–194)
- 803. Emerging Diagnostic Tools and Techniques II (195-200)
- 904. Outcomes Research Non-Malignant Conditions: Venous Thromboembolism Associated with Cancer and/or COVID-19 (201–206)
- 905. Outcomes Research—Malignant Conditions (Lymphoid Disease): Outcomes Research Real World Data Healthcare Disparities (207–212)
- 906. Outcomes Research—Malignant Conditions (Myeloid Disease): Real World Management And Outcome (213–218)

### 2:00 p.m. - 3:30 p.m.

- 102. Regulation of Iron Metabolism (219-223)
- 113. Hemoglobinopathies, Excluding Thalassemia—New Genetic Approaches to Sickle Cell Disease: New Insights Into Sickle Cell Disease Pathophysiology (224–229)
- 322. Disorders of Coagulation or Fibrinolysis: Hemophilia: Genes, Joints, and PK (230–235)
- Anticoagulation and Antithrombotic Therapy: Novel Agents, Reversal Drugs and Indications (236–241)
- Basic Science and Clinical Practice in Blood Transfusion: COVID-19 Convalescent Plasma and Transfusion Immunology I (242–247)
- 501. Hematopoietic Stem and Progenitor Biology: New Insights into the Molecular Regulation of Hematopoietic Stem Cells (248–253)
- 508. Bone Marrow Failure: Advancing Our Biologic Understanding in Inherited and Acquired Bone Marrow Failure Disorders (254–259)
- 604. Molecular Pharmacology and Drug Resistance in Myeloid Diseases (260–265)

- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Innovative Chemotherapy and Immunotherapy Strategies in Frontline and Relapsed Disease (266–271)
- Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: MRD and Novel molecular Markers (272–277)
- 621. Lymphoma—Genetic/Epigenetic Biology: Genetic and epigenetic profiling of malignant lymphomas (278–283)
- 636. Myelodysplastic Syndromes—Basic and Translational Studies (284–289)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Bispecific T Cell Engager Therapies and Novel Targeting Agents (290–295)
- 732. Clinical Allogeneic Transplantation Results III (296–301)
- 901. Health Services Research-Non-Malignant Conditions I (302-305)
- 902. Health Services Research—Malignant Conditions (Lymphoid Disease) I (306–311)

### SUNDAY

### 7:00 a.m. - 9:00 a.m.

Plenary Scientific Session

### 9:30 a.m. - 11:00 a.m.

- Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Hematologic Malignancies and COVID-19 (312–317)
- 301. Vascular Wall Biology, Endothelial Progenitor Cells, and Platelet Adhesion, Activation, and Biochemistry (318–323)
- 502. Hematopoiesis: Regulation of Gene Transcription, Cytokines, Signal Transduction, Apoptosis, and Cell Cycle Regulation: Molecular regulation of cell fate and regeneration (324–329)
- 613. Acute Myeloid Leukemia: Novel Therapies and Treatment Approaches (330–335)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma—Clinical Studies: Clinical studies in Waldenstrom's Macroglobulinemia, Marginal Zone Lymphoma and Hairy Cell Leukemia (336–341)

- 634. Myeloproliferative Syndromes: Clinical: Translational Science in MPN— Hitting the Mark (342–347)
- 641. CLL: Biology and Pathophysiology, excluding Therapy: Treatment Resistance and Prognosis (348–352)
- 722. Clinical Allogeneic Transplantation; Acute and Chronic GvHD, Immune Reconstitution: Phase I and II Trials (353–358)
- 803. Emerging Diagnostic Tools and Techniques I (359-363)
- 904. Outcomes Research Non-Malignant Conditions: Sickle Cell Disease and Beta Thalassemia (364–369)
- 905. Outcomes Research—Malignant Conditions (Lymphoid Disease): Outcomes Research Real World Data Lymphoma (370–375)

### 12:00 p.m. - 1:30 p.m.

- Disorders of Platelet Number or Function: Thrombotic Thrombocytopenic Purpura and Platelet Dysfunction (376–381)
- 503. Clonal Hematopoiesis: Aging and Inflammation (382–387)
- 613. Acute Myeloid Leukemia: Molecular Mutations and Their Prognostic Implications (388–393)
- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis II (394–399)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Prospective Clinical Trials: Updates and advances in bispecific antibody therapies and autologous CAR-T approaches (400–405)
- 636. Myelodysplastic Syndromes Basic and Translational Studies (406–411)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Relapsed/Refractory Multiple Myeloma (412–417)
- Clinical Allogeneic Transplantation; Acute and Chronic GvHD, Immune Reconstitution: Pathobiology and Predictive Biomarkers (418–423)
- 901. Health Services Research-Non-Malignant Conditions II (424-429)
- 903. Health Services Research—Malignant Conditions (Myeloid Disease): Barriers to Cancer Care Delivery in Myeloid Malignancies (430–435)
- 905. Outcomes Research—Malignant Conditions (Lymphoid Disease): Outcomes Research Real World Data Myeloma (436–441)

### 2:00 p.m. - 3:30 p.m.

- 331. Pathophysiology of Thrombosis I (442-447)
- Hematopoiesis and Stem Cells: Microenvironment, Cell Adhesion, and Stromal Stem Cells (448–451)
- Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Altered Transcription Factor Regulation (452–457)
- 613. Acute Myeloid Leukemia: Potpourri of Potential Practice Changing Studies (458–463)
- 614. Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Targeted Therapies (464–469)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma—Clinical Studies: Clinical Studies in Hodgkin Lymphoma (470–475)

- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/ Observational Studies: PCNSL Treatment and Prognosis and CNS Prophylaxis in High-Risk Aggressive Lymphomas (476–478)
- 634. Myeloproliferative Syndromes: Clinical: Clinical Trials in Polycythemia Vera (479–484)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: The Role of the Bone Marrow Microenvironment in the Pathogenesis and Therapy of Multiple Myeloma and Waldenstrom's Macroglobulinemia. (485–490)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence II (491–496)
- 801. Gene Editing, Therapy and Transfer (497-501)

### **MONDAY**

### 7:00 a.m. - 8:30 a.m.

- Hemoglobinopathies, Excluding Thalassemia—Clinical: Assessment and Prevention of End-Organ Injury in Sickle Cell Disease (502–506)
- 322. Disorders of Coagulation or Fibrinolysis: Hemophilia: Treatment and Inhibitors (507–511)
- 331. Pathophysiology of Thrombosis II (512-517)
- Oncogenes and Tumor suppressors: Pre-clinical models and Novel Targets (518–523)
- 605. Molecular Pharmacology, Drug Resistance—Lymphoid and Other Diseases: Molecular pharmacology and drug resistance mechanisms in lymphoproliferative disorders (524–529)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/

- Observational Studies: Biomarkers and Prognostication in Aggressive B-Cell Non-Hodgkin Lymphomas (530–535)
- 637. Myelodysplastic Syndromes—Clinical Studies: Personalized Clinical-Decision Tools and treatment of lower risk MDS (536–541)
- 642. CLL: Therapy, excluding Transplantation (542-547)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Initial Therapy (548-553)
- 703. Adoptive Immunotherapy: Mechanisms and New Approaches: Optimizing CAR T cells for Improved Outcomes (554–558)
- 732. Clinical Allogeneic Transplantation Results II (559-564)
- 802. Chemical Biology and Experimental Therapeutics: Innovations in Therapy and Drug Screening (565–570)

### 9:00 a.m. - 10:30 a.m.

- 322. Disorders of Coagulation or Fibrinolysis: Von Willebrand Disease and Bleeding (571–575)
- Anticoagulation and Antithrombotic Therapy: COVID-19, Obesity and Hemorrhagic Complications (576–581)
- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Insights in Genomics, MRD, and Toxicities (582–587)
- 615. Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Commercially Available Therapy, excluding Transplantation I (588–593)
- 622. Lymphoma Biology—Non-Genetic Studies: Microenvironment and Immune Response in Hodgkin Lymphoma (594–596)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Prospective Clinical Trials: Incorporating novel agents and new adoptive cell therapy approaches (597–601)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy (602–607)
- 703. Adoptive Immunotherapy: Mechanisms and New Approaches: Adoptive Cell Therapy beyond CAR T cells (608–613)
- 731. Clinical Autologous Transplantation: Building Better Transplant Platforms in Lymphoid Malignancies (614–619)
- Health Services Research—Malignant Conditions (Myeloid Disease): Treatment and Publication Patterns in Myeloid Malignancies (620–625)

### 11:30 a.m. - 1:00 p.m.

- 321. Blood Coagulation and Fibrinolytic Factors: Coagulation and Fibrinolytic Factors: Regulation of Coagulation (626–631)
- 615. Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Commercially Available Therapy, excluding Transplantation II (632–637)
- 621. Lymphoma—Genetic/Epigenetic Biology: Clinical implications of biological insights in lymphoma (638–643)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma—Clinical Studies: Immunotherapy in T/NK Cell Lymphoma (644–646)
- 632. Chronic Myeloid Leukemia: Therapy: CML: New and Beyond (647–652)
- 637. Myelodysplastic Syndromes—Clinical Studies: Treatment of Higher Risk Myelodysplastic syndromes (653–658)
- 641. CLL: Biology and Pathophysiology, excluding Therapy: Genetic Models and Genomic Landscape of CLL and Richter Transformation (659–664)
- 652. Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy (665–670)
- 801. Gene Editing, Therapy and Transfer I (671-676)

### 1:30 p.m. - 3:00 p.m.

- Hemoglobinopathies, Excluding Thalassemia—Clinical:
   Novel Treatments for Sickle Cell Disease (677–681)
- 201. Granulocytes, Monocytes, and Macrophages (682-687)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Dissecting AML heterogeneity to refine treatment approaches (688–693)
- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis I (694–699)
- 623. Mantle Cell and Indolent B-Cell Lymphoma CAR-T and immunotherapy clinical studies (700-704)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/ Observational Studies: Front-Line Treatment and Prognostication of Burkitt Lymphoma, Plasmablastic Lymphoma, and DLBCL (705–708)

- 631. CML: Biology and Pathophysiology, excluding Therapy: Mechanisms of Resistance and Progression in CML (709–712)
- 635. Myeloproliferative Syndromes: Basic Science (713-718)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy (719–723)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation; Novel Approaches for Relapsed/ Refractory Myeloma and Amyloidosis (724–729)
- 701. Experimental Transplantation: Basic Biology, Pre-Clinical Models (730–735)
- 704. Immunotherapies: Therapeutic T cell Manipulation (736-741)
- 902. Health Services Research—Malignant Conditions (Lymphoid Disease) I (742–747)

## POSTER PRESENTATIONS

NEW THIS YEAR: Virtual poster presentations will be shared via a brief PowerPoint presentation with accompanying audio. The Virtual Poster Hall will be open for attendees to browse a different set of posters each day. The Poster Hall hours are as follows:

Sunday, December 6 . . . . . . . . . . . . . . . . . 7:00 a.m. - 3:30 p.m. (Pacific Time)

Monday, December 7. . . . . . . . . . . . . . . . . 7:00 a.m. - 3:00 p.m. (Pacific Time)

Poster Sessions are not offered for CME credit.

All times are in Pacific time. Duplication/recording is prohibited.

### **SATURDAY**

7:00 a.m. - 3:30 p.m. Poster Session I – Presentations (non-CME)



- 101. Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron: Poster I (748-765)
- 102. Regulation of Iron Metabolism: Poster I (766-773)
- 112. Thalassemia and Globin Gene Regulation: Poster I (774–781)
- 113. Hemoglobinopathies, Excluding Thalassemia-New Genetic Approaches to Sickle Cell Disease: Poster I (782-793)
- 114. Hemoglobinopathies, Excluding Thalassemia-Clinical: Poster I (794-813)
- 201. Granulocytes, Monocytes, and Macrophages: Poster I (814-821)
- 203. Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Poster I (822-829)
- 301. Vascular Wall Biology, Endothelial Progenitor Cells, and Platelet Adhesion, Activation, and Biochemistry: Poster I (830-834)
- 311. Disorders of Platelet Number or Function: Poster I (835-850)
- 321. Blood Coagulation and Fibrinolytic Factors: Poster I (851-858)
- 322. Disorders of Coagulation or Fibrinolysis: Poster I (859-878)
- 331. Pathophysiology of Thrombosis: Poster I (879-886)
- 332. Anticoagulation and Antithrombotic Therapy: Poster I (887–896)
- 401. Clinical Sciences in Transfusion Medicine: Poster I (897-905)
- 501. Hematopoietic Stem and Progenitor Biology: Poster I (906-914)
- 502. Hematopoiesis: Regulation of Gene Transcription, Cytokines, Signal Transduction, Apoptosis, and Cell Cycle Regulation: Poster I (915-919)
- 503. Clonal Hematopoiesis: Aging and Inflammation: Poster I (920-923)
- 506. Hematopoiesis and Stem Cells: Microenvironment, Cell Adhesion, and Stromal Stem Cells: Poster I (924–926)
- 508. Bone Marrow Failure: Poster I (927-939)
- 602. Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Poster I (940-948)
- 603. Oncogenes and Tumor Suppressors: Poster I (949-955)
- 604. Molecular Pharmacology and Drug Resistance in Myeloid Diseases: Poster I (956-965)
- 605. Molecular Pharmacology, Drug Resistance-Lymphoid and Other Diseases: Poster I (966-972)

- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Poster I (973–984)
- 613. Acute Myeloid Leukemia: Clinical Studies: Poster I (985-1013)
- 614. Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Poster I (1014-1024)
- 615. Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Poster I (1025-1035)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Poster I (1036-1060)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster I (1061–1089)
- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster I (1090-1100)
- 621. Lymphoma—Genetic/Epigenetic Biology: Poster I (1101–1111)
- 622. Lymphoma Biology—Non-Genetic Studies: Poster I (1112–1119)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma-Clinical Studies: Poster I (1120-1149)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma-Clinical Studies: Poster I (1150-1172)
- 625. Lymphoma: Pre-Clinical-Chemotherapy and Biologic Agents: Poster I (1173-1181)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)-Results from Prospective Clinical Trials: Poster I (1182-1201)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)-Results from Retrospective/Observational Studies: Poster I (1202-1231)
- 631. Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy: Poster I (1232-1233)
- 632. Chronic Myeloid Leukemia: Therapy: Poster I (1234-1247)
- 634. Myeloproliferative Syndromes: Clinical: Poster I (1248-1261)
- 635. Myeloproliferative Syndromes: Basic Science: Poster I (1262-1267)
- 636. Myelodysplastic Syndromes-Basic and Translational Studies: Poster I (1268-1276)
- 637. Myelodysplastic Syndromes-Clinical Studies: Poster I (1277-1294)

- 641. CLL: Biology and Pathophysiology, excluding Therapy: Poster I (1295-1304)
- 642. CLL: Therapy, excluding Transplantation: Poster I (1305-1321)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: Poster I (1322-1357)
- 652. Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy: Poster I (1358-1365)
- 653. Myeloma/Amyloidosis: Therapy, excluding Transplantation: Poster I (1366-1420)
- 701. Experimental Transplantation: Basic Biology, Pre-Clinical Models: Poster I (1421-1427)
- 703. Adoptive Immunotherapy: Poster I (1428–1439)
- 704. Immunotherapies: Poster I (1440-1450)
- 711. Cell Collection and Processing: Poster I (1451-1455)
- 721. Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities: Poster I (1456-1481)
- 722. Clinical Allogeneic Transplantation: Acute and Chronic GVHD, Immune Reconstitution: Poster I (1482-1494)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence: Poster I (1495-1504)

- 731. Clinical Autologous Transplantation: Results: Poster I (1505-1517)
- 732. Clinical Allogeneic Transplantation: Results: Poster I (1518-1538)
- 801. Gene Editing, Therapy and Transfer: Poster I (1539–1546)
- 802. Chemical Biology and Experimental Therapeutics: Poster I (1547-1551)
- 803. Emerging Diagnostic Tools and Techniques: Poster I (1552–1562)
- 901. Health Services Research-Non-Malignant Conditions: Poster I (1563-1589)
- 902. Health Services Research-Malignant Conditions (Lymphoid Disease): Poster I (1590-1610)
- 903. Health Services Research-Malignant Conditions (Myeloid Disease): Poster I (1611-1621)
- 904. Outcomes Research-Non-Malignant Conditions: Poster I (1622-1639)
- 905. Outcomes Research-Malignant Conditions (Lymphoid Disease): Poster I (1640-1661)
- 906. Outcomes Research-Malignant Conditions (Myeloid Disease): Poster I (1662-1670)

### SUNDAY

### 7:00 a.m. - 3:30 p.m. Poster Session II - Presentations (non-CME)

- 101. Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron: Poster II (1671-1687)
- 102. Regulation of Iron Metabolism: Poster II (1688-1694)
- 112. Thalassemia and Globin Gene Regulation: Poster II (1695-1702)
- 113. Hemoglobinopathies, Excluding Thalassemia-Basic and Translational Science: Poster II (1703-1713)
- 114. Hemoglobinopathies, Excluding Thalassemia-Clinical: Poster II (1714-1733)
- 201. Granulocytes, Monocytes, and Macrophages: Poster II (1734-1741)
- 203. Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Poster II (1742-1749)
- 301. Vascular Wall Biology, Endothelial Progenitor Cells, and Platelet Adhesion, Activation, and Biochemistry: Poster II (1750-1753)
- 311. Disorders of Platelet Number or Function: Poster II (1754-1771)
- 321. Blood Coagulation and Fibrinolytic Factors: Poster II (1772–1779)
- 322. Disorders of Coagulation or Fibrinolysis: Poster II (1780-1800)
- 331. Pathophysiology of Thrombosis: Poster II (1801–1808)
- 332. Anticoagulation and Antithrombotic Therapy: Poster II (1809-1819)
- 401. Basic Science and Clinical Practice in Blood Transfusion: Poster II (1820-1828)
- 501. Hematopoietic Stem and Progenitor Biology: Poster II (1829-1836)
- 502. Hematopoiesis: Regulation of Gene Transcription, Cytokines, Signal Transduction, Apoptosis, and Cell Cycle Regulation: Poster II (1837-1841)
- 503. Clonal Hematopoiesis: Aging and Inflammation: Poster II (1842-1845)
- 506. Hematopoiesis and Stem Cells: Microenvironment, Cell Adhesion, and Stromal Stem Cells: Poster II (1846-1848)
- 508. Bone Marrow Failure: Poster II (1849-1861)
- 602. Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Poster II (1862-1870)
- 603. Oncogenes and Tumor Suppressors: Poster II (1871-1877)

- 604. Molecular Pharmacology and Drug Resistance in Myeloid Diseases: Poster II (1878-1886)
- 605. Molecular Pharmacology, Drug Resistance-Lymphoid and Other Diseases: Poster II (1887-1893)
- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Poster II (1894-1903)
- 613. Acute Myeloid Leukemia: Clinical Studies: Poster II (1904–1931)
- 614. Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Poster II (1932-1942)
- 615. Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Poster II (1943-1953)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Poster II (1954-1977)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster II (1978-2006)
- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster II (2007-2016)
- 621. Lymphoma-Genetic/Epigenetic Biology: Poster II (2017-2027)
- 622. Lymphoma Biology-Non-Genetic Studies: Poster II (2028-2035)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma—Clinical Studies: Poster II (2036–2064)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma-Clinical Studies: Poster II (2065-2086)
- 625. Lymphoma: Pre-Clinical-Chemotherapy and Biologic Agents: Poster II (2087-2095)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)-Results from Prospective Clinical Trials: Poster II (2096-2114)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/Observational Studies: Poster II (2115-2143)
- 631. Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy: Poster II (2144-2145)
- 632. Chronic Myeloid Leukemia: Therapy: Poster II (2146-2158)

- 634. Myeloproliferative Syndromes: Clinical: Poster II (2159-2172)
- 635. Myeloproliferative Syndromes: Basic Science: Poster II (2173-2178)
- 636. Myelodysplastic Syndromes—Basic and Translational Studies: Poster II (2179–2187)
- 637. Myelodysplastic Syndromes-Clinical Studies: Poster II (2188-2205)
- 641. CLL: Biology and Pathophysiology, excluding Therapy: Poster II (2206–2215)
- 642. CLL: Therapy, excluding Transplantation: Poster II (2216-2232)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: Poster II (2233–2267)
- 652. Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy: Poster II (2268–2275)
- 653. Myeloma: Therapy, excluding Transplantation: Poster II (2276-2328)
- 701. Experimental Transplantation: Basic Biology, Pre-Clinical Models: Poster II (2329–2332)
- 703. Adoptive Immunotherapy: Mechanisms and New Approaches: Poster II (2333–2344)
- 704. Immunotherapies: Poster II (2345-2357)
- 711. Cell Collection and Processing: Poster II (2358-2362)
- Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities: Poster II (2363–2387)

- 722. Clinical Allogeneic Transplantation: Acute and Chronic GVHD, Immune Reconstitution: Poster II (2388–2400)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence: Poster II (2401–2411)
- 731. Clinical Autologous Transplantation: Results: Poster II (2412-2424)
- 732. Clinical Allogeneic Transplantation: Results: Poster II (2425-2445)
- 801. Gene Editing, Therapy and Transfer: Poster II (2446-2453)
- 802. Chemical Biology and Experimental Therapeutics: Poster II (2454–2458)
- 803. Emerging Diagnostic Tools and Techniques: Poster II (2459-2470)
- 901. Health Services Research—Non-Malignant Conditions: Poster II (2471–2497)
- 902. Health Services Research—Malignant Conditions (Lymphoid Disease): Poster II (2498–2517)
- 903. Health Services Research—Malignant Conditions (Myeloid Disease): Poster II (2518–2527)
- 904. Outcomes Research—Non-Malignant Conditions: Poster II (2528–2545)
- 905. Outcomes Research—Malignant Conditions (Lymphoid Disease): Poster II (2546-2566)
- 906. Outcomes Research—Malignant Conditions (Myeloid Disease): Poster II (2567–2574)

### MONDAY

### 7:00 a.m. – 3:00 p.m. Poster Session III – Presentations Con-CME

- Red Cells and Erythropoiesis, Structure and Function, Metabolism, and Survival, Excluding Iron: Poster III (2575–2591)
- 102. Regulation of Iron Metabolism: Poster III (2592-2599)
- 112. Thalassemia and Globin Gene Regulation: Poster III (2600-2607)
- Hemoglobinopathies, Excluding Thalassemia—Basic and Translational Science: Poster III (2608–2618)
- 114. Hemoglobinopathies, Excluding Thalassemia— Clinical: Poster III (2619–2638)
- 201. Granulocytes, Monocytes, and Macrophages: Poster III (2639-2646)
- Lymphocytes, Lymphocyte Activation, and Immunodeficiency, including HIV and Other Infections: Poster III (2647–2653)
- 301. Vascular Wall Biology, Endothelial Progenitor Cells, and Platelet Adhesion, Activation, and Biochemistry: Poster III (2654–2658)
- 311. Disorders of Platelet Number or Function: Poster III (2659-2677)
- 321. Blood Coagulation and Fibrinolytic Factors: Poster III (2678-2684)
- 322. Disorders of Coagulation or Fibrinolysis: Poster III (2685-2704)
- 331. Pathophysiology of Thrombosis: Poster III (2705-2711)
- 332. Anticoagulation and Antithrombotic Therapy: Poster III (2712-2721)
- Basic Science and Clinical Practice in Blood Transfusion: Poster III (2722–2729)
- 501. Hematopoietic Stem and Progenitor Biology: Poster III (2730-2737)
- 502. Hematopoiesis: Regulation of Gene Transcription, Cytokines, Signal Transduction, Apoptosis, and Cell Cycle Regulation: Poster III (2738–2742)
- 503. Clonal Hematopoiesis: Aging and Inflammation: Poster III (2743–2746)
- 506. Hematopoiesis and Stem Cells: Microenvironment, Cell Adhesion, and Stromal Stem Cells: Poster III (2747–2748)
- 508. Bone Marrow Failure: Poster III (2749-2761)
- 602. Disordered Gene Expression in Hematologic Malignancy, including Disordered Epigenetic Regulation: Poster III (2762–2769)

- 603. Oncogenes and Tumor Suppressors: Poster III (2770-2776)
- 604. Molecular Pharmacology and Drug Resistance in Myeloid Diseases: Poster III (2777–2785)
- 605. Molecular Pharmacology, Drug Resistance—Lymphoid and Other Diseases: Poster III (2786–2792)
- 612. Acute Lymphoblastic Leukemia: Clinical Studies: Poster III (2793–2803)
- 613. Acute Myeloid Leukemia: Clinical Studies: Poster III (2804-2832)
- 614. Acute Lymphoblastic Leukemia: Therapy, excluding Transplantation: Poster III (2833–2842)
- Acute Myeloid Leukemia: Commercially Available Therapy, excluding Transplantation: Poster III (2843–2853)
- 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Poster III (2854–2877)
- 617. Acute Myeloid Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster III (2878–2906)
- 618. Acute Lymphoblastic Leukemia: Biology, Cytogenetics, and Molecular Markers in Diagnosis and Prognosis: Poster III (2907–2915)
- 621. Lymphoma-Genetic/Epigenetic Biology: Poster III (2916-2926)
- 622. Lymphoma Biology—Non-Genetic Studies: Poster III (2927–2933)
- 623. Mantle Cell, Follicular, and Other Indolent B-Cell Lymphoma—Clinical Studies: Poster III (2934–2963)
- 624. Hodgkin Lymphoma and T/NK Cell Lymphoma— Clinical Studies: Poster III (2964–3006)
- 625. Lymphoma: Pre-Clinical—Chemotherapy and Biologic Agents: Poster III (3007–3015)
- 626. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Prospective Clinical Trials: Poster III (3016–3034)
- 627. Aggressive Lymphoma (Diffuse Large B-Cell and Other Aggressive B-Cell Non-Hodgkin Lymphomas)—Results from Retrospective/Observational Studies: Poster III (3035–3063)

- 631. Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy: Poster III (3064–3064)
- 632. Chronic Myeloid Leukemia: Therapy: Poster III (3065–3078)
- 634. Myeloproliferative Syndromes: Clinical: Poster III (3079-3092)
- 635. Myeloproliferative Syndromes: Basic Science: Poster III (3093-3098)
- 636. Myelodysplastic Syndromes—Basic and Translational Studies: Poster III (3099–3107)
- 637. Myelodysplastic Syndromes—Clinical Studies: Poster III (3108-3125)
- 641. CLL: Biology and Pathophysiology, excluding Therapy: Poster III (3126–3135)
- 642. CLL: Therapy, excluding Transplantation: Poster III (3136-3152)
- 651. Myeloma: Biology and Pathophysiology, excluding Therapy: Poster III (3153–3187)
- 652. Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy: Poster III (3188–3195)
- 653. Myeloma: Therapy, excluding Transplantation: Poster III (3196-3248)
- 701. Experimental Transplantation: Basic Biology, Pre-Clinical Models: Poster III (3249–3254)
- Adoptive Immunotherapy: Mechanisms and New Approaches: Poster III (3255–3265)
- 704. Immunotherapies: Poster III (3266-3278)
- 711. Cell Collection and Processing: Poster III (3279-3283)
- 721. Clinical Allogeneic Transplantation: Conditioning Regimens, Engraftment, and Acute Transplant Toxicities: Poster III (3284–3308)

- 722. Clinical Allogeneic Transplantation: Acute and Chronic GVHD, Immune Reconstitution: Poster III (3309–3320)
- 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence: Poster III (3321–3330)
- 731. Clinical Autologous Transplantation: Results: Poster III (3331-3343)
- 732. Clinical Allogeneic Transplantation: Results: Poster III (3344-3365)
- 801. Gene Editing, Therapy and Transfer: Poster III (3366–3373)
- 802. Chemical Biology and Experimental Therapeutics: Poster III (3374–3378)
- 803. Emerging Diagnostic Tools and Techniques: Poster III (3379-3389)
- 901. Health Services Research—Non-Malignant Conditions: Poster III (3390–3416)
- 902. Health Services Research—Malignant Conditions (Lymphoid Disease): Poster III (3417–3436)
- 903. Health Services Research—Malignant Conditions (Myeloid Disease): Poster III (3437–3446)
- 904. Outcomes Research—Non-Malignant Conditions: Poster III (3447–3464)
- 905. Outcomes Research—Malignant Conditions (Lymphoid Disease): Poster III (3465-3485)
- 906. Outcomes Research—Malignant Conditions (Myeloid Disease): Poster III (3486–3493)

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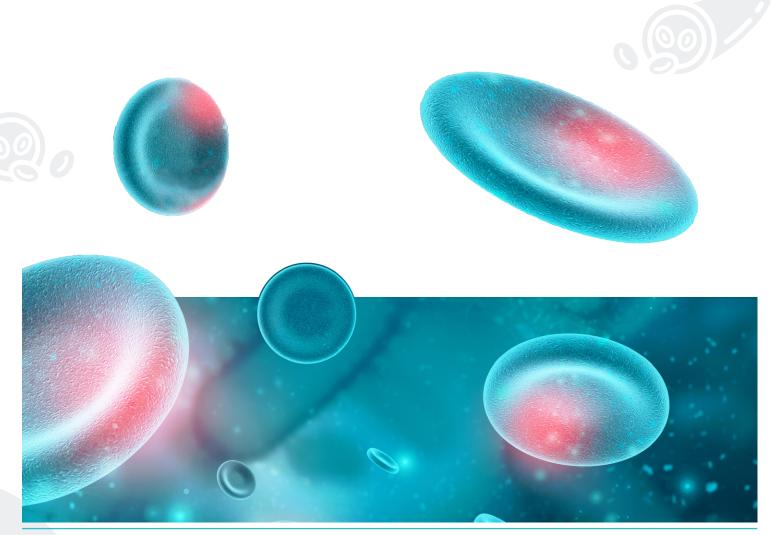
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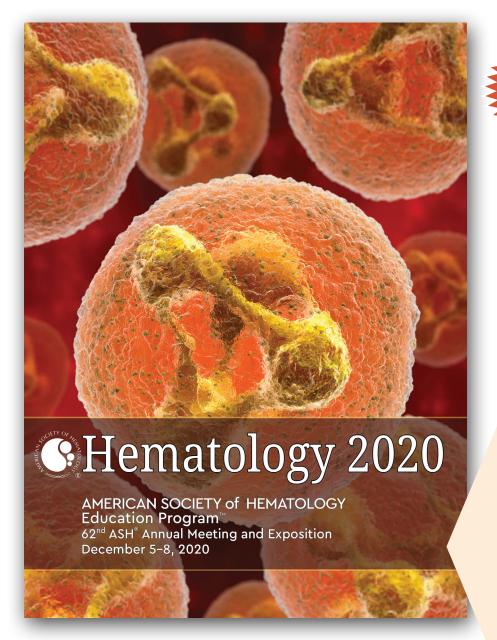
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**EXHIBITORS** 



# EARN UP TO 40 CME/MOC CREDITS\*





Hematology 2020 provides peer-reviewed review articles from the 2020 ASH Annual Meeting.

# **CME/MOC Tests**

Earn up to 40 CME credits or ABIM MOC points by completing two 20-credit exams, one on malignant and the other on non-malignant hematology. Purchase the test at the ASH Academy.

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The American Society of Hematology is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The American Society of Hematology designates this enduring material for a maximum of 40 AMA PRA Category 1 Credits™. Physicians who participate in this CME activity but are not licensed in the United States are also eligible for AMA Category 1 PRA Credit™.

### \*ABIM Maintenance of Certification

Successful completion of this CME activity enables the participant to earn up to 40 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

# SATELLITE SYMPOSIA

Satellite Symposia will take place on Friday, December 4, 2020, preceding the ASH annual meeting. ASH appreciates its corporate and nonprofit partners for their participation in this program. The Society values its partnerships and the supportive role that members of this community play in an effort to provide hematologists with quality educational programs. Satellite Symposia are not CME-accredited through ASH. Each symposium lists a contact person for accreditation information.

All times are in Pacific time. Duplication/recording is prohibited.

### EARLY MORNING SYMPOSIA:

7:00 a.m. - 10:00 a.m.

A Case-based Workshop: Clinical and Laboratory Aspects of Hemophilia and Thrombosis

7:00 a.m. - 10:00 a.m.

This program is sponsored and supported by Mayo Clinic.

### **Co-Chairs:**

RAJIV K. PRUTHI, MBBS, Mayo Clinic, Rochester, MN Dong Chen, MD, PhD, Mayo Clinic, Rochester, MN

### Speakers:

RAJIV K. PRUTHI, MBBS, Mayo Clinic, Rochester, MN ANAND PADMANABHAN, MBBS, PhD, Mayo Clinic, Rochester, MN

Dong Chen, MD, PhD, Mayo Clinic, Rochester, MN Ana I. Casanegra, MD, Mayo Clinic, Rochester, MN

Contact: Heidi Zunker

Email: zunker.heidi@mayo.edu

Acute Myeloid Leukemia: Using Available Evidence and Guidelines to Make Sense of a Rapidly Evolving Treatment Paradigm

### 7:00 a.m. - 10:00 a.m.

This program is sponsored by Clinical Care Options and supported by educational grants from Agios Pharmaceuticals Inc., Jazz Pharmaceuticals and Pfizer, Inc. Provided by the National Comprehensive Cancer Network in partnership with Clinical Care Options, LLC.

### Chair:

FARHAD RAVANDI, MBBS, The University of Texas MD Anderson Cancer Center, Houston, TX

### Speakers:

Amir T. Fathi, MD, Massachusetts General Hospital Cancer Center, Cambridge, MA Alice S. Mims, MD, Medical University of South Carolina, Columbus, OH

Contact: Clinical Care Options Email: meetings@clinicaloptions.com

Advances in Diagnosis and Management of Myelodysplastic Syndromes

### 7:00 a.m. - 10:00 a.m.

This program is sponsored and supported by MDS Foundation, Inc.

### Chair:

Mario Cazzola, MD, Fondazione IRCCS Policlinico San Matteo Pavia, Pavia, Italy

### Speakers:

Jane E. Churpek, MD, MS, University of Wisconsin School of Medicine and Public Health, Madison, WI

RAFAEL BEJAR, MD, PhD, University of California—San Diego, La Jolla, CA

AMY E. DeZern, MD, Johns Hopkins University, Baltimore. MD

Katharina S. Götze, Technical University of Munich, Munich, Germany

SAAR I. GILL, MD, PHD, University of Pennsylvania, Philadelphia, PA

Stephane De Botton, Institut Gustave Roussy, Villejuif, France

Contact: Lea Harrison

Email: lharrison@mds-foundation.org

# An Optimized Approach to Sickle Cell Disease Care in a New Era of Treatment

### 7:00 a.m. - 10:00 a.m.

This program is sponsored by Vindico Medical Education and supported by Global Blood Therapeutics.

### Chair:

Jane S. Hankins, MD, MS, St. Jude Children's Research Hospital, Memphis, TN

### Speakers:

Daniel E. Bauer, MD, PhD, Boston Children's Hospital, Harvard Medical School, Boston, MA Modupe Idowu, MD, The University of Texas, Houston, Houston, TX Caterina P. Minniti, MD, National Institutes of Health Clinical Center, Chevy Chase, MD Akshay Sharma, MBBS, St. Jude Children's Research Hospital, Memphis, TN

Contact: CME Resource

Email: CME@VindicoCME.com

### Application of Individualized Treatment for CLL/ SLL: Novel Agents, Combinations, and Sequencing Therapy

### 7:00 a.m. - 10:00 a.m.

This program is sponsored by Clinical Care Options and supported by National Comprehensive Cancer Network.

### Chair:

William G. Wierda, MD, PhD, The University of Texas MD Anderson Cancer Center, Houston, TX

### **Speakers:**

Jeremy S. Abramson, MD, Massachusetts General Hospital Cancer Center, Boston, MA Brian T. Hill, MD, Cleveland Clinic Foundation, Cleveland, OH

**Contact: Clinical Care Options** 

Email: meetings@clinicaloptions.com

Consensus or Controversy? Investigators Discuss Clinical Practice Patterns and Available Research Data Guiding the Management of Patients with Multiple Myeloma (Part 1 of a 4-Part Series)

### 7:00 a.m. - 10:00 a.m.

This program is sponsored by Research To Practice and supported by Abbvie Inc, Bristol-Myers Squibb Company, GlaxoSmithKline, Karyopharm, Oncopeptides, Sanofi Genzyme and Takeda Oncology.

### Chair:

Neil Love, MD, Research To Practice, Miami, FL

### **Speakers:**

RAFAEL FONSECA, MD, Mayo Clinic, Phoenix, AZ OLA LANDGREN, MD, PhD, Memorial Sloan Kettering Cancer Center, New York, NY

Nikhil C. Munshi, MD, Dana-Farber Cancer

Institute, Boston, MA

Robert Z. Orlowski, MD, PhD, MD Anderson Cancer

Center, Houston, TX

EDWARD A. STADTMAUER, MD, FACP, University of

Pennsylvania, Philadelphia, PA

Contact: Sylvia Eriksen

Email: seriksen@researchtopractice.com

Exploring Antibody Therapy in ALL: How and Why to Integrate Antibody-Based Treatment Into Patient Management

### 7:00 a.m. - 10:00 a.m.

This program is sponsored by PeerView Institute for Medical Education and supported by Pfizer.

### Chair:

DAVID I. MARKS, MB, MS, FRACP, PhD, FRCPATH, University Hospitals Bristol, Bristol, United Kingdom

### Speakers:

Nicholas J. Short, MD, The University of Texas MD Anderson Cancer Center, Houston, TX Daniel J. DeAngelo, MD, PhD, Dana-Farber Cancer Institute, Boston, MA

Contact: PVI Live

Email: Questions@PeerView.com

How I Think, How I Treat in the New Age of AML Care: Personal Perspectives on New Evidence and Innovative Therapeutics

### 7:00 a.m. – 10:00 a.m.

This program is sponsored by PeerView Institute for Medical Education and supported by Actinium Pharmaceuticals, Gilead Sciences, Inc., and Jazz Pharmaceuticals, Inc. .

### Co-Chairs:

HARRY P. Erba, MD, PhD, University of Alabama at Birmingham, Birmingham, AL

NAVAL DAVER, MD, MD Anderson Cancer Center, Houston, TX

### **Speakers:**

Gail J. Roboz, MD, Weill Cornell Medicine and The New York Presbyterian Hospital, New York, NY Tara Lin, MD, University of Kansas, Westwood, KS

Contact: PVI Live

Email: Questions@PeerView.com

Managing Myeloma: Where We Are, Where We're Going, and Where We SHOULD Be Going (Time to Choose Sides!)

### 7:00 a.m. - 10:00 a.m.

This program is sponsored by RedMedEd and supported by the Multiple Myeloma Research Foundation.

### Co-Chairs:

Hearn Jay Cho, MD, PhD, Tisch Cancer Institute, New York, NY

Paul G. Richardson, MD, Dana-Farber Cancer Institute, Boston, MA

A. Keith Stewart, MBChB, Princess Margaret Cancer Centre, University Health Network, Toronto, Ontario, Canada

### **Speakers:**

ADAM D. COHEN, MD, University of Pennsylvania, Philadelphia, PA

Suzanne Lentzsch, MD, PhD, Columbia University

Medical Center, New York, NY

David S. Siegel, MD, Hackensack University Medical Center, Hackensack, NJ

Contact: Karen Tenaglia

Email: ktenaglia@redmeded.com

Mapping the New Era in CLL Management: Precision Medicine, Optimized Therapeutic Sequencing, and Patient Perspectives in Treatment-Naïve and Relapsed Disease

### 7:00 a.m. - 10:00 a.m.

This program is supported by independent educational grants from AstraZeneca LP, Adaptive Biotechnologies, Pharmacyclics LLC, an AbbVie Company and Janssen Biotech, Inc., administered by Janssen Scientific Affairs, LLC.

### Chair:

JOHN G. GRIBBEN, MD, DSc, FRCP, FRCPATH, FMEDSCI, Barts Cancer Institute, London, United Kingdom

### Speakers:

Ryan Jacobs, MD, Levine Cancer Institute/Atrium Health, Charlotte, NC

PHILIP A. THOMPSON, MB, MS, MD Anderson Cancer Center, Houston, TX

ALESSANDRA TEDESCHI, MD, ASST Niguarda (Grande Ospedale Metropolitano Niguarda), Milan, Italy

Contact: PVI Live

Email: *Questions@PeerView.com* 

# Mastering the Treatment of Myeloid Malignancies in the Era of Personalized Medicine

### 7:00 a.m. - 10:00 a.m.

This program is sponsored by Cleveland Clinic and supported by Cleveland Clinic & AAMDS.

### Chair:

 $\ensuremath{\mathsf{B}}\xspace\mathsf{H}\xspace\mathsf{H}\xspace\mathsf{H}\xspace\mathsf{H}$  . Patel, MD, Cleveland Clinic, Cleveland, OH

### Speakers:

Kelly L. Bolton, MD, PhD, Memorial Sloan
Kettering Cancer Center, New York, NY
Vikas Gupta, MD, FRCP, FRCPath, The Princess
Margaret Cancer Centre, Toronto, Ontario, Canada
Betty K. Hamilton, MD, Cleveland Clinic
Foundation, Cleveland, OH

JEFFREY E. LANCET, MD, H. Lee Moffitt Cancer Center & Research Institute, Tampa, FL

Jaroslaw P. Maciejewski, MD, PhD, Taussig Cancer Center, Cleveland, OH

Guillermo F. Sanz, MD, PhD, Hospital Universitario La Fe, Valencia, Spain

Contact: Samantha Pringle Email: pringls@ccf.org

### Preparing for Personalized Care in MDS: Integrating Innovative Treatments Into a Cohesive Patient Care Model

### 7:00 a.m. - 10:00 a.m.

This program is sponsored by PeerView Institute for Medical Education and supported by Astex Pharmaceuticals, Inc., Bristol Myers Squibb, Taiho Oncology, Inc., and Takeda Oncology.

### Chair:

Steven D. Gore, MD, Yale Cancer Center, New Haven, CT

### **Speakers:**

MICHAEL R. SAVONA, MD, Vanderbilt University Medical Center, Nashville, TN

David A. Sallman, MD, H. Lee Moffitt Cancer Center,

Tampa, FL

Prapti Patel, MD, The University of Texas Southwestern Medical Center, Dallas, TX

Contact: PVI Live

Email: *Questions@PeerView.com* 

Understanding Cold Agglutinin Disease: How Do Emerging Treatment Options Have the Potential to Transform Patient Outcomes?

### 7:00 a.m. - 10:00 a.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by Sanofi Genzyme.

### Chair:

ALEXANDER RÖTH, MD, University Hospital Essen, Essen, Germany

### **Speakers:**

ILENE C. WEITZ, University of Southern California, Los Angeles, CA

David J. Kuter, MD, Massachusetts General Hospital, Boston, MA

WILMA BARCELLINI, Fondazione IRCCS Ca' Granda, Ospedale Maggiore Policlinico, Milan, Italy

Contact: Dayna Kleinstein Email: *info@gotoper.com* 

### LATE MORNING SYMPOSIA:

11:00 a.m. - 2:00 p.m.

Accelerating Toward a Cure for Myeloma: Emerging Data, New Agents, and an Evolving Treatment Paradigm

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Clinical Care Options, LLC and supported by educational grants from Amgen, Bristol-Myers Squibb, GlaxoSmith-Kline, Karyopharm & Oncopeptides. Provided by the Annenberg Center for Health Sciences at Eisenhower. In partnership with Clinical Care Options, LLC & the International Myeloma Foundation.

### Chair:

Brian G.M. Durie, MD, Cedars Sinai Cancer Center, Los Angeles, CA

### Speakers:

S. VINCENT RAJKUMAR, MD, Mayo Clinic, Rochester, MN

SHAJI K. KUMAR, MD, Mayo Clinic, Rochester, MN PHILIPPE MOREAU, MD, Centre Hospitalier Universitaire, Nantes, FRA Jesús F. San-Miguel, Clinica Universidad de Navarra, Pamplona, Spain

THOMAS MARTIN, MD, University of California, San Francisco, CA

**Contact: Clinical Care Options** 

Email: meetings@clinicaloptions.com

Advances in GvHD: Expert Guidance on the Current Treatment Landscape, Optimizing Prophylaxis, and Integrating Novel Therapies

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Clinical Care Options, LLC and supported by an educational grant from Incyte Corporation. Provided by Clinical Care Options, LLC.

### Chair:

COREY S. CUTLER, MD, MPH, FRCPC, Dana-Farber Cancer Institute, Boston, MA

### **Speakers:**

Nelson J. Chao, MD, MBA, Duke University Medical Center, Durham, NC

DAVID B. MIKLOS, MD, PhD, Stanford University Medical Center, Stanford, CA

**Contact: Clinical Care Options** 

Email: meetings@clinicaloptions.com

Advances in Therapy for Inherited Non-Malignant Blood Disorders: Focus on Sickle Cell Disease and Hemophilia.

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Vindico Medical Education and supported by an educational grant from Novo Nordisk Inc. This continuing medical education activity is provided by Vindico Medical Education.

### Chair:

STEVEN W. PIPE, MD, University of Michigan, Ann Arbor, MI

### Speakers:

Mark Reding, MD, University of Minnesota Medical Center, Minneapolis

CHRISTINE GUELCHER, HEMOSTASIS RN-BC, MS, PPCNP-BC, Children's National Health System, Washington, DC

Biree Andemariam, MD, University of Connecticut Health Center, West Hartford, CT

Contact: CME Resource

Email: CME@VindicoCME.com

Building New Management Models for NHL Care: Tumor Board Insights on Innovative Therapies in FL and DLBCL

### 11:00 a.m. - 2:00 p.m.

This activity is supported by educational grants from ADC Therapeutics, Epizyme Inc., Gilead Sciences Inc., Incyte Corporation, and MorphoSys US Inc.

### Chair:

NATHAN H. FOWLER, MD, The University of Texas MD Anderson Cancer Center, Houston, TX

### Speakers:

Prof. Dr. Martin Dreyling, MD, Klinikum Der Universitaet Muenchen-Campus Grosshadern, Munich, Germany Caron Jacobson, MD, MMSc, Dana-Faber Cancer Institute, Boston, MA

Krish Patel, MD, Swedish Cancer Institute, Seattle, WA

Contact: PVI Live

Email: Questions@PeerView.com

# Clinical Advances in Immune Thrombocytopenia: Integrating New Therapies

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Clinical Care Options, LLC and supported by educational grants from Amgen and Dova Pharmaceuticals. Provided by Clinical Care Options, LLC.

### Chair:

David J. Kuter, MD, Massachusetts General Hospital, Boston, MA

### **Speakers:**

KEITH R. McCrae, MD, Cleveland Clinic, Cleveland, OH

MICHAEL D. TARANTINO, MD, Bleeding & Clotting Disorders Institute, Peoria, IL

**Contact: Clinical Care Options** 

Email: meetings@clinicaloptions.com

Consensus or Controversy? Investigators Discuss Clinical Practice Patterns and Available Research Data Guiding the Management of Patients with Chronic Lymphocytic Leukemia (Part 2 of a 4-Part Series)

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Research To Practice and supported by AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company, Genentech, a member of the Roche Group, Pharmacyclics LLC, An AbbVie Company and Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC.

### Chair:

Neil Love, MD, Research To Practice, Miami, FL

### **Speakers:**

Matthew S. Davids, MD, Dana-Farber Cancer Institute, Boston, MA

Kerry A. Rogers, MD, The Ohio State University Comprehensive Cancer Center, Columbus, OH

Tanya Siddiqi, MD, City of Hope, Duarte, CA Stephan Stilgenbauer, Professor Dr, Department of Internal Medicine III, Ulm University, Ulm, Germany

WILLIAM G. WIERDA, MD, PhD, The University of Texas MD Anderson Cancer Center, Houston, TX

Contact: Sylvia Eriksen

Email: seriksen@researchtopractice.com

# D is for Diagnosis: Detecting and Treating Rare Disorders in Hematologic Practice

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by Sanofi Genzyme.

### Chair:

Atul Mehta, FRCP, Royal Free Hospital, London, United Kingdom

### **Speakers:**

Marie Scully, MD, University College London Hospitals, Cardiometabolic Programme, National Institute for Health Research UCLH-UCL Biomedical Research Center, London, United Kingdom

NICOLA COOPER, Hammersmith Hospital, Imperial College, London, United Kingdom ALAN LICHTIN, MD, Leukemia Program, Cleveland, OH

Contact: Dayna Kleinstein Email: *info@gotoper.com* 

Individualizing Treatment Plans and Optimizing Outcomes for Patients with MF and PV: Stories Behind The Science

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by educational grants from Bristol Myers Squibb, Constellation Pharmaceuticals, Inc., Incyte Corporation, and PharmaEssentia USA.

### Chair:

Srdan Verstovsek, MD, PhD, MD Anderson Cancer Center, Houston, TX

Contact: Dayna Kleinstein Email: info@gotoper.com Medical Crossfire®: Bridging Unmet Needs with Emerging Data In Relapsed/Refractory DLBCL To Improve Patient Outcomes

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by an educational grant from MorphoSys.

### **Speakers:**

Ranjana Advani, MD, Stanford University, Stanford, CA

Kami J. Maddocks, MD, Ohio State University Hospital, Columbus, OH

Georg Lenz, University Hospital Muenster, Munster, Germany

Grzegorz S. Nowakowski, MD, Mayo Clinic, Rochester, MN

Contact: Dayna Kleinstein Email: info@gotoper.com

Medical Crossfire®: Exploring the Modern Management of Acute Lymphoblastic Leukemia from AYA to Adult

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Physicians' Education Resource® (PER®) and supported by educational grants from Amgen, Jazz Pharmaceuticals, and Takeda Oncology.

### Speakers:

NICOLA GOEKBUGET, MD, Goethe University Hospital, Frankfurt, Germany

HAGOP M. KANTARJIAN, MD, MD Anderson Cancer Center, Houston, TX

CHING-HON PUI, MD, St. Jude Children's Research Hospital, Memphis, TN

CLAIRE RODDIE, PhD, MD, University College London, London, United Kingdom

Contact: Dayna Kleinstein Email: *info@gotoper.com* 

New Targets, New Data, New Guidelines: Assessing Treatment Options to Personalize Care in B-Cell Lymphomas

### 11:00 a.m. - 2:00 p.m.

This program is sponsored and supported by Physicians' Education Resource, LLC.

### **Speakers:**

Brad S. Kahl, MD, Washington University School of Medicine in St. Louis, Saint Louis, MO JASON R. WESTIN, MD, MD Anderson, Houston, TX THOMAS E. WITZIG, MD, Mayo Clinic, Rochester, MN

Contact: Dayna Kleinstein Email: dkleinstein@gotoper.com

T-Cell Lymphoma Tumor Board: Application of Novel Agents for the Treatment of PTCL and CTCL

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by educational grants from Seattle Genetics and Takeda Oncology.

### Chair:

Steven M. Horwitz, MD, Memorial Sloan Kettering Cancer Center, New York, NY

### **Speakers:**

Ahmet Dogan, MD, PhD, Memorial Sloan Kettering Cancer Center, New York, NY

Nена Мента-Shah, MD, Washington University, St. Louis, MO

Pamela B. Allen, MD, MSc, Emory University Winship Cancer Institute, Decatur, GA

Contact: Dayna Kleinstein Email: *info@gotoper.com* 

Taking Action with Minimal Residual Disease: Technique, Role, and Utilization of MRD to Improve Outcomes in Patients with Hematologic Malignancies

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC and supported by by educational grants from AbbVie Inc.; Adaptive Biotechnologies Corporation; and Amgen, Inc. .

### Chair:

Andre H. Goy, MD, John Theurer Cancer Center, Hackensack University Medical Center, Hackensack, NJ

### **Speakers:**

NITIN JAIN, MD, MD Anderson Cancer Center, Houston, TX

Mark Roschewski, MD, National Cancer Institute, National Institutes of Health, Bethesda, MD

Contact: Dayna Kleinstein Email: dkleinstein@gotoper.com

The Evolving Role of PI3K Inhibitors for the Management of Hematologic Malignancies: Integration of Recent Data Sets into Clinical Practice

### 11:00 a.m. - 2:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by educational grants from Incyte Corporation, TG Therapeutics, Inc., and Verastem, Inc.

### Chair:

JOHN M. PAGEL, MD, PHD, DSc, Swedish Cancer Institute, Center for Blood Disorders and Stem Cell Transplantation, Seattle, WA

### Speakers:

JAVIER PINILLA IBARZ, MD, PhD, Moffitt Cancer Center, Tampa, FL

ALEXEY DANILOV, MD, Oregon Health & Science University, Portland, OR

Callie C. Coombs, MD, University of North Carolina, Chapel Hill, NC

JOANNA M. RHODES, MD, University of Pennsylvania, Long Island City, NY

Contact: Dayna Kleinstein Email: *info@gotoper.com* 

### AFTERNOON SYMPOSIA:

3:00 p.m. - 6:00 p.m.

# Advances in CAR T-Cell Therapy: What Does the Future Look Like?

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by Kite Pharma, Inc. and Novartis Pharmaceuticals Corporation.

### Chair:

DAVID G. MALONEY, MD, PhD, Fred Hutchinson Cancer Research Center, Seattle, WA

### Speakers:

Stephanie Jackson, MSN, RN, AOCNS, BMTCN, Ronald Reagan UCLA Medical Center, Los Angeles, CA

Krishna V. Komanduri, MD, University of Miami Miller School of Medicine, Miami, FL Matthew J. Frigault, MD, MSc, Massachusetts General Hospital, Dorchester, MA

Contact: Dayna Kleinstein Email: *info@gotoper.com* 

### A Fresh Look at CAR T-Cell Therapy: Recent Advances, New Evidence, and Evolving Paradigms to Improve Patient Care

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Clinical Care Options, LLC and supported by an educational grant from Bristol-Myers Squibb. Provided by Clinical Care Options, LLC.

### Chair:

Renier J. Brentjens, MD, PhD, Memorial Sloan Kettering Cancer Center, New York, NY

### **Speakers:**

Noopur S. Raje, MD, Massachusetts General Hospital, Boston, MA Frederick L. Locke, MD, Moffitt Cancer Center, Tampa, FL

Contact: Clinical Care Options

Email: meetings@clinicaloptions.com

# Addressing the Medical Need in CLL: How BTK Inhibitors Are Improving Outcomes

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Clinical Care Options, LLC and supported by educational grants from AstraZeneca and Beigene. Provided by Clinical Care Options, LLC.

### Chair:

IAN W. FLINN, MD, PHD, Sarah Cannon Research Institute, Nashville, TN

### Speakers:

Susan M. O'Brien, MD, UCI Cancer Center, Orange, CA

JOHN M. PAGEL, MD, PhD, Fred Hutchinson Cancer Research Center, Seattle, WA

Contact: Clinical Care Options Email: meetings@clinicaloptions.com

### Adopting New Approaches for Relapsed/ Refractory Follicular Lymphoma

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by MedscapeLIVE! and supported by Epizyme, Inc. There may be additional supporters confirmed.

### Chair:

LORETTA J. NASTOUPIL, MD, The University of Texas MD Anderson Cancer Center, Houston, TX

### Speakers:

Connie Lee Batlevi, MD, PhD, Memorial Sloan Kettering Cancer Center, Short Hills, NJ Matthew A. Lunning, DO, FACP, University of Nebraska Medical Center, Omaha, NE

Contact: Jave Harden

Email: jharden@medscapelive.com

# Applying Data to Practice: The Role of BTK Inhibitors for the Treatment of CLL

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by MedscapeLIVE! and supported by AstraZeneca.

### Chair:

Jennifer Woyach, MD, The Ohio State University, Columbus, OH

### Speakers:

John N. Allan, MD, Weill Cornell Medicine, Long Island City, NY Deborah M. Stephens, DO, Huntsman Cancer Institute, Salt Lake City, UT

Contact: Jaye Harden

Email: jharden@medscapelive.com

Consensus or Controversy? Investigators Discuss Clinical Practice Patterns and Available Research Data Guiding the Management of Patients with Acute Myeloid Leukemia (Part 3 of a 4-Part Series)

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Research To Practice and supported by Abbvie Inc, Astellas, Bristol-Myers Squibb Company, Daiichi Sankyo, Genentech, a member of the Roche Group, Helsinn Healthcare SA and Pfizer Inc.

### Chair:

Neil Love, MD, Research To Practice, Miami, FL

### **Speakers:**

ALEXANDER E. PERL, MD, University of Pennsylvania, Philadelphia, PA

Daniel A. Pollyea, University of Colorado, Denver,

EYTAN M. STEIN, MD, Memorial Sloan Kettering Cancer Center, New York, NY

Andrew H. Wei, MBBS, PhD, The Alfred Hospital, Melbourne, Australia

Mark Levis, MD, PhD, Johns Hopkins University, Baltimore, MD

Contact: Sylvia Eriksen

Email: seriksen@researchtopractice.com

# Contemporary Management of Hemophilia A: Expert Guidance to Improve Patient Outcomes

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Clinical Care Options, LLC and supported by educational grants from Genentech, a member of the Roche Group, Sanofi Genzyme Corporation and Takeda Pharmaceutical Company Ltd. Provided by Clinical Care Options, LLC.

### Chair:

MIGUEL A. ESCOBAR, MD, The University of Texas Health Science Center and Gulf States Hemophilia and Thrombophilia Center, Houston, TX

### Speakers:

MICHAEL U. CALLAGHAN, MD, Wayne State University, Detroit, MI REBECCA KRUSE-JARRES, MD, MPH, Bloodworks

Northwest, Seattle, WA

Contact: Clinical Care Options Email: meetings@clinicaloptions.com

# **Evolving the Standard of Care: Rethinking the Treatment Paradigm for Iron Deficiency Anemia**

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by MedscapeLIVE! and supported by Pharmacosmos Therapeutics, Inc.

### Chair:

Carlo Brugnara, MD, The Children's Hospital, Boston, MA

### Speakers:

MICHAEL AUERBACH, MD, Auerbach Hem-Onc Associates, Inc., Baltimore, MD Myles Wolf, MD, MMsc, Duke University School of Medicine, Durham, NC

Contact: Jaye Harden

Email: jharden@medscapelive.com

### Experts Debate Optimal Approaches to the Treatment of Multiple Myeloma

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Bio Ascend and supported by GlaxoSmithKline, Janssen, Oncopeptides.

### Chair:

Sagar Lonial, MD, Emory University School of Medicine, Atlanta, GA

### Speakers:

Kenneth Anderson, MD, Dana-Farber Cancer Institute, Boston, MA Pieter Sonneveld, MD, PhD, Erasmus MC, Rotterdam, Netherlands Peter Voorhees, MD, Levine Cancer Center, Charlotte, NC

Contact: Chloe Dunnam

Email: dunnam@bioascend.com

# How to Do It™ Interactive Workshop: Taking Action with Clinical Advances in Chronic Lymphocytic Leukemia

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC and supported by educational grants from AstraZeneca and Pharmacyclics.

### Chair:

RICHARD R. FURMAN, MD, Weill Cornell Medical College, New York, NY

### Speakers:

Farrukh T. Awan, MD, The Ohio State University, Dallas, TX

JOHN M. PAGEL, MD, PhD, DSc, Swedish Cancer Institute, Center for Blood Disorders and Stem Cell Transplantation, Seattle, WA

Contact: Dayna Kleinstein Email: dkleinstein@gotoper.com

# **Key Considerations: Advances in Gene Therapy for Hemophilia**

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by The France Foundation and supported by BioMarin, uniQure, Pfizer.

### Chair:

GLENN F. PIERCE, MD, PhD, Consultant, La Jolla, CA

### Speakers:

Lindsey George, MD, University Medical Centre Hamburg-Eppendorf, Haddonfield, NJ Alfonso Iorio, MD, PhD, McMaster University, Hamilton, Ontario, Canada Barbara A. Konkle, MD, Bloodworks Northwest, Seattle, WA

Contact: Amanda Noe

Email: anoe@francefoundation.com

### New Agents and Therapeutic Strategies in Beta-Thalassemia

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Clinical Care Options, LLC and supported by an educational grant from Bristol-Myers Squibb. Provided by Clinical Care Options, LLC.

### Chair:

Janet L. Kwiatkowski, MD, MSCE, The Children's Hospital of Philadelphia, Philadelphia, PA

### **Speakers:**

Jeanne Boudreaux, MD, Children's Healthcare of Atlanta, Emory University, Atlanta, GA Sujit Sheth, MD, Cornell University, New York, NY

Contact: Clinical Care Options Email: meetings@clinicaloptions.com

# **Sickle Cell Disease: Targeting Complications to Improve Long-term Implications**

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by an educational grant from Novartis Pharmaceuticals Corporation.

### Chair:

Kenneth I. Ataga, MD, University of North Carolina At Chapel Hill, Memphis, TN

Contact: Dayna Kleinstein Email: info@gotoper.com

# **Transforming the Treatment Paradigm for Patients With MDS**

### 3:00 p.m. - 6:00 p.m.

This program is sponsored by Clinical Care Options, LLC and supported by by educational grants from Bristol-Myers Squibb and Taiho Oncology. Provided by Clinical Care Options, LLC.

### Chair:

Rami S. Komrokji, MD, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL

### Speakers:

Guillermo Garcia-Manero, MD, The University of Texas MD Anderson Cancer Center, Department of Leukemia, Houston, TX Jamile M. Shammo, MD, Rush University Medical Center, Chicago, IL

Contact: Clinical Care Options Email: meetings@clinicaloptions.com

### **EVENING SYMPOSIA:**

7:00 p.m. – 10:00 p.m.

Consensus or Controversy? Investigators Discuss Clinical Practice Patterns and Available Research Data Guiding the Management of Patients with Hodgkin and Non-Hodgkin Lymphoma (Part 4 of a 4-Part Series)

### 7:00 p.m. - 10:00 p.m.

This program is sponsored by Research To Practice and supported by AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company, Genentech, a member of the Roche Group, Incyte Corporation, Karyopharm Therapeutics Inc and Seattle Genetics.

### Chair:

Neil Love, MD, Research To Practice, Miami, FL

### Speakers:

Jonathan W. Friedberg, MD, MSSc, University of Rochester, Rochester, NY John Kuruvilla, MD, The Princess Margaret Hospital, Toronto, Ontario, Canada Ann S. LaCasce, MD, MSc, Dana-Farber Cancer Institute, Boston, MA John P. Leonard, MD, Weill Cornell Medical College, Pelham Manor, NY Michael E. Williams, MD, UVA Health System Hospital West, Charlottesville, VA

Contact: Sylvia Eriksen

Email: seriksen@researchtopractice.com

Improving Outcomes in MDS and MPN: Tailoring Treatment Based on Patient- and Disease-Specific Factors

### 7:00 p.m. - 10:00 p.m.

This program is sponsored by Physicians' Education Resource® (PER®) and supported by educational grants from Agios Pharmaceuticals, Inc.; Astex Pharmaceuticals, Inc.; Bristol Myers Squibb; Gilead Sciences, Inc.; Novartis Pharmaceuticals Corporation; Taiho Oncology, Inc.; and Takeda Oncology.

### Chair:

Guillermo Garcia-Manero, MD, The University of Texas MD Anderson Cancer Center, Department of Leukemia, Houston, TX

### Speakers:

Ayalew Tefferi, MD, Mayo Clinic, Rochester, MN Valeria Santini, AOU Careggi-University of Florence, Firenze, Italy Ruben Mesa, MD, UT Health San Antonio Cancer Center, San Antonio, TX

Contact: Dayna Kleinstein Email: *info@gotoper.com* 

Leveraging Clinical Data and Trials to Inform Treatment for Patients with GvHD: An Expert Case-Based Discussion

### 7:00 p.m. – 10:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by educational grants from Incyte Corporation and Kadmon Corporation, LLC.

### Chair:

James L. Ferrara, MD, Icahn School of Medicine, New York, NY

Contact: Dayna Kleinstein Email: *info@gotoper.com* 

State-of-the-Art Care in Relapsed/Refractory Multiple Myeloma: Novel Targets, Combinations, and Treatment Approaches

### 7:00 p.m. - 10:00 p.m.

This program is sponsored by Physicians' Education Resource, LLC (PER) and supported by educational grants from Karyopharm Therapeutics Inc., Sanofi Genzyme, and Oncopeptides, Inc.

### Chair:

Maria-Victoria Mateos, MD, PhD, University Hospital of Salamanca, Salamanca, Spain

### **Speakers:**

Enrique M. Ocio, MD, PhD, Hospital Universitario De Salamanca, Santander, Spain Irene M. Ghobrial, MD, Dana-Farber Cancer Institute, Boston, MA Thomas G. Martin III, MD, University of California, San Francisco, San Francisco, CA

Contact: Dayna Kleinstein Email: *info@gotoper.com* 



# PRODUCT THEATERS

# **PRODUCT THEATERS**

Product Theaters as of October 21, 2020. Check the mobile app for an updated list of Product Theaters.

Product Theaters feature exhibitor presentations on new research findings and products. The Product Theater sessions offered at the times listed below will be solely promotional in nature; therefore, continuing medical education credits will not be offered.

All times are in Pacific time. Duplication/recording is prohibited.

### **SATURDAY**

### Sponsored by Bristol Myers Squibb

A New Treatment Option for Patients with Acute Myeloid Leukemia

Saturday 11:00 a.m. - 12:00 p.m.

Speaker:

MICHELLE LITTLE, PhD, Bristol Myers Squibb

### Sponsored by Genentech

POLIVY+BR: Advance the Possibilities in R/R DLBCL, NOS, After at Least 2 Prior Therapies

Saturday 11:00 a.m. - 12:00 p.m.

Speaker:

LISA MUSICK, PHARMD, BCPS, Genentech

### Sponsored by GSK

Introducing BLENREP (belantamab mafodotinblmf) for Injection, for Intravenous Use

Saturday 11:00 a.m. - 12:00 p.m.

Speaker:

Antonio Palumbo, MD, GSK

### Sponsored by Pfizer

A Discussion of Efficacy and Safety on a Treatment Option for Adults With Relapsed or Refractory (R/R) Acute Lymphoblastic Leukemia (ALL)

Saturday 11:00 a.m. - 12:00 p.m.

Speaker:

RICHA SHAH, PHARMD, Pfizer

### Sponsored by Sanofi Genzyme

Advances in the Treatment of Cold Agglutinin Disease

Saturday 11:00 a.m. - 12:00 p.m.

Speaker:

Melitza Iglesias, MD, Sanofi Genzyme

### Sponsored by Thermo Fisher Scientific

NGS Solutions That Help Simplify Your Journey to Answers in Hemato-oncology Research

Saturday 11:00 a.m. - 12:00 p.m.

Speaker:

AMY CARROLL, PhD, Thermo Fisher Scientific

### SUNDAY

### Sponsored by Astellas Pharma US, Inc.

A Targeted Therapeutic Approach for Relapsed or Refractory FLT3m+ AML Patients

Sunday 11:00 a.m. - 12:00 p.m.

Speaker:

RAMON V. TIU, MD, Astellas Pharma, US, Inc.

### Sponsored by Bristol Myers Squibb

**Bristol Myers Squibb Product Theater** 

Sunday 11:00 a.m. - 12:00 p.m.

Speaker:

Mecide Gharibo, MD, Bristol-Myers Squibb

### Sponsored by Incyte Corporation

Review of Efficacy and Safety of Monjuvi (tafasitamab-cxix): FDA-Approved Monoclonal Antibody in Combination with Lenalidomide for Adult Patients with R/R DLBCL Who Have Received at Least One Prior Therapy

Sunday 11:00 a.m. – 12:00 p.m.

Speaker:

Susan Snodgrass, MD, Incyte Corporation

### Sponsored by Janssen Biotech, Inc.

Redefining Approaches in Early-Line Multiple Myeloma Treatment

Sunday 11:00 a.m. - 12:00 p.m.

Speaker:

KATHLEEN GRAY, PhD, Janssen Biotech, Inc.

### Sponsored by Novartis Pharmaceuticals

Developing the Future of CAR-T Cell Therapy Today

Sunday 11:00 a.m. – 12:00 p.m.

Speakers:

AMIR HEFNI, PhD, Novartis CAROLIN BARTH, MD, Novartis

### Sponsored by Pfizer

A Treatment Option for Adult Patients With Newly Diagnosed CP Ph+ CML or Patients With CML Resistant/Intolerant to Prior TKI Therapy

Sunday 11:00 a.m. - 12:00 p.m.

Speaker:

JASMEET ANAND, PHARMD, Pfizer

### Sponsored by Sanofi Genzyme

An Anti-CD38 Directed Antibody for the Treatment for Appropriate Patients with Relapsed Refractory Multiple Myeloma

Sunday 11:00 a.m. – 12:00 p.m.

Speaker:

Erin Singh, PhD, Sanofi Genzyme

### **MONDAY**

### Sponsored by Abbvie

Exploring Outcomes With Fixed-Duration
Treatment in CLL and New Evidence in First-Line
AML: Pivotal Clinical Trial Data That Supports
Treatment Decisions and Patient Care

Monday 10:30 a.m. - 11:30 a.m.

Speaker:

R. Frank Cornell, MD, MS, Abbvie

Sponsored by Adaptive Biotechnologies clonoSEQ and the Future of MRD

Monday 10:30 a.m. – 11:30 a.m.

Speaker:

Lanny Kirsch, MD, Adaptive Biotechnologies

Sponsored by Alexion Pharmaceuticals

PNH: Key Clinical Considerations for a Terminal Complement-Mediated Disease

Monday 10:30 a.m. - 11:30 a.m.

Speaker:

ANITA HILL, MD, PHD, Alexion Pharmaceuticals, Inc.

### Sponsored by AstraZeneca

Scientific Exploration of Novel Targets for AML, MM, and NHL: A Glimpse into Areas of Research and Development

Monday 10:30 a.m. – 11:30 a.m.

Speaker:

Katharina Modelska, MD, PhD, AstraZeneca

### Sponsored by Genmab

Epcoritamab, a Novel Subcutaneous Bi-Specific CD3xCD20 Antibody for the Treatment of Patients with B-NHL: From Bench to Bedside and Beyond

Monday 10:30 a.m. - 11:30 a.m.

Speaker:

TAHAMTAN AHMADI, MD, PHD, Genmab

### Sponsored by Novo Nordisk

Trust the Experience of a rFVIIa Product Used for a Wide Range of Indications

Monday 10:30 a.m. - 11:30 a.m.

Speaker:

STEPHANIE SEREMETIS, MD, Novo Nordisk





Notes:		

# **COMPANY FOCUS ON DISEASE POSTERS**

# **COMPANY FOCUS ON DISEASE POSTERS**

Company Focus on Disease Posters as of October 21, 2020.

More events to be added! Check the mobile app and online for the latest schedule.

Company Focus on Disease Posters are curated groups of poster presentations, selected by the hosting company, that focus on a specific disease area. Differentiated from the ASH Poster Walk sessions, which are curated by ASH working groups of volunteer hematologists, these poster sessions are not CME-accredited. These new sessions will include a viewing of up to six pre-selected poster presentations and a moderated discussion between a company representative and presenters.

All times are in Pacific time. Duplication/recording is prohibited.

### AstraZeneca's Focus on B-Cell Malignancy Posters (non-CME)



Wednesday, Dec 9

8:00 a.m. - 9:00 a.m.

### **Moderators:**

Carlos Doti, MD, Head of Hematology—Global Medical Affairs, AstraZeneca Paulo Miranda, MD, Senior Global Medical Affairs Lead—Hematology, AstraZeneca

Notes:		

# **EXHIBITORS**

Participating Exhibitors as of October 23, 2020

### **Acceleron Pharma**

### http://www.acceleronpharma.com

Acceleron is dedicated to the discovery, development, and commercialization of medicines. Together with our global collaboration partner, Bristol Myers Squibb, we are pioneering the development of therapies in hematology/oncology.

### **Actinium Pharmaceuticals**

### https://www.actiniumpharma.com

Actinium Pharmaceuticals Inc. is a clinical stage biotech focused on improving patient access and outcomes to cellular therapies such as BMT and CAR-T with its proprietary targeted conditioning technology. Actinium is the only company with a late stage, multi-disease, multi-target pipeline focused on targeted conditioning. Its technology is enabled by Antibody Radio-Conjugates that combine the targeting ability of monoclonal antibodies with the cell killing ability of radioisotopes.

### **Adaptive Biotechnologies Corporation**

### http://www.adaptivebiotech.com

Adaptive Biotechnologies is a commercial-stage biotech company focused on harnessing the inherent biology of the adaptive immune system to transform the diagnosis and treatment of disease. Our proprietary immune medicine platform reveals and translates the massive genetics of the adaptive immune system with scale, precision and speed. Adaptive's goal is to develop and commercialize immune-driven diagnostics and therapeutics tailored to each individual patient.

### **ADC Therapeutics**

### https://www.adctherapeutics.com

ADC Therapeutics is a clinical-stage oncology biotechnology company on a mission to bring unique, targeted therapies and hope to patients and their families. The company is advancing next-generation antibody drug conjugates (ADCs) with highly potent and targeted pyrrolobenzodiazepine (PBD) dimer technology. These PBD-based ADCs are expected to provide a novel way to treat hematologic cancers and solid tumors, address significant unmet medical needs, and improve patients' lives.

### **Agios Pharmaceuticals**

### http://www.agios.com

Agios is focused on discovering and developing novel investigational medicines to treat malignant hematology, solid tumors and rare genetic diseases through scientific leadership in the field of cellular metabolism. In addition to an active research and discovery pipeline across these three therapeutic areas, Agios has two approved oncology precision medicines and multiple first-in-class investigational therapies in clinical and/or preclinical development.

### **Alexion Pharmaceuticals**

### https://www.alexion.com

Alexion is a global biopharmaceutical company with the mission of transforming the lives of people affected by rare diseases by continuously innovating and creating meaningful value in all that we do. Headquartered in Boston, Massachusetts, Alexion has offices around the globe and serves patients in more than 50 countries.

### Allogene Therapeutics, Inc.

### https://www.allogene.com

Allogene Therapeutics, headquartered in South San Francisco, is a clinical-stage biotechnology company pioneering the development of allogeneic chimeric antigen receptor T cell (AlloCAR  $T^{\text{TM}}$ ) therapies for cancer. Led by a management team with extensive experience in cell therapy, Allogene is developing a pipeline of "off-the-shelf" CAR T cell therapy candidates with the goal of delivering readily available cell therapy faster, more reliably and at greater scale to more patients.

### **American Society of Hematology**

### http://www.hematology.org

The Society's mission is to further the understanding, diagnosis, treatment, and prevention of disorders affecting the blood, bone marrow, and the immunologic, hemostatic and vascular systems, by promoting research, clinical care, education, training, and advocacy in hematology.

Exhibitors 127

### American Society of Pediatric Hematology/ Oncology

### http://www.aspho.org

The American Society of Pediatric Hematology/Oncology (ASPHO) is the medical society of pediatric hematology/oncology subspecialists and other healthcare professionals dedicated to promoting the optimal care of children, adolescents and young adults with blood disorders and cancer. Founded in 1981, ASPHO sponsors educational and professional development programs, promotes discovery, conducts advocacy, advances professional practice and supports partnerships to further its goals.

### **Amgen**

### http://www.amgenoncology.com

Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. A biotechnology pioneer since 1980, Amgen has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

### **Apellis Pharmaceuticals**

### https://www.apellis.com

Apellis Pharmaceuticals, Inc. is a global biopharmaceutical company that is committed to leveraging courageous science, creativity, and compassion to deliver life-changing therapies. Leaders in targeted C3 therapies, we aim to develop best-in-class and first-in-class therapies for a broad range of debilitating diseases that are driven by uncontrolled or excessive activation of the complement cascade, including those within hematology, ophthalmology, and nephrology. For more information, please visit our website.

# Aplastic Anemia and MDS International Foundation, Inc.

### http://www.aamds.org

The Aplastic Anemia and MDS International Foundation (AAMDSIF) is the world's leading non-profit health organization dedicated to supporting patients and their families who are living with aplastic anemia, myelodysplastic syndromes (MDS), paroxysmal nocturnal hemoglobinuria (PNH) and related bone marrow failure diseases. Founded in 1983, AAMDSIF provides patient education resources, professional education programs, research grants and advocacy for bone marrow failure disease research funding.

### **ASCO**

### https://www.asco.org

The American Society of Clinical Oncology and the Association for Clinical Oncology represent nearly 45,000 oncology professionals in every cancer subspecialty who care for people living with cancer. Through research, education, and promotion of the highest-quality and equitable patient care, members work to conquer cancer and create a world where cancer is prevented or cured, and every survivor is healthy. Learn more about how we provide the right information, right when you need it.

### **ASH Research Collaborative**

### http://www.ashrc.org

The ASH Research Collaborative (ASH RC) is a non-profit organization established by the American Society of Hematology in 2018 to foster collaborative partnerships that accelerate progress in hematology, with the goal of improving the lives of people affected by blood diseases. The foundation of the ASH RC is its Data Hub and Clinical Trials Network. The Data Hub is a technology platform that facilitates the exchange of information by aggregating research-grade data on hematologic diseases. As a major initiative within the ASH RC, the Data Hub aims to create the largest shared information resource within the global hematology community. The Sickle Cell Disease Clinical Trials Network (SCD CTN), designed to accelerate the development and evaluation of therapies in a large proportion of the United States population affected by SCD. Through the Data Hub, SCD CTN, and projects still to come, the ASH RC will transform research and practice in malignant and nonmalignant hematologic diseases throughout the world, for the benefit of patients and the hematology community.

### Astellas Pharma US, Inc.

### https://www.astellasoncology.com

Astellas Oncology is committed to elevating the standard of cancer care. We focus on developing innovative, targeted therapies for hard-to-treat cancers with limited treatment options, which is where we see the greatest opportunity to help people living with cancer.

# Astex Pharmaceuticals, Inc., a member of the Ostuka Group

### https://www.astx.com

Astex Pharmaceuticals, Inc. is committed to the fight against cancer. Astex is developing a proprietary pipeline of novel therapies for the treatment of hematologic malignancies and solid tumors. These include the oral hypomethylating agent decitabine and cedazuridine (ASTX727), for the treatment of myelodysplastic syndromes and acute myeloid leukemia; and tolinapant (ASTX660) for the treatment of T-Cell lymphomas. Astex is a member of the Otsuka group of companies, which includes Taiho Pharmaceutical and Taiho Oncology. Subject to regulatory approvals, Astex's products will be commercialized in the US and Canada by Taiho subsidiaries, and in the rest of the world by Otsuka subsidiaries.

### **AstraZeneca**

### http://www.astrazeneca-us.com

AstraZeneca is a global, science-led biopharmaceutical company that focuses on the discovery, development and commercialization of prescription medicines, primarily for the treatment of diseases in three therapy areas – Oncology, Cardiovascular, Renal & Metabolism and Respiratory. For more information, please visit www.astrazeneca-us.com.

### **Bayer**

### https://www.bayer.com

Bayer is a global enterprise with core competencies in the life science fields of health care and nutrition. Its products and services are designed to benefit people by supporting efforts to overcome the major challenges presented by a growing and aging global population. Bayer is committed to the principles of sustainable development, and the Bayer brand stands for trust, reliability and quality throughout the world.

### BeiGene

### http://www.beigene.com

BeiGene is a global, commercial-stage biotechnology company focused on discovering, developing, manufacturing, and commercializing innovative medicines to improve treatment outcomes and access for patients worldwide. Our 4,200+ employees in China, the United States, Australia, Europe, and elsewhere are committed to expediting the development of a diverse pipeline of novel therapeutics. We currently market two internally discovered oncology products: BTK inhibitor BRUKINSA® (zanubrutinib) in the United States and China, and anti-PD-1 antibody tislelizumab in China. We also market or plan to market in China additional oncology products licensed from Amgen Inc., Celgene Logistics Sàrl, a Bristol Myers Squibb (BMS) company, and EUSA Pharma. To learn more about BeiGene, please visit www.beigene.com.

### **BioMarin Pharmaceutical Inc.**

### http://www.biomarin.com

BioMarin is a world leader in developing and commercializing innovative therapies for rare diseases driven by genetic causes. With a 20-year history, BioMarin remains steadfast to its original mission—to bring new treatments to market that will make a big impact on small patient populations. These conditions are often inherited, difficult to diagnose, progressively debilitating, have few, if any, treatment options, and are usually ignored. Visit www.biomarin.com to learn more.

### bluebird bio

### http://www.bluebirdbio.com

At bluebird bio we're all-in on building integrated product platforms that encompass gene therapy, cancer immunotherapy and (megaTAL-enabled) gene editing. We believe these approaches will provide the potential to treat a broad range of serious conditions and deliver the chance for people to live fully. Because we want to bring the transformative effects of gene therapy to as many people as possible, we're pushing ourselves to fly higher than ever before with a bold vision for 2022 and beyond: 4 products in-market, 5 or more clinical programs, and 1-2 investigational new drugs per year. Our goal is to help the people we serve by recoding the science, the system — and even the status quo — for life.

### **Blueprint Medicines**

### https://www.blueprintmedicines.com

Blueprint Medicines is a precision therapy company striving to improve human health. With a focus on genomically defined cancers, rare diseases and cancer immunotherapy, we are developing transformational medicines rooted in our leading expertise in protein kinases, which are proven drivers of disease. We have two approved precision therapies and are currently advancing multiple investigational medicines in clinical development, along with a number of research programs

### **BMS/Pfizer**

Bristol Myers Squibb and Pfizer are partners in a worldwide collaboration. This global alliance combines both Bristol Myers Squibb's and Pfizer's long-standing strengths in drug development and commercialization.

### **BostonGene**

### https://www.bostongene.com

BostonGene Corporation is a biomedical software company committed to defining optimal precision medicine-based therapies for cancer patients. BostonGene's unique solution performs sophisticated analytics to aid clinicians in their evaluation of viable treatment options for each patient's individual genetics, tumor and tumor microenvironment, clinical characteristics and disease profile.

### **Bristol Myers Squibb**

### http://www.bms.com

Bristol Myers Squibb is a leading global biopharma company focused on discovering, developing and delivering innovative medicines for patients with serious diseases in areas including oncology, hematology, immunology, cardiovascular and neuroscience. Our employees work every day to transform patients' lives through science.

### **Chiesi Global Rare Diseases**

### https://www.chiesiglobalrarediseases.com

Chiesi Global Rare Diseases (GRD) is a business unit of the Chiesi Group, a global company with 85 years of experience in the pharmaceutical industry and operating in 29 countries. Founded in February 2020 and based in Boston, Massachusetts, Chiesi GRD works in collaboration with Chiesi Group to harness the full resources and capabilities of our global network to bring innovative new treatment options to people living with rare diseases. The unit is also a dedicated partner supporting the work of global leaders in patient advocacy, research, and patient care. Chiesi GRD is a reflection of Chiesi Group's many decades of experience in drug development and our commitment to putting the needs of patients at the forefront of everything we do.

### **CIBMTR**

### http://www.cibmtr.org

The CIBMTR facilitates critical cellular therapy research through a clinical database with >500,000 patients from >300 centers worldwide and a biospecimen repository with >150,000 samples. Collaborate with us on one of our >200 current studies. Visit cibmtr.org.

### **City of Hope Comprehensive Cancer Center**

### http://cityofhope.org

City of Hope is a leading research and treatment center for cancer, diabetes and other life-threatening diseases. Designated as a comprehensive cancer center, the highest recognition bestowed by the National Cancer Institute, City of Hope is also a founding member of the National Comprehensive Cancer Network, with research and treatment protocols that advance care throughout the nation.

### **CRISPR Therapeutics/Vertex Pharmaceuticals**

### https://www.vrtx.com

CRISPR Therapeutics and Vertex Pharmaceuticals entered into a strategic research collaboration in 2015 focused on the use of CRISPR/Cas9 gene editing technology to discover and develop potential new treatments aimed at the underlying genetic causes of human disease. The first candidate medicine to emerge from the partnership is in clinical trials for the treatment of transfusion-dependent beta thalassemia and severe sickle cell disease.

### **Daiichi Sankyo**

### https://www.daiichisankyo.com

With more than 100 years of scientific expertise and a presence in more than 20 countries, Daiichi Sankyo and its 15,000 employees around the world draw upon a rich legacy of innovation and a robust pipeline of promising new medicines to help people.

### **Dova Pharmaceuticals**

### https://dova.com

Dova is a pharmaceutical company focused on acquiring, developing and commercializing drug candidates for diseases where there is a high unmet medical need. With a nimble approach and a team of bright minds aglow with passion, we're dedicated to bringing brilliant medicine to market.

### **Elsevier**

### http://www.elsevier.com/events/ASH

Elsevier is a world-leader in medical publishing and a provider of information solutions that enhance the performance of science, health, and technology professionals, empowering them to make better decisions and deliver better care.

### Epizyme, Inc.

### http://www.epizyme.com

Epizyme, Inc. is an integrated biopharmaceutical company committed to rewriting treatment for cancer and other diseases through transformative epigenetic medicines. Epizyme has one commercial oncology product and is exploring the treatment potential of this therapy in investigational clinical trials focused on other conditions. By focusing on the genetic drivers of disease, Epizyme works to match new medicines with the patients who need them.

### **epocrates**

### http://www.athenahealth.com

epocrates, an athenahealth company, is the #1 medical app among US physicians. Over 1 million healthcare professionals trust epocrates to help them make more confident, efficient decisions at the point of care. Clinicians rely on epocrates drug monographs, interaction check, medical calculators & many other features throughout their daily workflows.

### **European Hematology Association**

### http://www.ehaweb.org

The European Hematology Association (EHA) is a non-profit association that represents European medical professionals with an active interest in hematology. Founded in 1992 to promote excellence in patient care, research and education in hematology, EHA has over 5000 active members from more than 100 countries. Its growing number of initiatives aim towards a cure for all blood disorders.

### **EUSA Pharma**

### https://eusapharma.com

EUSA Pharma is a dynamic, global biopharmaceutical company focused on oncology and rare disease, continuously striving to confront gaps in patient care. Our ambition drives us to provide medical treatments that support real change to improve lives wherever they are needed in the world. As a young, specialty biopharmaceutical company, EUSA Pharma is committed to delivering solutions that can have a meaningful effect on life, helping patients across a range of therapeutic areas.

### **Forma Therapeutics**

### https://www.formatherapeutics.com

Forma Therapeutics is a clinical-stage biopharmaceutical company focused on the research, development and commercialization of novel therapeutics to transform the lives of patients with rare hematologic diseases and cancers. Our work has generated a broad portfolio of programs with the potential to provide profound patient benefit.

### **Foundation Medicine**

### https://www.foundationmedicine.com

Foundation Medicine is a molecular information company dedicated to a transformation in cancer care in which treatment is informed by a deep understanding of the genomic changes that contribute to each patient's unique cancer. The company offers a full suite of comprehensive genomic profiling assays to identify the molecular alterations in a patient's cancer and match them with relevant targeted therapies, immunotherapies and clinical trials.

### **Gamida Cell Ltd.**

### https://www.gamida-cell.com

Gamida Cell is an advanced cell therapy company committed to cures for patients with blood cancers and serious blood diseases. We harness our cell-expansion platform to create therapies with the potential to redefine standards of care in areas of serious medical need. For additional information, please visit www. gamida-cell.com.

### Genentech

### http://www.gene.com

For more than 40 years, we've been following the science, seeking solutions to unmet medical needs. As a proud member of the Roche Group, we make medicines to treat patients with serious medical conditions. We are headquartered in South San Francisco, California.

### Genmab

### https://www.genmab.com

Founded in 1999 in Copenhagen, Denmark, Genmab is a dual-listed, international biotechnology company specializing in the creation and development of differentiated antibody therapeutics for the treatment of cancer. With a deep knowledge of the power of the human immune system and a proven track record for inventing and engineering novel therapeutic antibodies, we aim to tackle and overcome the challenges in oncology drug development. In our product discovery, we connect our proprietary antibody platform technologies with our robust target and disease biology knowledge to create novel and differentiated products. Our differentiated pipeline stands as proof of our ability to identify and address the areas of unmet treatment need and includes three Genmab-created antibodies, out-licensed and developed by partners, that were approved by the U.S. Food and Drug Administration with breakthrough designations—Daratumumab, Ofatumumab and Teprotumumab.

### **Global Blood Therapeutics**

### http://www.globalbloodtx.com

GBT is a biopharmaceutical company determined to discover, develop and deliver innovative treatments that provide hope to underserved patient communities. GBT is developing two therapies for the potential treatment of sickle cell disease, including its late-stage product candidate, voxelotor, as an oral, once-daily therapy. To learn more, please visit <code>www.gbt.com</code> and follow the company on Twitter <code>@GBT\_news</code>.

### **GSK**

### http://www.gsk.com

GSK is focused on maximizing patient survival through transformational medicines. GSK's pipeline is focused on immuno-oncology, cell therapy, cancer epigenetics and synthetic lethality. Our goal is to achieve a sustainable flow of new treatments based on a diversified portfolio of investigational medicines utilizing modalities such as small molecules, antibodies, antibody drug conjugates and cells, either alone or in combination.

### **Hemophilia Federation of America**

### https://www.hemophiliafed.org

HFA is a national non-profit organization serving the needs of the bleeding disorders community. Through programming and listening to their needs, we work to advance patients' rights and access to care, be a resource to patients and their families, and to provide educational opportunities to give patients the tools they need to advocate for themselves. We aim to improve the care and quality of life for those with bleeding disorders by removing barriers to diagnosis, treatment, and cure.

### **Incyte Corporation**

### http://www.incyte.com

Incyte is a Wilmington, Delaware-based, global biopharmaceutical company focused on finding solutions for serious unmet medical needs through the discovery, development and commercialization of proprietary therapeutics. For additional information on Incyte, please visit Incyte.com and follow @Incyte.

### **Innate Pharma**

### https://www.innate-pharma.com

Innate Pharma S.A. is a commercial stage, oncology-focused biotech company dedicated to improving treatment and clinical outcomes for patients through therapeutic antibodies that harness the immune system to fight cancer. Learn more about Innate Pharma at www. innate-pharma.com.

### **Intrinsic LifeSciences**

### http://www.intrinsiclifesciences.com

Intrinsic LifeSciences LLC provides superior, innovative & patent-protected research test kits and certified diagnostics & clinical research CLIA services for hepcidin and erythroferrone (ERFE), the key indicators of anemia, inflammation and pregnancy disorders. Our CAP accredited clinical lab, IntrinsicDx $^{\text{TM}}$ , offers the Intrinsic Hepcidin IDx $^{\text{TM}}$  Test service. We also provide RUO immunoassay testing for other related biomarkers. To learn more visit www.intrinsicdx.com, www.intrinsiclifesciences.com.

### **Invivoscribe**

### https://invivoscribe.com

Invivoscribe® is a global leader in hemato-oncology & CDx, providing innovative solutions for myeloid & lymphoid diseases for over 25 years. We provide ISO 13485 compliant development, cGMP manufacturing, regulatory expertise, commercialization & clinical trial services. Our ISO 15189 laboratories in the US, Europe & Asia offer standardized testing focused on actionable biomarkers & gene panels which support patient stratification, therapeutic decisions, trial enrollment & MRD monitoring.

### Janssen Biotech Inc.

### http://www.janssen.com

At Janssen, we're creating a future where disease is a thing of the past. We're the Pharmaceutical Companies of Johnson & Johnson, working tirelessly to make that future a reality for patients everywhere by fighting sickness with science, improving access with ingenuity, and healing hopelessness with heart. We focus on areas of medicine where we can make the biggest difference: Cardiovascular & Metabolism, Immunology, Infectious Diseases & Vaccines, Neuroscience, Oncology, and Pulmonary Hypertension.

### **Jazz Pharmaceuticals, Inc.**

### http://www.jazzpharma.com

Jazz Pharmaceuticals plc (Nasdaq: JAZZ), a global biopharmaceutical company, is dedicated to developing life-changing medicines for people with limited or no options, so they can live their lives more fully and redefine what is possible. As a leader in sleep medicine and with a growing hematology/oncology portfolio, Jazz has a diverse portfolio of products and product candidates in development, and is focused on transforming biopharmaceutical discoveries into novel medicines.

### **Kadmon Pharmaceuticals LLC**

### https://www.kadmon.com

Kadmon is a late clinical-stage clinical biopharmaceutical company discovering and developing transformative therapies for unmet medical needs. Kadmon's lead product candidate, belumosudil, is an orally administered selective inhibitor of ROCK 2 in development for the treatment of cGVHD and other immune diseases. In September of 2020, Kadmon submitted a New Drug Application to the U.S. Food and Drug Administration (FDA) with belumosudil for the treatment of patients with cGVHD.

### **Kite, A Gilead Company**

### http://www.kitepharma.com

Kite, a Gilead Company, is a biopharmaceutical company based in Santa Monica, California. Kite is engaged in the development of innovative cancer immunotherapies. The company is focused on chimeric antigen receptor and T cell receptor engineered cell therapies. For more information on Kite, please visit www.kite-pharma.com.

### Kyowa Kirin, Inc.

### http://www.kyowa-kirin.com

Kyowa Kirin is a global specialty pharmaceutical company with US Headquarters based in Bedminster, NJ. The company is focused primarily on developing and commercializing biopharmaceuticals that help improve the health and well-being of people through innovative and state-of-the-art technologies in various therapeutic areas including oncology, neurology, nephrology, and immunology. For additional information, you can visit us at www.kyowa-kirin.com.

### **Legend Biotech**

### https://www.legendbiotech.com

Legend Biotech is a global clinical-stage biopharmaceutical company engaged in the discovery and development of novel cell therapies for oncology and other indications. Our team of over 700 employees across the United States, China and Europe, along with our differentiated technology, global development, and manufacturing strategies and expertise, provide us with the strong potential to discover, develop, and manufacture novel cell therapies for patients in need.

### Lilly

### http://www.lillyoncologypipeline.com

For more than 50 years, Lilly has been dedicated to delivering life-changing medicines and support to people living with cancer and those who care for them. Lilly is determined to build on this heritage and continue making life better for all those affected by cancer around the world. To learn more about Lilly's commitment to people with cancer, please visit www.LillyOncology.com.

### **Mallinckrodt Pharmaceuticals**

### http://www.mallinckrodt.com

Mallinckrodt is focused on providing innovative treatment platforms that harness the power of each individual patient's immune system to fight disease. Our therapeutic platforms, including the latest generation THERAKOS® CELLEX® Photopheresis System, are the world's only approved, fully-integrated systems for administering extracorporeal photopheresis. For more information about the CELLEX® System, please visit www.therakos.com.

### **MD Anderson Cancer Center**

### http://www.mdanderson.org

MD Anderson is renowned for its cutting-edge research, exceptional patient care, innovative prevention programs and its commitment to training future generations. We've pioneered new treatment approaches for blood cancers and disorders, including CAR T cell therapy, immunotherapies and targeted therapies that are extending patients' lives without compromising their quality of life. MD Anderson is ranked No. 1 in cancer care by U.S. News & World Report.

### **Med Learning Group**

### https://www.medlearninggroup.com

This virtual reality room experience explores the management of patients with either previously untreated or relapsed/refractory acute myeloid leukemia (AML) or chronic lymphocytic leukemia (CLL) focusing on newer targeted therapies. This VR experience uses animations that are designed to aid clinicians in their daily practice regarding the mechanisms of action and genomic targets of these therapies to provide better care for patients with these hematologic conditions.

### Medidata, a Dassault Systèmes company

### https://www.medidata.com

Medidata, a Dassault Systèmes company, leads the digital transformation of life sciences. Acorn AI is built upon Medidata's core platform, including 20,000 trials and 6 million patients, and features the industry's largest clinical trial data repository. Acorn AI solutions include Synthetic Control Arm™, Intelligent Trials, Rave Imaging, and Rave Omics that optimize the design and accelerate the execution of clinical trials.

### **Miltenyi Biotec**

### http://www.miltenyibiotec.com

Miltenyi Biotec provides products that advance biomedical research and cellular therapy. Our innovative tools support research from basic research to translational research to clinical application. Our 30 years of expertise includes immunology, stem cell biology, neuroscience, and cancer. Miltenyi Biotec has 3,000 employees in 28 countries.

### **Mission Bio**

### http://www.missionbio.com

Mission Bio's Tapestri Platform is the industry's first and only single-cell multi-omics platform, enabling genotype and phenotype from the same cell and precise detection of heterogeneity underlying disease progression, treatment response, resistance, and relapse. Application areas include blood cancers, solid tumor profiling, and cell and gene therapy. Spun out of research at the University of California, San Francisco, Mission Bio is headquartered in South San Francisco, California.

### **Moffitt Cancer Center**

### http://www.Moffitt.org

Moffitt is dedicated to one lifesaving mission: to contribute to the prevention and cure of cancer. The Tampa-based facility is one of only 51 National Cancer Institute-designated Comprehensive Cancer Centers, a distinction that recognizes Moffitt's scientific excellence, multidisciplinary research, and robust training and education. Moffitt is the No. 11 cancer hospital and has been nationally ranked by U.S. News & World Report since 1999.

### **MorphoSys**

### http://www.morphosysevents.com

MorphoSys is a commercial-stage biopharmaceutical company dedicated to the discovery and development of exceptional, innovative therapies for patients suffering from serious diseases, with a focus is on cancer. Based on its leading expertise in antibody, protein and peptide technologies, MorphoSys, together with its partners, has developed and contributed to the development of more than 100 product candidates, of which 27 are currently in clinical development.

### **MPN Research Foundation**

### http://www.mpnresearchfoundation.org

The MPN Research Foundation (formerly MPD Foundation) funds innovative, accountable research that produces results for patients with polycythemia vera, essential thrombocythemia and myelofibrosis. We also produce educational symposia, a free informative brochure in English and Spanish, and a newsletter - MPN Update.

# National Institute of Diabetes Digestive and Kidney Diseases

# https://www.niddk.nih.gov/about-niddk/research-areas/hematologic-diseases

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) conducts and supports research on nonmalignant blood diseases. The multi-faceted hematology research program focuses on understanding basic cellular and molecular mechanisms that underlie the production and function of blood cells in health and disease. It supports researchers at all stages of a career path. NIDDK Program Staff will be available to connect with you and discuss your plans.

### **NeoGenomics Laboratories**

### http://www.neogenomics.com

NeoGenomics specializes in cancer genetics testing and information services. We provide one of the most comprehensive oncology-focused testing menus in the world for physicians to help them diagnose and treat cancer with >600 tests available in-house including extensive molecular profiling in myeloid disorders and leukemias, cfDNA/RNA assays for biopsy-free evaluation of hematologic cancers, and >20 HemeFISH™ panels. The company's Pharma Services Division serves pharmaceutical clients in clinical trials and drug development to meet program objectives and delivery from biomarker discovery through CDx validation and commercialization. Collaborations are welcome.

### NMDP/Be The Match

### https://www.BeTheMatchClinical.org

For patients diagnosed with leukemia, lymphoma, and other life-threatening diseases, a hematopoietic cell transplant (bone marrow or cord blood transplant) may be their best or only hope for a cure. The National Marrow Donor Program®/Be The Match® facilitates these transplants, conducts research, provides support and resources for patients, and education for physicians. Partnering with our global network, we will never give up in working to save more lives. For more information, please visit BeTheMatchClinical.org.

### **Novartis Pharmaceutical**

### http://www.novartisoncology.com

Novartis is reimagining medicine to improve and extend people's lives. As a leading global medicines company, we use innovative science and digital technologies to create transformative treatments in areas of great medical need. In our quest to find new medicines, we consistently rank among the world's top companies investing in research and development. Novartis products reach more than 750 million people globally and we are finding innovative ways to expand access to our latest treatments. About 109,000 people of more than 140 nationalities work at Novartis around the world.

### **Novo Nordisk Commercial Exhibit**

### http://www.novonordisk-us.com

At Novo Nordisk, with each new treatment we develop, and every new patient we meet, we are expanding our commitment to helping people live better lives. Together with patients and the people who care for them, we are working toward bigger goals and visions for our world. Find a Novo Nordisk representative in your area by using the "Find a Rep" or "Contact Us" pages at <a href="https://www.NovoSevenRTPro.com">https://www.Re-binynPro.com</a>, or <a href="https://www.Re-binynPro.com">https://www.Re-binynPro.com</a>, or <a href="https://www.EsperoctPro.com">https://www.Re-binynPro.com</a>, or <a href="https://www.EsperoctPro.com">https://www.EsperoctPro.com</a>.

### Novo Nordisk - Medical

### https://www.novonordisk-us.com

Novo Nordisk, a global healthcare company, has been committed to discovering and developing innovative medicines to help people living with diabetes lead longer, healthier lives for 95 years. This heritage has given us experience and capabilities that also enable us to help people defeat other serious diseases including obesity, hemophilia and growth disorders. We remain steadfast in our conviction that the formula for success is to stay focused, think long term and do business in a financially, socially and environmentally responsible way. With U.S. headquarters in New Jersey and production and research facilities in six states, Novo Nordisk employs nearly 6,000 people throughout the country. For more information, visit novonordisk.us

### **Oncopeptides**

### http://www.oncopeptides.com

Oncopeptides is a pharmaceutical company focused on the development of targeted therapies for difficult-to-treat hematological diseases. In 2000, the Company was formed by some of Sweden's leading scientists with ties to preeminent oncology research institutions. Oncopeptides' headquarters is in Stockholm, Sweden with a U.S. headquarters in Boston, Massachusetts. In addition to Boston, Oncopeptides has a footprint in Los Altos, California, another U.S. biotech hub.

### **Pfizer**

# http://www.pfizer.com/research/therapeutic\_areas/oncology

Pfizer Inc.: Breakthroughs that change patients' lives - At Pfizer, we apply science and our global resources to bring therapies to people that extend and significantly improve their lives. We strive to set the standard for quality, safety and value in the discovery, development and manufacture of health care products, including innovative medicines and vaccines. Every day, Pfizer colleagues work across developed and emerging markets to advance wellness, prevention, treatments and cures that challenge the most feared diseases of our time.

### **Pharmacosmos Therapeutics Inc.**

### https://www.pharmacosmos.com

Pharmacosmos Therapeutics Inc. is a U.S. specialty pharmaceutical company dedicated to providing patient care through the commercialization of Monoferric® (ferric derisomaltose) injection and through exceptional resources to support this treatment. We are the U.S. affiliate of the Denmark-based Pharmacosmos Group. Please visit us at www.monoferric.com to learn more.

### PharmaEssentia Corporation

### http://www.pharmaessentia.com

PharmaEssentia Corporation is a rapidly growing biopharmaceutical innovator leveraging deep expertise and proven scientific principles to deliver effective new biologics for challenging hematologic diseases. Our near-term focus is on therapies for myeloproliferative neoplasms (MPNs), with one product already approved in Europe and a diversifying pipeline, and we are working to reshape the treatment landscape through active collaboration with the global MPN community. Founded in 2003 by a team of Taiwanese-American executives and renowned scientists, today we are expanding our global presence with operations in the U.S., Japan, China, and Korea, along with a world-class biologics production facility in Taichung.

### **Platelet Disorder Support Association**

### http://www.pdsa.org

Patient-founded in 1998 to educate and empower immune thrombocytopenia patients, PDSA connects the ITP community with life-altering programs and support. Our comprehensive offering of services also enables clinicians to stay current on ITP protocols, cutting edge research, and therapies being developed worldwide. PDSA collaborates with other patient advocacy groups, researchers, and government agencies to drive public policy, develop new treatments and funds innovative patient-centered research.

### **Precision for Medicine**

### https://www.precisionformedicine.com

Precision is the first global precision medicine clinical research organization purpose-built to improve the clinical research and development process for new therapeutics. Our novel approach integrates clinical operations excellence, along with laboratory expertise, and advanced data sciences to inform every step. This maximizes our clients' insight into patient biology, delivers more predictable trial outcomes and accelerates clinical development.

### **Regeneron Pharmaceuticals**

### https://www.regeneron.com/pipeline

Regeneron is a leading biotechnology company and antibody research pioneer transforming science to medicine for patients with serious diseases. With a robust oncology pipeline of novel classes and combinations, Regeneron is committed to discovering, developing, and delivering innovative therapies to improve the lives of patients with cancer. Visit <a href="https://www.regeneron.com/pipeline">https://www.regeneron.com/pipeline</a> and check the "oncology" box to view our pipeline and tumor types we are exploring

### Sanofi Genzyme

### http://www.sanofigenzyme.com

Sanofi Genzyme, the specialty care global business unit of Sanofi, focuses on rare diseases, rare blood disorders, multiple sclerosis, oncology, and immunology. We help people with debilitating and complex conditions that are often difficult to diagnose and treat. Our approach is shaped by our experience developing highly specialized treatments and forging close relationships with physician and patient communities. We are dedicated to discovering and advancing new therapies, providing hope to patients and their families around the world.

### Seagen

### http://www.seagen.com

Seagen Inc. is a global biotechnology company that discovers, develops, and commercializes medicines for cancer. The company has a pipeline of therapies at various stages of preclinical testing, clinical testing, and development. We are leveraging our expertise in antibodies to build a portfolio of proprietary immuno-oncology agents in clinical trials for hematologic malignancies and solid tumors. For more information, visit www.seagen.com.

### Servier Pharmaceuticals

### https://www.servier.com/en

Servier Pharmaceuticals is a commercial-stage, privately held US company with a passion for innovation on behalf of our patients, their families & caregivers. Starting with oncology, we are committed to building a robust portfolio of treatments for therapeutic areas with unmet need. Launched by Servier Group, a unique global organization operating in more than 150 countries & governed by a non-profit foundation, Servier Pharmaceuticals has the resources and network of an established global pharmaceutical company, while operating with a nimble entrepreneurial spirit. With extensive expertise, global reach and commitment to clinical excellence, Servier Pharmaceuticals is dedicated to bringing the promise of tomorrow to the patients we serve.

### **Sierra Oncology**

### https://www.sierraoncology.com

Sierra Oncology is a late stage drug development company advancing momelotinib, a selective and orally-bioavailable JAK1, JAK2 & ACVR1 inhibitor with a differentiated mechanism of action that enables it to potentially address anemia, constitutional symptoms and enlarged spleen. Sierra is currently conducting MOMENTUM, a randomized double-blind Phase 3 clinical trial designed to enroll 180 myelofibrosis patients who are symptomatic, anemic and have been treated previously with a JAK inhibitor.

### Sobi, Inc.

### https://www.sobi-northamerica.com

Sobi is a specialized international biopharmaceutical company transforming the lives of people with rare diseases. Sobi is providing sustainable access to innovative therapies in the areas of haematology, immunology and specialty indications. Today, Sobi employs approximately 1,300 people across Europe, North America, the Middle East, Russia and North Africa. You can find more information about Sobi at sobi.com.

### **Society for Immunotherapy of Cancer**

### http://www.sitcancer.org

The Society for Immunotherapy of Cancer (SITC) is a 501(c)(3) not-for-profit medical professional society of influential research scientists, physician scientists, clinicians, patients, patient advocates, government representatives and industry leaders dedicated to improving cancer patient outcomes by advancing the science and application of cancer immunotherapy. Currently, SITC has more than 3,000 members who represent over 35 medical specialties in 48 countries.

### **Society of Hematologic Oncology**

### https://www.sohoonline.org

The purpose of the Society of Hematologic Oncology (SOHO) is to promote worldwide research, education, prevention, clinical studies and optimal patient care in all aspects of hematologic malignancies. SOHO is an international society designed specifically for clinicians, research scientists and related health care professionals. SOHO's mission is to expedite worldwide research and education through the exchange of scientific information.

### Spark Therapeutics, Inc.

### http://www.sparktx.com

At Spark Therapeutics, we leverage our unique technical and R&D expertise as we strive to bring gene therapies to patients. One of our areas of research is hemophilia A, an inherited bleeding disorder caused by mutations in the F8 gene that encodes coagulation factor VIII. Led by researchers and clinicians with long-standing commitment to the hemophilia community, we recognize the essential need to understand and gain important perspectives from patients, caregivers and leaders in the community.

### **STEMCELL Technologies**

# https://www.stemcell.com/virtual-conference-exhibition/ASH2020

STEMCELL Technologies Inc. is committed to providing specialized cell isolation products, standardized cell culture media and accessory tools for your cell biology research. Driven by science and a passion for quality, STEMCELL supports the advancement of scientific research around the world with our catalog of more than 2000 cell biology research tools. To learn more, visit www.STEMCELL.com.

### **Stemline Therapeutics**

### http://www.stemline.com

Stemline Therapeutics is a commercial-stage biopharmaceutical company focused on novel oncology therapeutics. ELZONRISÒ (tagraxofusp), a CD123-directed cytotoxin, is FDA-approved for treatment of adult and pediatric patients, two years and older, with blastic plasmacytoid dendritic cell neoplasm (BPDCN). ELZONRIS is in clinical trials for additional indications including chronic myelomonocytic leukemia (CMML), myelofibrosis (MF) and acute myeloid leukemia (AML). Pipeline candidates: felezonexor (SL-801; XPO1 inhibitor; Phase 1 in advanced solid tumors), SL-1001 (novel RET kinase inhibitor, IND-enabling studies ongoing), SL-701 (immunotherapeutic; Phase 2 in GBM completed), and SL-901 (novel kinase inhibitor; IND-enabling studies ongoing).

### **Sumitomo Dainippon Pharma Oncology**

### https://www.sdponcology.com

Sumitomo Dainippon Pharma Oncology, Inc., is a wholly owned subsidiary of Sumitomo Dainippon Pharma Co., Ltd. As a global oncology organization with teams in the U.S. and Japan, SDP Oncology is relentlessly committed to advancing purposeful science by transforming new discoveries into meaningful treatments for patients with cancer. For more information, visit www. sdponcology.com.

### **Syndax Pharmaceuticals**

### https://www.syndax.com

Syndax is determined to realize a future in which people with cancer live longer and better than ever before. Syndax's pipeline includes SNDX-5613, a highly selective inhibitor of the Menin–MLL binding interaction, in development for the treatment of patients with MLLr and NPM1 acute leukemias, and axatilimab, an investigational monoclonal antibody that blocks the colony stimulating factor 1 (CSF-1) receptor, in development for the treatment of patients with chronic Graft versus Host Disease.

### **Syneos Health**

### https://www.Syneoshealth.com

Syneos Health® (Nasdaq:SYNH) is the only fully integrated biopharmaceutical solutions organization. The Company, including a Contract Research Organization (CRO) and Contract Commercial Organization (CCO), is purpose-built to accelerate customer performance to address modern market realities. We bring together approximately 24,000 clinical and commercial minds with the ability to support customers in more than 110 countries. Together we share insights, use the latest technologies, and apply advanced business practices to speed our customers' delivery of important therapies to patients. To learn more about how we are shortening the distance from lab to life®, visit syneoshealth. com.

### Taiho Oncology, Inc. - Medical Affairs

### http://www.taihooncology.com

Taiho Oncology, Inc., a subsidiary of Taiho Pharmaceutical Co., Ltd. and Otsuka Holdings Co., Ltd., has established a world class clinical development organization that works urgently to develop innovative cancer treatments and has built a commercial business in the U.S. Taiho Oncology has an oral oncology pipeline consisting of selectively targeted agents. Advanced technology, dedicated researchers, and state of the art facilities are helping us to define the way the world treats cancer. It's our work; it's our passion; it's our legacy.

### Takeda

### http://www.takedaoncology.com

We endeavor to deliver novel medicines to patients with cancer worldwide through our commitment to science, breakthrough innovation and passion for improving the lives of patients. Our combined legacy in oncology includes a broad range of paradigm-changing therapies for hematologic cancers and solid tumors.

### **Takeda Hematology**

### https://www.takeda.com

Takeda Pharmaceutical Company Limited (TSE:4502/ NYSE:TAK) is a global, values-based, R&D-driven biopharmaceutical leader headquartered in Japan, committed to bringing Better Health and a Brighter Future to patients by translating science into highly-innovative medicines. Takeda focuses its R&D efforts on four therapeutic areas: Oncology, Gastroenterology (GI), Rare Diseases and Neuroscience. We also make targeted R&D investments in Plasma-Derived Therapies and Vaccines. We are focusing on developing highly innovative medicines that contribute to making a difference in people's lives by advancing the frontier of new treatment options and leveraging our enhanced collaborative R&D engine and capabilities to create a robust, modality-diverse pipeline. Our employees are committed to improving quality of life for patients and to working with our partners in health care in approximately 80 countries and regions. For more information, visit https://www.takeda.com.

### TG Therapeutics, Inc.

### http://www.tgtherapeutics.com

TG Therapeutics is focused on developing & delivering medicines for patients with B-cell malignancies. TG has 5 drug candidates in development with ublituximab & umbralisib in pivotal trials for CLL, NHL and MS. Ublituximab is a novel glycoengineered anti-CD20 mAb & umbralisib is an oral, QD, PI3K-delta inhibitor with unique inhibition of CK1-epsilon. In Phase 1 development TG also has an anti-PD-L1 mAb (TG-1501), an oral BTK inhibitor (TG-1701) & an anti-CD47/CD19 bispecific antibody (TG-1801).

### The Leukemia & Lymphoma Society

### http://www.lls.org

The Leukemia & Lymphoma Society® (www.lls.org) is the global leader in the fight against blood cancer. Since 1949, LLS has invested nearly \$1.3 billion in blood cancer research to find cures for leukemia, lymphoma, myeloma and other blood cancers. LLS is the leading source of free blood cancer information and support, and is the voice for all blood cancer patients seeking access to quality, affordable, coordinated care. For help, contact the Information Resource Center at (800) 955-4572.

### The MDS Alliance

### http://www.mds-alliance.org

The MDS Alliance is an international umbrella organization that aims to ensure patients with MDS, regardless of where they live, have access to the best multi-professional care. We aim to provide member organizations, patients and healthcare teams with the resources and the latest information about MDS, including current treatment options, large international projects, and events of interest to the whole community.

### The MDS Foundation, Inc.

### https://www.mds-foundation.org

About the MDS Foundation -The MDS Foundation is a global non-profit advocacy organization that for over 25 years has supported patients and their families as well as healthcare providers in the fields of MDS and its related diseases. Vision -Every MDS patient will benefit from our initiatives and research as early as possible. Mission -MDS Foundation supports and educates patients, their communities, and healthcare providers, and contributes to innovative research in the fields of MDS and its related continuum of diseases to better diagnose, control and ultimately cure these diseases.

### **Thermo Fisher Scientific**

### http://www.thermofisher.com

Thermo Fisher Scientific is the world leader in serving science. Our mission is to enable our customers to make the world healthier, cleaner and safer. Through our Thermo Scientific, Applied Biosystems, Invitrogen, and Ion Torrent brands, we help customers accelerate innovation and enhance productivity.

### **Turkish Society of Hematology**

### http://www.thd.org.tr

The Turkish Society of Hematology (TSH) was founded in 1967. The Society, as the official representative of scientists of hematology in Turkey, boasts a membership of 806 and is one of the most active and oldest societies in the country. TSH has a peer-reviewed international journal "Turkish Journal of Hematology".

### **UCB**

### http://www.ucb.com

UCB is a global biopharmaceutical company focused on the discovery and development of innovative medicines and solutions to transform the lives of people living with severe diseases of the immune system or of the central nervous system. We are Inspired by Patients. Driven by Science. Follow us on Twitter: @ UCB news.

### uniQure

### http://www.uniqure.com

uniQure is delivering on the promise of gene therapy—single treatments with potentially curative results. We are leveraging our modular and validated technology platform to rapidly advance a pipeline of proprietary and partnered adeno-associated virus (AAV)-based gene therapies to treat patients with severe genetic diseases. We are currently conducting a pivotal phase 3 trial in our lead indication, hemophilia B, and have established preclinical proof-of-concept in Huntington's disease.

### **X4 Pharmaceuticals**

### http://www.x4pharma.com

X4 is a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of novel therapeutics for the treatment of rare diseases. X4's pipeline is comprised of first-in-class, oral, small molecule antagonists of chemokine receptor CXCR4, which have the potential to treat a broad range of rare diseases, including primary immunodeficiencies, neutropenia, and certain cancers.

Notes:		

An OPTIMIZED APPROACH to SICKLE CELL DISEASE

Care in a New Era of Treatment



7:00 AM - 9:15 AM PT 10:00 AM - 12:15 PM ET

Virtual Satellite Symposium With LIVE Question & Answer

### **AGENDA**

Sickle Cell Disease in a New Decade: Progress and Persisting Challenges

A Deep Dive Into Available and Emerging Strategies

**Putting It All Together - Clinical Cases** 

What Will SCD Care Look Like in 2030?

### **LIVE Question and Answer**

Vindico Medical Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

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**Questions?**Questions@VindicoCME.com

REGISTER TODAY! https://tinyurl.com/y4e4m4vp



Advances in Therapy for Inherited Non-Malignant Blood Disorders:

Focus on Sickle Cell Disease and Hemophilia

# Friday, December 4, 2020

11:00 AM — 12:30 PM PT | 2:00 PM — 3:30 PM ET Virtual Satellite Symposium With LIVE Question & Answer

# **Agenda**

Unmet Needs for Patients With Non-Malignant Blood Disorders

Chris Guelcher, Hemostasis RN-BC, MS, PPCNP-BC

### **Panel Discussion**

Moderated by Steven W. Pipe, MD

Disease Modification in SCD – Available and Emerging Approaches

Biree Andemariam, MD

### **Panel Discussion**

Moderated by Steven W. Pipe, MD

# Advances in the Management in Patients With Hemophilia

Mark Reding, MD

### **Panel Discussion**

Moderated by Steven W. Pipe, MD

### **LIVE Question & Answer**

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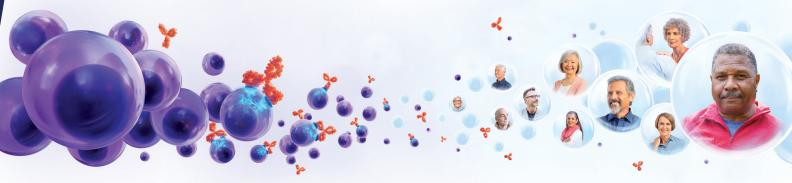
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IN THE TREATMENT OF **RELAPSED REFRACTORY MULTIPLE MYELOMA**IN COMBINATION WITH **POMALIDOMIDE AND DEXAMETHASONE (Pd)** 

# **ACHIEVE GREATER OUTCOMES**

# FOR YOUR PATIENTS

SARCLISA is an anti-CD38 therapy proven to deliver **superior PFS** (**median PFS of 11.53 months with SARCLISA + Pd vs 6.47 months with Pd alone**, HR=0.596, 95% CI: 0.44, 0.81, *P*=0.0010). SARCLISA also demonstrated a **significant increase in ORR** (60.4% with SARCLISA + Pd [95% CI: 52.2%, 68.2%] vs 35.3% with Pd alone [95% CI: 27.8%, 43.4%], *P*<0.0001)<sup>1\*</sup>



# NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) Preferred Category 1 recommendation for isatuximab-irfc (SARCLISA)

Isatuximab-irfc (SARCLISA), in combination with pomalidomide and dexamethasone, is a Preferred Category 1 option for previously treated multiple myeloma by the National Comprehensive Cancer Network® (NCCN®).<sup>2</sup>

NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way.

\*ORR included sCR, CR, VGPR, and PR. sCR, CR, VGPR, and PR were evaluated by an IRC using the IMWG response criteria.<sup>1</sup>

CR=complete response; IMWG=International Myeloma Working Group; IRC=independent response committee; mAb=monoclonal antibody; NCCN=National Comprehensive Cancer Network; ORR=overall response rate; PFS=progression-free survival; PR=partial response; sCR=stringent complete response; VGPR=very good partial response.

### Indication

SARCLISA (isatuximab-irfc) is indicated, in combination with pomalidomide and dexamethasone, for the treatment of adult patients with multiple myeloma who have received at least two prior therapies including lenalidomide and a proteasome inhibitor.

### Important Safety Information

### **CONTRAINDICATIONS**

SARCLISA is contraindicated in patients with severe hypersensitivity to isatuximab-irfc or to any of its excipients.

### WARNINGS AND PRECAUTIONS

### Infusion-Related Reactions

Infusion-related reactions (IRRs) have been observed in 39% of patients treated with SARCLISA. All IRRs started during the first SARCLISA infusion and resolved on the same day in 98% of the cases. The most common symptoms of an IRR included dyspnea, cough, chills, and nausea. The most common severe signs and symptoms included hypertension and dyspnea.

Please see Important Safety Information throughout, and accompanying brief summary of full Prescribing Information.



# Choose SARCLISA + Pd to Offer Improved Outcomes to More Patients vs Pd Alone

Studied in the phase 3 ICARIA-MM trial, which included patients with poor prognostic factors<sup>1</sup>

Based on the ICARIA-MM trial, SARCLISA + Pd is a treatment choice for patients with relapsed refractory multiple myeloma



Who have received at least **2 prior therapies**, including lenalidomide and a Pl



Who may have **renal impairment** (creatinine clearance <60 mL/min/1.73 m<sup>2</sup>), high cytogenetic risk, or a history of COPD or asthma



Who may have poor performance status or are ≥75 years of age



Who are **refractory to lenalidomide**, a PI, or both

STUDY DESIGN: ICARIA-MM (NCT02990338), a multicenter, open-label, randomized, phase 3 study, evaluated the efficacy and safety of SARCLISA in 307 patients with relapsed refractory multiple myeloma who had received at least 2 prior therapies, including lenalidomide and a PI. Patients received either SARCLISA 10 mg/kg administered as an IV infusion in combination with Pd (n=154) or Pd alone (n=153), administered in 28-day cycles until disease progression or unacceptable toxicity. SARCLISA was given weekly in the first cycle and every 2 weeks thereafter. Pomalidomide 4 mg was taken orally once daily from day 1 to day 21 of each 28-day cycle. Low-dose dexamethasone (orally or IV) 40 mg (20 mg for patients ≥75 years of age) was given on days 1, 8, 15, and 22 for each 28-day cycle. PFS was the primary endpoint; ORR and OS were key secondary endpoints. PFS results were assessed by an IRC, based on central laboratory data for M-protein, and central radiologic imaging review using the IMWG criteria. Median follow-up was 11.6 months.¹

PATIENT CHARACTERISTICS: The median patient age was 67 years (range, 36 to 86), and 20% of patients were ≥75 years of age. Ten percent of patients entered the study with a history of COPD or asthma. The proportion of patients with renal impairment (creatinine clearance <60 mL/min/1.73 m²) was 34%. The ISS stage at study entry was I in 37%, II in 36%, and III in 25% of patients. Overall, 20% of patients had high-risk chromosomal abnormalities at study entry: del(17p), t(4;14), and t(14;16) were present in 12%, 8%, and 2% of patients, respectively. The median number of prior lines of therapy was 3 (range, 2 to 11). All patients received a prior PI, all patients received prior lenalidomide, and 56% of patients received prior stem cell transplantation; the majority of patients (93%) were refractory to lenalidomide, 76% to a PI, and 73% to both an immunomodulator and a PI.¹

COPD=chronic obstructive pulmonary disease; ISS=International Staging System; IV=intravenous; OS=overall survival; PI=proteasome inhibitor.

### Important Safety Information (cont'd)

### Infusion-Related Reactions (cont'd)

To decrease the risk and severity of IRRs, premedicate patients prior to SARCLISA infusion with acetaminophen, H<sub>2</sub> antagonists, diphenhydramine or equivalent, and dexamethasone. Monitor vital signs frequently during the entire SARCLISA infusion. For patients with grade 1 or 2 reactions, interrupt SARCLISA infusion and provide appropriate medical support. If symptoms improve, restart SARCLISA infusion at half of the initial rate, with supportive care as needed, and closely monitor patients. If symptoms do not recur after 30 minutes, the infusion rate may be increased to the initial rate, and then increased incrementally. In case symptoms do not improve or recur after interruption, permanently discontinue SARCLISA and institute appropriate management. Permanently discontinue SARCLISA if a grade 3 or higher IRR occurs and institute appropriate emergency medical management.

# SARCLISA + Pd Extended Median PFS to ~1 Year

Superior PFS with SARCLISA + Pd vs Pd alone<sup>1</sup>



The median duration of treatment was 41 weeks with SARCLISA + Pd vs 24 weeks with Pd.1

At a median follow-up time of 11.6 months, 43 patients (27.9%) receiving SARCLISA + Pd and 56 patients (36.6%) receiving Pd had died. Median OS was not reached for either treatment group at interim analysis. The OS results at interim analysis did not reach statistical significance.<sup>1</sup>

# SARCLISA + Pd showed a significant increase in ORR<sup>1\*</sup>

SARCLISA + Pd (n=	154)	<b>Pd</b> (n=153)
<b>60.4</b> % ORR	P<0.0001	<b>35.3</b> % ORR
<b>31.8</b> <sup>%</sup> ≥VGPR	~4× increase	<b>8.5</b> % ≥VGPR
<b>35</b> days	Median time to first response among responders	58 days

<sup>\*</sup>ORR included sCR, CR, VGPR, and PR. ORR: SARCLISA + Pd (95% CI: 52.2%, 68.2%), Pd (95% CI: 27.8%, 43.4%).

### Important Safety Information (cont'd)

### **Neutropenia**

SARCLISA may cause neutropenia. Neutropenia (reported as laboratory abnormality) occurred in 96% of patients and grade 3-4 neutropenia occurred in 85% of patients treated with SARCLISA, pomalidomide, and dexamethasone (Isa-Pd). Febrile neutropenia occurred in 12% of patients and neutropenic infections, defined as infection with concurrent grade ≥3 neutropenia, occurred in 25% of patients treated with Isa-Pd. The most frequent neutropenic infections included those of upper SARCLISA

(isatuximab-irfc)

Injection for IV use 500 mg/25 mL,100 mg/5 mL

Please see Important Safety Information throughout, and accompanying brief summary of full Prescribing Information.

respiratory tract (10%), lower respiratory tract (9%), and urinary tract (3%).

# Important Safety Information (cont'd)

### Neutropenia (cont'd)

Monitor complete blood cell counts periodically during treatment. Consider the use of antibiotics and antiviral prophylaxis during treatment. Monitor patients with neutropenia for signs of infection. In case of grade 4 neutropenia, delay SARCLISA dose until neutrophil count recovery to at least 1.0 x 10°/L, and provide supportive care with growth factors, according to institutional guidelines. No dose reductions of SARCLISA are recommended.

### Second Primary Malianancies

Second primary malignancies were reported in 3.9% of patients in the SARCLISA, pomalidomide, and dexamethasone (Isa-Pd) arm and in 0.7% of patients in the pomalidomide and dexamethasone (Pd) arm, and consisted of skin squamous cell carcinoma (2.6% of patients in the Isa-Pd arm and in 0.7% of patients in the Pd arm), breast angiosarcoma (0.7% of patients in the Isa-Pd arm), and myelodysplastic syndrome (0.7% of patients in the Isa-Pd arm). With the exception of the patient with myelodysplastic syndrome, patients were able to continue SARCLISA treatment. Monitor patients for the development of second primary malignancies.

### **Laboratory Test Interference**

### Interference with Serological Testing (Indirect Antiglobulin Test)

SARCLISA binds to CD38 on red blood cells (RBCs) and may result in a false positive indirect antiglobulin test (indirect Coombs test). In ICARIA-multiple myeloma (MM), the indirect antiglobulin test was positive during SARCLISA treatment in 67.7% of the tested patients. In patients with a positive indirect antiglobulin test, blood transfusions were administered without evidence of hemolysis. ABO/RhD typing was not affected by SARCLISA treatment. Before the first SARCLISA infusion, conduct blood type and screen tests on SARCLISA-treated patients. Consider phenotyping prior to starting SARCLISA treatment. If treatment with SARCLISA has already started, inform the blood bank that the patient is receiving SARCLISA and SARCLISA interference with blood compatibility testing can be resolved using dithiothreitol-treated RBCs. If an emergency transfusion is required, non-cross-matched ABO/RhD-compatible RBCs can be given as per local blood bank practices.

### Interference with Serum Protein Electrophoresis and Immunofixation Tests

SARCLISA is an IgG kappa monoclonal antibody that can be incidentally detected on both serum protein electrophoresis and immunofixation assays used for the clinical monitoring of endogenous M-protein. This interference can impact the accuracy of the determination of complete response in some patients with IgG kappa myeloma protein.

### **Embryo-Fetal Toxicity**

Based on the mechanism of action, SARCLISA can cause fetal harm when administered to a pregnant woman. SARCLISA may cause fetal immune cell depletion and decreased bone density. Advise pregnant women of the potential risk to a fetus. Advise females with reproductive potential to use an effective method of contraception during treatment with SARCLISA and for at least 5 months after the last dose. The combination of SARCLISA with pomalidomide is contraindicated in pregnant women because pomalidomide may cause birth defects and death of the unborn child. Refer to the pomalidomide prescribing information on use during pregnancy.

### **ADVERSE REACTIONS**

The most common adverse reactions (≥20%) were neutropenia (laboratory abnormality, 96% Isa-Pd vs 92% Pd), infusion-related reactions (38% Isa-Pd vs 0% Pd), pneumonia (31% Isa-Pd vs 23% Pd), upper respiratory tract infection (57% Isa-Pd vs 42% Pd), and diarrhea (26% with Isa-Pd vs 19% Pd). Serious adverse reactions occurred in 62% of patients receiving SARCLISA. Serious adverse reactions in >5% of patients who received Isa-Pd included pneumonia (26%), upper respiratory tract infections (7%), and febrile neutropenia (7%). Fatal adverse reactions occurred in 11% of patients (those that occurred in more than 1% of patients were pneumonia and other infections [3%]).

### **USE IN SPECIAL POPULATIONS**

Because of the potential for serious adverse reactions in the breastfed child from isatuximab-irfc administered in combination with Pd, advise lactating women not to breastfeed during treatment with SARCLISA.

### Please see accompanying brief summary of full Prescribing Information.

**References: 1.** SARCLISA [prescribing information]. Bridgewater, NJ: sanofi-aventis U.S. LLC. **2.** Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Multiple Myeloma V.2.2021. © National Comprehensive Cancer Network, Inc. 2020. All rights reserved. Accessed September 9, 2020. To view the most recent and complete version of the guideline, go online to NCCN.org.





### **SARCLISA®**

Rx Only

### (isatuximab-irfc) injection, for intravenous use Brief Summary of Prescribing Information 1 INDICATIONS AND USAGE

SARCLISA is indicated, in combination with pomalidomide and dexamethasone, for the treatment of adult patients with multiple myeloma who have received at least two prior therapies including lenalidomide and a proteasome inhibitor.

### 2 DOSAGE AND ADMINISTRATION

### 2.1 Recommended Dosage

- Administer pre-infusion medications [see Dosage and Administration (2.2)].
- SARCLISA should be administered by a healthcare professional, with immediate access to emergency equipment and appropriate medical support to manage infusion-related reactions if they occur [see Warnings and Precautions (5.1)].

The recommended dose of SARCLISA is 10 mg/kg actual body weight administered as an intravenous infusion in combination with pomalidomide and dexamethasone, according to the schedule in Table 1 [see Clinical Studies (14)] in the full prescribing information].

**Table 1: SARCLISA Dosing Schedule in Combination** with Pomalidomide and Dexamethasone

Cycle	Dosing schedule		
Cycle 1	Days 1, 8, 15, and 22 (weekly)		
Cycle 2 and beyond	Days 1, 15 (every 2 weeks)		

Each treatment cycle consists of a 28-day period. Treatment is repeated until disease progression or unacceptable toxicity. SARCLISA is used in combination with pomalidomide and dexamethasone.

Missed SARCLISA Doses
If a planned dose of SARCLISA is missed, administer the dose as soon as possible and adjust the treatment schedule accordingly, maintaining the treatment interval.

### 2.2 Recommended Premedications

Administer the following premedications prior to SARCLISA infusion to reduce the risk and severity of infusion-related reactions [see Warnings and Precautions (5.1)]:

- · Dexamethasone 40 mg orally or intravenously (or 20 mg orally or intravenously for patients ≥75 years of age)
- Acetaminophen 650 mg to 1000 mg orally (or equivalent).
- H2 antagonists.
- · Diphenhydramine 25 mg to 50 mg orally or intravenously (or equivalent). The intravenous route is preferred for at least the first 4 infusions.

The above recommended dose of dexamethasone (orally or intravenously) corresponds to the total dose to be administered only once before infusion as part of the premedication and of the backbone treatment, before SARCLISA and pomalidomide administration. Administer the recommended premedication agents 15 to 60 minutes prior to starting a SARCLISA infusion.

### 2.3 Dose Modifications

No dose reduction of SARCLISA is recommended. Dose delay may be required to allow recovery of blood counts in the event of hematological toxicity [see Warnings and Precautions (5.2, 5.4)]. For information concerning drugs given in combination with SARCLISA, see manufacturer's prescribing information. For other medicinal products that are administered with SARCLISA, refer to the respective current prescribing information.

### 2.4 Preparation

Prepare the solution for infusion using aseptic technique as follows: Calculate the dose (mg) of required SARCLISA based on actual patient weight (measured prior to each cycle to have the administered dose adjusted accordingly) [see Dosage and Administration (2.1)]. More than one SARCLISA vial may be necessary to obtain the required dose for the patient.

- · Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit.
- · Remove the volume of diluent from the 250 mL Sodium Chloride Injection, USP, or 5% Dextrose Injection, USP diluent bag that is equal to the required volume of SARCLISA injection.
- Withdraw the necessary volume of SARCLISA injection and dilute by adding to the infusion bag of 0.9% Sodium Chloride Injection, USP or 5% Dextrose Injection, USP to achieve the appropriate SARCLISA concentration for
- The infusion bag must be made of polyolefins (PO), polyethylene (PE), polypropylene (PP), polyvinyl chloride (PVC) with di-(2-ethylhexyl) phthalate (DEHP) or ethyl vinyl àcetate (EVA).
- · Gently homogenize the diluted solution by inverting the bag. Do not shake.

### 2.5 Administration

Administer the infusion solution by intravenous infusion using an intravenous tubing infusion set (in PE, PVC with or without DEHP, polybutadiene [PBD], or polyurethane [PU])

- with a 0.22 micron in-line filter (polyethersulfone [PES], polysulfone, or nylon).
- The infusion solution should be administered for a period of time that will depend on the infusion rate (see Table 2). Use prepared SARCLISA infusion solution within 48 hours when stored refrigerated at 2°C–8°C, followed by 8 hours (including the infusion time) at room temperature
- Do not administer SARCLISA infusion solution concomitantly in the same intravenous line with other agents.

Following dilution, administer the SARCLISA infusion solution intravenously at the infusion rates presented in Table 2. Incremental escalation of the infusion rate should be considered only in the absence of infusion-related reactions [see Warnings and Precautions (5.1) and Adverse Reactions (6.1)].

**Table 2: Infusion Rates of SARCLISA Administration** 

	Dilution Volume	Initial Rate	Absence of Infusion- Related Reaction	Rate Increment	Maximum Rate
First infusion	250 mL	25 mL/ hour	For 60 minutes	25 mL/hour every 30 minutes	150 mL/ hour
Second infusion	250 mL	50 mL/ hour	For 30 minutes	50 mL/ hour for 30 minutes then increase by 100 mL/ hour every 30 minutes	200 mL/ hour
Subsequent infusions	250 mL	200 mL/ hour	-	-	200 mL/ hour

### 4 CONTRAINDICATIONS

SARCLISA is contraindicated in patients with severe hypersensitivity to isatuximab-irfc or to any of its excipients [see Warnings and Precautions (5.1)].

### **5 WARNINGS AND PRECAUTIONS**

### 5.1 Infusion-Related Reactions

Infusion-related reactions have been observed in 39% of patients treated with SARCLISA [see Adverse Reactions (6.1)]. All infusion-related reactions started during the first SARCLISA infusion and resolved on the same day in 98% of the cases. The most common symptoms of an infusionrelated reaction included dyspnea, cough, chills, and nausea. The most common severe signs and symptoms included hypertension and dyspnea *(see Adverse Reactions (6.1))*. To decrease the risk and severity of infusion-related reactions, premedicate patients prior to SARCLISA infusion with acetaminophen, H2 antagonists, diphenhydramine, or equivalent; dexamethasone [see Dosage and Administration (2.2)]. Monitor vital signs frequently during the entire SARCLISA infusion. For patients with grade 1 or 2 reactions, sanctisa interior Sanctisa infusion and provide appropriate medical support. If symptoms improve, restart SaRCLISA infusion at half of the initial infusion rate, with supportive care as needed, and closely monitor patients. If symptoms do not recur after 30 minutes, the infusion rate may be increased to the initial rate, and then increased incrementally, as shown in Table 2 [see Dosage and Administration (2.5)]. In case symptoms do not improve or recur after interruption, permanently discontinue SARCLISA and institute appropriate management. Permanently discontinue SARCLISA therapy if a grade 3 or higher infusion-related reaction occurs and institute appropriate medical management.

### 5.2 Neutronenia

SARCLISA may cause neutropenia. Neutropenia (reported as laboratory abnormality) occurred in 96% of patients and grade 3-4 neutropenia occurred in 85% of patients treated with SARCLISA, pomalidomide, and dexamethasone (Isa-Pd). Febrile neutropenia occurred in 12% of patients and neutropenic infections, defined as infection with concurrent grade ≥3 neutropenia, occurred in 25% of patients treated with Isa-Pd. The most frequent neutropenic infections included those of upper respiratory tract (10%), lower respiratory tract (9%), and urinary tract (3%) [see Adverse Reactions (6.1)1.

Monitor complete blood cell counts periodically during treatment. Consider the use of antibiotics and antiviral prophylaxis during treatment. Monitor patients with neutropenia for signs of infection. In case of grade 4 neutropenia delay SARCLISA dose until neutrophil count recovery to at least  $1.0 \times 10^9/L$ , and provide supportive care with growth factors, according to institutional guidelines. No dose reductions of SARCLISA are recommended.

### 5.3 Second Primary Malignancies

Second primary malignancies were reported in 3.9% of patients in the SARCLISA, pomalidomide and dexamethasone (Isa-Pd) arm and in 0.7% of patients in the pomalidomide and dexamethasone (Pd) arm, and consisted of skin squamous cell carcinoma (2.6% of patients in the Isa-Pd arm and in 7.7%). 0.7% of patients in the Pd arm), breast angiosarcoma (0.7% of patients in the Isa-Pd arm) and myelodysplastic syndrome

(0.7% of patients in the Isa-Pd arm). With the exception of the patient with myelodysplastic syndrome, patients were able to continue SARCLISA treatment. Monitor patients for the development of second primary malignancies, as per International Myeloma Working Group (IMWG) guidelines.

### 5.4 Laboratory Test Interference

Interference with Serological Testing (Indirect Antiglobulin

<u>Test)</u> SARCLISA binds to CD38 on red blood cells (RBCs) and may result in a false positive indirect antiglobulin test (indirect Coombs test). In ICARIA-multiple myeloma (MM) the indirect antiglobulin test was positive during SARCLISA treatment in 67.7% of the tested patients. In patients with a positive indirect antiglobulin test, blood translusions were administered without evidence of hemolysis. ABO/RhD typing was not affected by SARCLISA treatment. Before the first SARCLISA infusion, conduct blood type and screen tests on SARCLISA-treated patients. Consider phenotyping prior to starting SARCLISA treatment. If treatment with SARCLISA has already started, inform the blood bank that the patient is receiving SARCLISA and SARCLISA interference with blood compatibility testing can be resolved using dithiothreitoltreated RBCs. If an emergency transfusion is required, non-cross-matched ABO/RhD-compatible RBCs can be given as per local blood bank practices [see Drug Interactions (7.1)]. Interference with Serum Protein Electrophoresis and Immunofixation Tests
SARCLISA is an IgG kappa monoclonal antibody that can be

incidentally detected on both serum protein electrophoresis and immunofixation assays used for the clinical monitoring of endogenous M-protein. This interference can impact the accuracy of the determination of complete response in some patients with IgG kappa myeloma protein [see Drug Interactions (7.1)].

Based on the mechanism of action, SARCLISA can cause fetal harm when administered to a pregnant woman. SARCLISA may cause fetal immune cell depletion and decreased bone density. Advise pregnant women of the potential risk to a fetus. Advise females with reproductive potential to use retus: Advise lentales with reproductive potential to use an effective method of contraception during freatment with SARCLISA and for at least 5 months after the last dose *[see Use in Specific Populations (8.1, 8.3)]*. The combination of SARCLISA with pomalidomide is contraindicated in pregnant vegoral persure promptidentide may cause by the defeate women because pomalidomide may cause birth defects and death of the unborn child. Refer to the pomalidomide prescribing information on use during pregnancy.

### **6 ADVERSE REACTIONS**

The following clinically significant adverse reactions from SARCLISA are also described in other sections of the labeling:

- Infusion-Related Reactions [see Warnings and Precautions]
- Neutropenia [see Warnings and Precautions (5.2)]
- Second Primary Malignancies [see Warnings and Precautions (5,3)

### 6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

<u>Multiple Myeloma</u>
The safety of SARCLISA was evaluated in ICARIA-MM, a randomized, open-label clinical trial in patients with a reviously treated multiple myeloma. Patients were eligible for inclusion if they had ECOG status of 0–2, platelets ≥75,000 cells/mm³, absolute neutrophil count ≥1 × 10³/L, creatinine clearance ≥30 mL/min (MDRD formula), and AST and/ or ALT ≤3 × ULN. Patients received SARCLISA 10 mg/kg intravenously, weekly in the first cycle and every two weeks Intravenously, weekly in the first cycle and every two weeks thereafter, in combination with pomalidomide and low dose dexamethasone (Isa-Pd) (n=152) or pomalidomide and low dose dexamethasone (Pd) (n=149) *Isee Clinical Studies (14) in the full prescribing information)*. Among patients receiving Isa-Pd, 66% were exposed to SARCLISA for 6 months or longer and 24% were exposed for greater than 12 months or longer. The median age of patients who received Isa-Pd was 68 years (range 36–83); 58% male, 76% white, and 14% Asian. Serious adverse geactings occurred in 62% of natients Serious adverse reactions occurred in 62% of patients receiving Isa-Pd. Serious adverse reactions in >5% of patients who received Isa-Pd included pneumonia (26%), upper respiratory tract infections (7%), and febrile neutropenia (7%). Fatal adverse reactions occurred in 11% of patients (those that occurred in more than 1% of patients were pneumonia and other infections [3%]). Permanent discontinuation due to an adverse reaction

(grades 1-4) occurred in 7% of patients who received Isa-Pd. The most frequent adverse reactions requiring permanent discontinuation in patients who received Isa-Pd were infections (2.6%). In addition, SARCLISA alone was discontinued in 3% of patients due to infusion-related reactions.

Dosage interruptions due to an adverse reaction occurred in 31% of patients who received SARCLISA. The most frequent adverse reaction requiring dosage interruption was infusionrelated reaction (28%).

(isatuximab-irfc) injection, for intravenous use

neutropenia, infusion-related reactions, pneumonia, upper respiratory tract infection, and diarrhea.

The most common adverse reactions (≥20%) were

Table 3 summarizes the adverse reactions in ICARIA-MM.

Table 3: Adverse Reactions (≥10%) in Patients Receiving SARCLISA, Pomalidomide, and Dexamethasone with a Difference Between Arms of ≥5% Compared to Control Arm in ICARIA-MM Trial

Adverse Reactions	SARCLISA + Pomalidomide + Dexamethasone (Isa-Pd) (N=152)		Pomalidomide + Dexamethasone (Pd) (N=149)				
	All grades (%)	Grade 3 (%)	Grade 4 (%)	All grades (%)	Grade 3 (%)	Grade 4 (%)	
Infusion-related reaction	38	1.3	1.3	0	0	0	
Infections	Infections						
Pneumonia*	31	22	3.3	23	16	2.7	
Upper respiratory tract infection <sup>†</sup>	57	9	0	42	3.4	0	
Blood and lyn	phatic sy	stem dis	orders				
Febrile neutropenia	12	11	1.3	2	1.3	0.7	
Respiratory, thoracic and mediastinal disorders							
Dyspnea <sup>‡</sup>	17	5.0	0	12	1.3	0	
Gastrointestinal disorders							
Diarrhea	26	2	-	19	0.7	-	
Nausea	15	0	_	9	0	-	
Vomiting	12	1.3	-	3.4	0	-	

CTCAE version 4.03

\*Pneumonia includes atypical pneumonia, bronchopulmonary aspergillosis, pneumonia, pneumonia haemophilus, pneumonia influenzal, pneumonia pneumococcal, pneumonia streptococcal, pneumonia viral, candida pneumonia, pneumonia bacterial, haemophilus infection, lung infection, pneumonia fungal, and pneumocystis jirovecii pneumonia.

†Upper respiratory tract infection includes bronchiolitis, bronchitis, bronchitis viral, chronic sinusitis, fungal pharyngitis, influenza-like illness, laryngitis, nasopharyngitis, parainfluenzae virus infection, pharyngitis, respiratory tract infection, respiratory tract infection viral rhinitis, sinusitis, tracheitis, upper respiratory tract infection, and upper respiratory tract infection bacterial.

‡Dyspnea includes dyspnea, dyspnea exertional, and dyspnea at rest.

Table 4 summarizes the hematology laboratory abnormalities in ICARIA-MM.

Table 4: Treatment Emergent Hematology Laboratory Abnormalities in Patients Receiving Isa-Pd Treatment versus Pd Treatment – ICARIA-MM

Laboratory Parameter n (%)	SARCLISA + Pomalidomide + Dexamethasone (Isa-Pd) (N=152)		Pomalidomide + Dexamethasone (Pd) (N=149)			
	All Grade Grade Grade 3		All Grades	Grade 3	Grade 4	
Anemia	151 (99)	48 (32)	0	145 (97)	41 (28)	0
Neutropenia	146	37	92	137	57	46
	(96)	(24)	(61)	(92)	(38)	(31)
Lymphopenia	140	64	19	137	52	12
	(92)	(42)	(13)	(92)	(35)	(8)
Thrombocytopenia	127	22	25	118	14	22
	(84)	(14)	(16)	(79)	(9)	(15)

<u>Description of Selected Adverse Reactions</u>

Infusion-related reactions
In ICARIA-MM, infusion-related reactions (defined as adverse reactions associated with the SARCLISA infusions, with an onset typically within 24 hours from the start of the infusion) were reported in 58 patients (38%) treated with SARCLISA. All patients who experienced infusion-related reactions. experienced them during the 1st infusion of SARCLISA, with 3 patients (2%) also having infusion-related reactions at their 2nd infusion, and 2 patients (1.3%) at their 4th infusion. Grade 1 infusion-related reactions were reported in 3.9% Grade 2 in 32%, Grade 3 in 1.3%, and Grade 4 in 1.3% of the patients. Signs and symptoms of Grade 3 or higher infusion-related reactions included dyspnea, hypertension,

and bronchospasm. The incidence of infusion interruptions because of infusion-related reactions was 29.6%. The median time to infusion interruption was 55 minutes.

In a separate study (TCD 14079 Part B) with SARCLISA 10 mg/kg administered from a 250 mL fixed-volume infusion in combination with Pd, infusion-related reactions (all Grade 2) were reported in 40% of patients, at the first administration, the day of the infusion. Overall, the infusion-related reactions of SARCLISA 10 mg/kg administered as a 250 mL fixed-volume infusion were similar to that of SARCLISA as administered in ICARIA-MM.

Infections
In ICARIA-MM, the incidence of Grade 3 or higher infections was 43% in Isa-Pd group. Pneumonia was the most commonly reported severe infection with Grade 3 reported in 22% of patients in Isa-Pd group compared to 16% in Pd group, and Grade 4 in 3.3% of patients in Isa-Pd group compared to 2.7% in Pd group. Discontinuations from treatment due to infection were reported in 2.6% of patients in Isa-Pd group compared to 5.4% in Pd group. Fatal infections were reported in 3.3% of patients in Isa-Pd group and in 4% in Pd group.

### 6.2 Immunogenicity

Infections

As with all therapeutic proteins, there is a potential for immunogenicity. The detection of antibody formation is highly dependent on the sensitivity and specificity of the assay. Additionally, the observed incidence of antibody (including neutralizing antibody) positivity in an assay may be influenced by several factors, including assay methodology, sample handling, timing of sample collection, concomitant medications, and underlying disease. For these reasons, comparison of the incidence of antibodies in the studies described below with the incidence of antibodies in other studies or to other isatuximab-irfc products may be

In ICARIA-MM, no patients tested positive for antidrug antibodies (ADA). Therefore, the neutralizing ADA status was not determined. Overall, across 6 clinical studies in multiple myeloma (MM) with SARCLISA single agent and combination therapies including ICARIA-MM (N=564), the incidence of treatment emergent ADAs was 2.3%. No clinically significant differences in the pharmacokinetics, safety, or efficacy of isatuximab-irfc were observed in patients with ADAs.

### 7 DRUG INTERACTIONS

### 7.1 Laboratory Test Interference

Interference with Serological Testing
SARCLISA, an anti-CD38 antibody, may interfere with
blood bank serologic tests with false positive reactions in
indirect antiglobulin tests (indirect Coombs tests), antibody
detection (screening) tests, antibody identification panels,
and antihuman globulin crossmatches in patients treated with SARCLISA [see Warnings and Precautions (5.4)]. Interference with Serum Protein Electrophoresis and Immunofixation Tests

SARCLISA may be incidentally detected by serum protein electrophoresis and immunofixation assays used for the monitoring of M-protein and may interfere with accurate response classification based on International Myeloma Working Group (IMWG) criteria [see Warnings and Precautions (5.4)

### **8 USE IN SPECIFIC POPULATIONS**

### 8.1 Pregnancy

Risk Summary
SARCLISA can cause fetal harm when administered to a pregnant woman. The assessment of isatuximab-irfc-associated risks is based on the mechanism of action and data from target antigen CD38 knockout animal models (see Data). There are no available data on SARCLISA use in pregnant women to evaluate for a drug-associated risk of major birth defects, miscarriage or adverse maternal or fetal outcomes. Animal reproduction toxicity studies have not been conducted with isatuximab-irfc. The estimated background conducted with isatuximab-iric. The estimated background risk of major birth defects and miscarriage for the indicated population is unknown. All pregnancies have a background risk of birth defect, miscarriage, or other adverse outcomes. In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2% to 4% and 15% to 20%, respectively. The combination of SARCLISA and pomalidomide is contraindicated in pregnant women because pomalidomide may cause birth defects and death of the unbarry child. Before may cause birth defects and death of the unborn child. Refer to the pomalidomide prescribing information on use during pregnancy. Pomalidomide is only available through a REMS program.

Clinical Considerations Fetal/neonatal reactions

Fetal/neonatal reactions
Immunoglobulin G1 monoclonal antibodies are known
to cross the placenta. Based on its mechanism of action,
SARCLISA may cause depletion of fetal CD38-positive
immune cells and decreased bone density. Defer
administration of live vaccines to neonates and infants
exposed to SARCLISA in utero until a hematology evaluation is completed.

<u>Data</u> Animal data

Mice that were genetically modified to eliminate all CD38 expression (CD38 knockout mice) had reduced bone density which recovered 5 months after birth. Data from studies using CD38 knockout animal models also suggest the involvement of CD38 in regulating humoral immune responses (mice), feto-maternal immune tolerance (mice), and early embryonic development (frogs).

### 8.2 Lactation

Risk Summary

There are no available data on the presence of isatuximab-irfc in human milk, milk production, or the effects on the breastfed child. Maternal immunoglobulin G is known to be present in human milk. The effects of local gastrointestinal exposure and limited systemic exposure in the breastfed infant to SARCLISA are unknown. Because of the potential for serious adverse are unknown. Because of the potential for serious adverse reactions in the breastfed child from isatuximab-irfc administered in combination with pornalidomide and dexamethasone, advise lactating women not to breastfeed during treatment with SARCLISA. Refer to pornalidomide prescribing information for additional information.

### 8.3 Females and Males of Reproductive Potential

<u>Pregnancy Testing</u> With the combination of SARCLISA with pomalidomide, refer to the pomalidomide labeling for pregnancy testing requirements prior to initiating treatment in females of reproductive potential.

Contraception Females

SARCLISA can cause fetal harm when administered to a pregnant woman [see Use in Specific Populations (8.1)]. Advise female patients of reproductive potential to use effective contraception during treatment and for at least 5 months after the last dose of SARCLISA. Additionally, refer to the pomalidomide labeling for contraception requirements prior to initiating treatment in females of reproductive potential. Males

Refer to the pomalidomide prescribing information.

### 8.4 Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

### 8.5 Geriatric Use

Of the total number of subjects in clinical studies of SARCLISA, 53% (306 patients) were 65 and over, while 14% (82 patients) were 75 and over. No overall differences in safety or effectiveness were observed between subjects 65 and over and younger subjects, and other reported clinical experience has not identified differences in responses between the adults 65 years and over and younger patients, but greater sensitivity of some older individuals cannot be ruled out.

### 10 OVERDOSAGE

There is no known specific antidote for SARCLISA overdose. In the event of overdose of SARCLISA, monitor the patients for signs or symptoms of adverse effects and take all appropriate measures immediately.

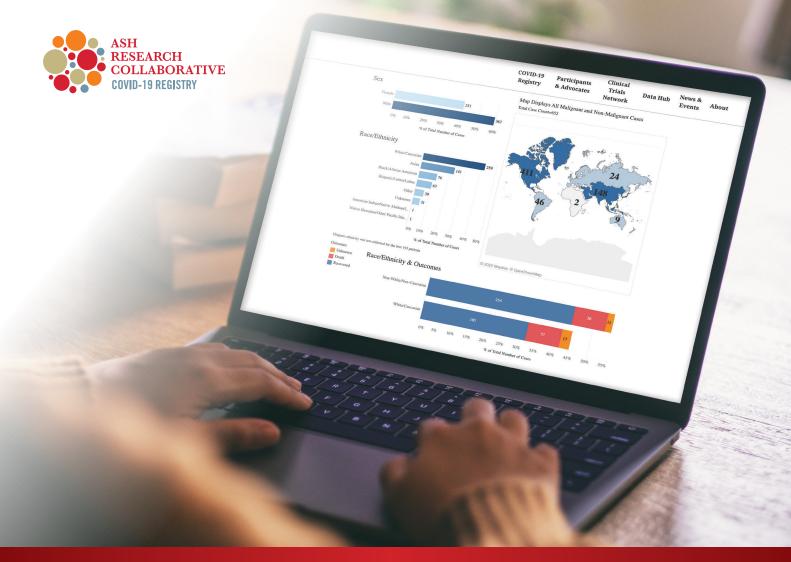
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# Submit your cases to the ASH® Research Collaborative COVID-19 Registry.

### The ASH Research Collaborative COVID-19 Registry for Hematology

is a global public reference tool that includes de-identified data on patients who have a positive COVID-19 diagnosis and any current or past hematologic condition, and patients without pre-existing hematologic conditions who developed a hematologic complication from COVID-19. Data are analyzed in real time and summaries are available via a public dashboard.

If you or your colleagues have cared for a patient who is being or has been treated for any hematologic condition and has tested positive for COVID-19, please submit your data to the ASH RC COVID-19 Registry for Hematology.

Enter cases online at www.ashrc.org.



