23rd Annual John Goldman E-Conference on Chronic Myeloid Leukemia: Biology and Therapy

October 7-10, 2021

Chairs: J. Cortes, T.P. Hughes, D.S. Krause
Co-Organizers: R. Bhatia, T. Brümmendorf, M. Copland, M. Deininger, O. Hantschel, F-X. Mahon, D. Perrotti, J. Radich, D. Réa

Advisory Committee: J. Apperley, S. Branford, C. Gambacorti-Passerini, F. Guilhot, R. Hehlmann, P. Laneuville, G. Saglio, C. Schiffer, S. Soverini, P. Valent, R. Van Etten

This program is presented according to Central European Summer Time (CEST). Please check the corresponding hours in your time zone.

Thursday, October 7, 2021

14:00-14:10	**WELCOME**	Jorge Cortes (Augusta)
14:10-14:20	**iCMLf - A REVIEW**	Tim P. Hughes (Adelaide)
14:20-14:53	**SPECIAL INTRODUCTORY LECTURE** **Chair:** Tomasz Skorski (Philadelphia)	
14:20-14:23	*Introduction*	
14:23-14:43	Detection and Targeting of Malignant Deaminase Activation in Chronic Myeloid Leukemia	Catriona Jamieson (La Jolla)
14:43-14:53	*Discussion*	
14:53-16:30	**SCIENTIFIC SESSION 1: TOP SCORING ABSTRACTS 2021** **Chairs:** Susan Branford (Adelaide), Bac Viet Le (Philadelphia)	
14:53-14:56	*Introduction*	
14:56-15:08	Targeting Integrated Stress Response By Isrib Combined with Imatinib Attenuates STAT5 Signaling and Eradicates Therapy-Resistant Chronic Myeloid Leukemia Cells	Katarzyna Piwocka (Warsaw)
15:08-15:20	Final Analysis of a Pan European Stop Tyrosine Kinase Inhibitor Trial in Chronic Myeloid Leukemia : The EURO-SKI Study	Johan Richter (Lund)
15:20-15:32	Impact of Inhibition of Folate Metabolism in Leukaemic Stem Cells	Martha M. Zarou (Glasgow)
15:32-15:44	Ponatinib in Combination with FLAG-IDA Chemotherapy for	Mhairi Copland (Glasgow)

	Blast-Phase Chronic Myeloid Leukemia: The Seamless Phase I/II Dose-Finding Matchpoint Trial	
15:44-15:56	Chemical Factors and Their Signaling in the Leukemic Bone Marrow Microenvironment	Raquel Pereira (Frankfurt)
15:56-16:08	COVID-19 in Patients with Chronic Myeloid Leukemia: Update of the International CML Foundation (iCMLf) CML and COVID-19 (CANDID) Study	Katia Pagnano (Campinas)
16:08-16:30	*Discussion*	
16:30-16:40	***Break***	
16:40-17:08	**TESSA HOLYOAKE MEMORIAL LECTURE: SPECIAL LECTURE** **Chair:** Brian Huntly (Cambridge)	
16:40-16:43	*Introduction*	
16:43-16:58	Bcl2-mediated metabolic properties of leukemia stem cells	Craig Jordan (Aurora)
16:58-17:08	*Discussion*	
17:08-18:30	**SCIENTIFIC SESSION 2: STEM CELLS AND THE MICROENVIRONMENT** **Chair:** Bing Carter (Houston)	
17:08-17:11	*Introduction*	
17:11-17:26	***Keynote presentation*** Evolution of our learning in stem cell	Ravi Bhatia (Birmingham)
17:26-17:36	*Discussion*	
	Selected Abstracts	
17:36-17:48	Deep Single Cell RNA-Seq Profiling Reveals an Embryonic Regulome That Defines the Molecular Programmes of Cycling and Quiescent Leukaemic Stem Cells	Wei Liu (Glasgow)
17:48-18:00	Bone Marrow Stromal Cells Upregulate Oxphos Pathway in CML Cells Via Direct Leukemia-Stroma Interactions	Piotr Chroscicki (Warsaw)
18:00-18:12	The Lysophospholipid Metabolism Enzyme Gdpd3 Maintains Chronic Myelogenous Leukemia Stem Cells	Kazuhito Naka (Hiroshima)
18:12-18:30	*Discussion*	
18:30-18:58	**SPECIAL LECTURE (2):** **Chair:** Stéphane Prost (Fontenay aux Roses)	
18:30-18:33	*Introduction*	
18:33-18:48	Does Ph+ in AML exist or not? vs CML	Catherine Smith (San Francisco)

18:48-18:58	*Discussion*	

Friday, October 8, 2021

10:20-11:50	**SCIENTIFIC SESSION 3: IMMUNOLOGY** **Chair:** Agnes Yong (Adelaide)	
10:20-10:23	*Introduction*	
10:23-10:38	***Keynote Presentation*** The immune landscape in CML	Dominik Wolf (Innsbrück)
10:38-10:48	*Discussion*	
	Selected Abstracts	
10:48-11:00	Leukemic Extracellular Vesicles Upregulate Highly Suppressive Regulatory T Cells By Modulating mTOR and STAT5 Signaling, Leading to Progression of CML	Julian Swatler (Warsaw)
11:00-11:12	Perturbed Function of Natural Killer Cells By Inflammatory Cytokines in Chronic Myeloid Leukemia	Valeriya Kuznetsova (Birmingham)
11:12-11:24	Leukemic Cytokines Co-Opt Regulatory T Cell and Th17 Immunity to Promote Disease Progression	Virginia Camacho (Birmingham)
11:24-11:36	KIR Polymorphism, Expression on NK Cells and Regulation By microRNAs Associated with Tyrosine Kinase Inhibitor Therapy in Chronic Myeloid Leukemia	Paulo Rodrigues-Santos (Coimbra)
11:36-11:50	*Discussion*	
11:50-12:00	**JANET ROWLEY PRIZE PRESENTATION** **Presenter:** Jerry Radich (Seattle) **Awardee 2021:** Susan Branford (Adelaide)	
12:00-12:25	**JANET ROWLEY PRIZE: SPECIAL LECTURE (3)** **Chair:** Jerry Radich (Seattle)	
12:00-12:15	*BCR-ABL1* dependent and independent molecular factors that influence treatment outcome	Susan Branford (Adelaide)
12:15-12:25	*Discussion*	
12:25-14:10	***Lunch***	

14:10-16:00	**SPECIAL SYMPOSIUM ON BLAST PHASE** **Chair:** Rüdiger Hehlmann (Mannheim)	
14:10-14:20	*Introductory overview – concepts and challenges*	Rüdiger Hehlmann (Mannheim)
14:20-14:32	*Current concepts in the biology of blast phase CML*	Tiong Ong (Singapore)
14:32-14:44	*Mutations, genetics, cytogenetics and their prognostic role in blast phase*	Simona Soverini (Bologna)
14:44-14:56	*Challenges and controversies in the diagnosis and classification of blast phase CML*	Robert Hasserjian (Boston)
14:56-15:08	*Treatment of myeloid in blast phase*	Mhairi Copland (Glasgow)
15:08-15:20	*Treatment of lymphoid in blast phase*	Koji Sasaki (Houston)
15:20-15:32	*The role and outcome of stem cell transplant for blast phase CML*	Aleksandar Radujkovic (Heidelberg)
15:32-16:00	*General Discussion*	

16:00-16:28	**SPECIAL LECTURE (4):** **Chair:** Giovanni Martinelli (Bologna)	
16:00-16:03	*Introduction*	
16:03-16:18	Lineage ambiguous leukemias	Charles Mullighan (Memphis)
16:18-16:28	*Discussion*	
16:28-16:40	***Break***	
16:40-17:40	***Biology Posters – Mentored Poster Walk 1*** **Biology Poster Walk Leaders:** Feyruz Rassool (Baltimore), Veronika Sexl (Vienna)	

16:40 – 17:40	**MEET-THE-EXPERT SESSION (pre-registration required)** Jane Apperley (London), Neil Shah (Chicago)

17:50-19:50	**WORKSHOP FOR NON-CLINICAL SCIENTISTS #1** **EPIGENETICS** **Chairs:** Ravi Bhatia (Birmingham), David Vetrie (Glasgow)	
17:50-17:55	*Introduction*	Ravi Bhatia (Birmingham), David Vetrie (Glasgow)
17:55-18:20	Profiling of chromatin regulatory factors by CUT&RUN and CUT&TAG	Greg Wang (Chapel Hill)
18:20-18:45	Use of chromatin conformation capture assays (3C/4C)	Michelle West (Brighton)
18:45-19:10	Multimodal single-cell analysis delineates the evolution of myeloid leukemia	Peter van Galen (Boston)
19:10-19:40	*Discussion*	
19:40-19:50	Conclusion	

17:50-18:50	**SATELLITE SYMPOSIUM** **CML treatment landscape in later lines: from clinical trial updates to real-world experience** **Chair:** Giuseppe Saglio (Turin) **Speakers:** Jeroen Janssen (Amsterdam), Dragana Milojkovic (London) ***This symposium is organized and sponsored by Novartis***

Saturday, October 9, 2021

11:00-12:35	**SCIENTIFIC SESSION 4: MOLECULAR MECHANISMS OF DISEASE AND RESPONSE TO TREATMENT** **Chair:** Andreas Hochhaus (Jena)	
11:00-11:03	*Introduction*	
11:03-11:18	***Keynote Presentation*** Molecular Mechanisms of TKI Action, Resistance and BCR-ABL Signaling	Oliver Hantschel (Marburg)
11:18-11:28	*Discussion*	
	Selected Abstracts	
11:28-11:40	Mitochondrial DNA Mutations Are Associated with Reduced Oxphos and Response to Imatinib in Chronic Myeloid Leukaemia Patients	Ilaria Pagani (Adelaide)
11:40-11:52	Identifying Novel Mechanisms Involved in Circumventing	Caroline Busch (Glasgow)

	Tyrosine Kinase Inhibition in CML	
11:52-12:04	A Comprehensive Analyses of Ph+ ALL Paediatric/AYA and Adult Patients Using Next Generation Sequencing and Flow Cytometry.	Deborah L. White (Adelaide)
12:04-12:16	DNMT1 Inhibitor and TKI Combination for Deeper Response and Depleting Stem Cell Self-Renewal in CML	Kazuharu Kamachi (Saga)
12:16-12:35	*Discussion*	
12:35-13:40	***Lunch***	
13:40-13:50	**JOHN GOLDMAN PRIZE PRESENTATION** **Presenter:** Robert Gale (London) **Awardee 2021:** Giuseppe Saglio (Turin)	
13:50-14:15	**JOHN GOLDMAN PRIZE: SPECIAL LECTURE (5)** **Chair:** Robert Gale (London)	
13:50-14:05	CML beyond TKI therapy	Giuseppe Saglio (Turin)
14:05-14:15	*Discussion*	
14:15-14:43	**SPECIAL LECTURE (6):** **Chair:** Thoas Fioretos (Lund)	
14:15-14:18	*Introduction*	
14:18-14:33	NK cell therapy for myeloid malignancies	Todd Fehniger (St Louis)
14:33-14:43	*Discussion*	
14:43-16:15	**SCIENTIFIC SESSION 5: NEW TREATMENT STRATEGIES** **Chair:** Franck Nicolini (Lyon)	
14:43-14:46	*Introduction*	
14:46-15:01	***Keynote Presentation*** The future of CML Therapy : Are more TKIs needed ?	Delphine Réa (Paris)
15:01-15:11	*Discussion*	
	Selected Abstracts	
15:11-15:23	Optic Primary Analysis: A Dose-Optimization Study of 3 Starting Doses of Ponatinib (PON)	Jorge Cortes (Augusta)
15:23-15:35	Mathematical Modelling of Immune Response in CML Patients Suggests Potential for TKI Reduction Prior to Cessation	Ingo Roeder (Dresden)
15:35-15:47	Updated Results from Phase 1 Study of Vodobatinib, a Novel Oral BCR-ABL1 Tyrosine Kinase Inhibitor (TKI), in Chronic Myeloid Leukemia (CML) and Philadelphia	Jorge Cortes (Augusta)

15:47- 15:59	Efficacy and Safety of Bosutinib in Previously Treated Patients with Chronic Myeloid Leukemia: Final Results from the Byond Trial	Carlo Gambacorti-Passerini (Monza)
15:59-16:15	*Discussion*	
16:15- 16:25	***Break***	
16:25-17:45	**SCIENTIFIC SESSION 6: TREATMENT-FREE REMISSION** **Chair:** Philippe Rousselot (Versailles)	
16:25-16:28	*Introduction*	
16:28-16:43	***Keynote Presentation*** What's stopping us from stopping TKI for more people with CML?	David Ross (Adelaide)
16:43-16:53	*Discussion*	
	Selected Abstracts	
16:53-17:05	Molecular Relapse after TKI Cessation for Treatment-Free Remission Can be Predicted By RNA-Sequencing	Vincent Alcazer (Lyon)
17:05-17:17	Allelic Polymorphisms of Killer Immunoglobulin-like Receptor and Human Leukocyte Antigen Determine Successful Achievement of Treatment-Free Remission in Patients with CML	Hiroshi Ureshino (Saga)
17:17-17:29	First Interim Results of the "Russian Prospective Study of Reduction and Discontinuation Treatment of TKI (READIT-2020)" in Patients with Chronic Myeloid	Margarita Gurianova (Moscow)
17:29-17:45	*Discussion*	
17:45-18:05 17:45-17:55	**ESH INTERNATIONAL JOHN GOLDMAN RESEARCH AWARD CEREMONY 2021** **Presenter:** Hervé Dombret (Paris), ESH President	
17:55-18:05	**Announcing the Awardee 2021:** Biological significance of BCR-ABL1 clonal hematopoiesis in Ph-positive acute lymphoblastic leukemia (Ph+ ALL): relevance for treatment-free remission	Emmanuelle Clappier (Paris)
18:20	***Clinical Posters - Mentored Poster Walk 2*** **Clinical Poster Walk Leaders:** Dragana Milojkovic (London), Douglas Smith (Baltimore)	

18:20 – 19:20	**MEET-THE-EXPERT SESSION (pre-registration required)** Michael Mauro (New York), Gianantonio Rosti (Bologna)

Sunday, October 10, 2021

11:00-13:00	**WORKSHOP FOR NON-CLINICAL SCIENTISTS #2** **SINGLE CELL ANALYSIS** **Chairs:** Mhairi Copland (Glasgow), Satu Mustjoki (Helsinki)	
11:00-11:05	*Introduction*	Mhairi Copland (Glasgow), Satu Mustjoki (Finland)
11:05-11:30	Application of single cell technologies	Ana Cvejic (Cambridge)
11:30-11:55	Defining CML stem cells using single-cell genomics	Göran Karlsson (Lund)
11:55-12:20	Use of single cell technologies in the study of myeloproliferative neoplasms	Rebekka Schneider (Rotterdam)
12:20-12:50	*Discussion*	
12:50-13:00	Conclusion	

13:00-13:25	**ESH INTERNATIONAL JOHN GOLDMAN RESEARCH AWARD 2019 : PRESENTATION OF RESULTS** **Chair:** Hervé Dombret (Paris), ESH President	
13 :00-13 :05	*Introduction*	
13 :05-13 :20	Use of machine learning to integrate clinical data and biomarkers to optimize prediction of TFR	Ilaria Pagani (Adelaide)
13:20-13:25	*Discussion*	
13:25-14:00	***Lunch***	
14:00- 14:30	**ROUNDTABLE: IS TFR THE RIGHT ROAD TO CURE WE SHOULD BE PURSUING?** **Chair:** Jeff Lipton (Toronto) Discussants: Jan Geissler (Munich), François-Xavier Mahon (Bordeaux), Moshe Talpaz (Ann Arbor)	
14:30- 14:58	**SPECIAL LECTURE (7):** **Chair**: Tim Brümmendorf (Aachen)	
14:30-14:33	*Introduction*	
14:33-14:48	The biology and implications of clonal hematopoiesis	Benjamin Ebert (Boston)
14:48-14:58	*Discussion*	
14:58-16:20	**SCIENTIFIC SESSION 7: QUALITY OF LIFE AND CO-MORBIDITIES** **Chair:** Susanne Saussele (Mannheim)	
14:58-15:01	*Introduction*	

15:01-15:16	**Keynote presentation** The role of patient reported outcomes in the management of patients with CML: Are we doing it right? Are we doing it enough?	Fabio Efficace (Chicago)
15:16-15:26	*Discussion*	
	Selected Abstracts	
15:26- 15:38	The Effect of Comorbidities on Response Outcomes with First-Line Dasatinib Versus Imatinib in Chronic Myeloid Leukemia in Chronic Phase (CML-CP): Exploratory Post Hoc Analysis of DASISION	Massimo Breccia (Rome)
15:38-15:50	COVID-19 – a Survey Among Brazilian Chronic Myeloid Leukemia Patients	Katia Pagnano (Campinas)
15:50-16:02	Health-Related Quality of Life (HRQoL) in CML-Patients at Diagnosis Compared to General Population	Marcel Lorch (Mannheim)
16:02-16:20	*Discussion*	
16:20-16:30	***Break***	
16:30-17:05	**iCMLf PRIZE PRESENTATION:** **Presenter:** Gianantonio Rosti (Bologna) **Awardee 2021:** Damira Bayzakova (Bishkek) - *posthumously*	
17:05-18:35	**SCIENTIFIC SESSION 8: TKI SAFETY** **Chair:** Kendra Sweet (Tampa)	
17:05-17:08	*Introduction*	
17:08-17:23	**Keynote presentation** A deeper dive into the safety of TKIs	Carlo Gambacorti-Passerini (Monza)
17:23-17:33	*Discussion*	
	Selected abstracts	
17:33- 17:45	Incidence of Pleural Effusion with Dasatinib and the Effect of Switching Therapy to Bosutinib in Patients with Chronic Phase CML	Akriti Jain (Tampa)
17:45-17:57	Diminished Skeletal Muscle Insulin Sensitivity in CML Patients Treated with Nilotinib	Lando Janssen (Nijmegen)
17:57- 18:09	Are Myeloid Mutations Associated with the Development of Vascular Events in Patients with Chronic Myeloid Leukemia?	Ruth Stuckey (Las Palmas)
18:09-18:21	Metabolism in Muscle Cells Is Influenced By Carnitine Intracellular Concentration Decrease Caused By Imatinib Treatment	Pavel Burda (Prague)

18:21- 18:35 *Discussion*

18:35 ***Closing remarks***