26th Annual John Goldman Conference on
CHRONIC MYELOID LEUKEMIA: BIOLOGY AND THERAPY
September 27-29, 2024 – Prague, Czech Republic

Chairs: J. Cortes, T.P. Hughes, D.S. Krause
Co-Organizers: R. Bhatia, T. Brümmendorf, M. Copland, M. Deininger, O. Hantschel, V. Helgason, S. T. Ong, J. Radich, D. Réa

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

Friday, September 27, 2024

08:15-08:20	**Welcome**	Jorge Cortes (Augusta)
08:20-08:25	**Welcome to Prague**	Jiri Mayer (Brno)
08:25-08:35	**iCMLf - A REVIEW**	Jorge Cortes (Augusta)

SCIENTIFIC SESSION 1: TOP SCORING ABSTRACTS 2024 *(12' + 3' discussion)*
Chairs: Andreas Hochhaus (Jena), Athina Varnava (Glasgow)

08:35-08:50	Investigation of resistance mechanisms of the allosteric BCR::ABL1 inhibitor asciminib	Inga B. Leske (Marburg)
08:50-09:05	Clinical impact of ASXL1 mutations in CML patients treated with asciminib in combination with ATP competing tyrosine kinase inhibitors	Thomas Ernst (Jena)
09:05-09:20	BNIP3 is required for hypoxia-induced reductive glutamine carboxylation in leukaemic cells	Daniele Sarnello (Glasgow)
09:20-09:35	The negative impact of variants in blood-cancer related genes for frontline imatinib treated patients is not overcome by frontline treatment with more potent BCR::ABL1 inhibitors	Susan Branford (Adelaide)
09:35-09:50	A randomized trial of the addition of ruxolitinib to BCR::ABL1 tyrosine kinase inhibitors (TKIs) for patients with chronic myeloid leukemia (CML) with molecular evidence of disease (SWOG trial S1712)	Kendra Sweet (Tampa)
09:50-10:05	Deciphering the biology of leukemic stem cells driving CML relapse after TKI cessation: insights from single-cell analysis of diagnostic bone marrow samples	Vaidehi Krishnan (Singapore)

10:05-10:35 Coffee Break

TESSA HOLYOAKE MEMORIAL LECTURE: SPECIAL LECTURE (1)
Chair: Franck Nicolini (Lyon)

10:35-10:55	Leukemic stem cells and the bone marrow microenvironment: friend or foe?	Dominique Bonnet (London)
10:55-11:00	*Discussion*	

SCIENTIFIC SESSION 2: Progenitors and immunology
Chair: Mirle Schemionek-Reinders (Aachen)

11:00-11:15	**Keynote Presentation:** Role of the immune system in CML: does it matter and how?	Agnes Yong (Adelaide)
11:15-11:20	*Discussion*	
	Selected Abstracts: *(12' + 3' discussion)*	
11:20 -11:35	Single cell multiomic approaches identify CD26+ and CD35+ stem cells at the top of leukemic and normal hematopoietic hierarchy	Ram K. Thakur (Lund)
11:35-11:50	Assessing and restoring NK cell function in chronic myeloid leukemia through innovative expansion techniques	Mengge Yu (Singapore)
11:50-12:05	Bone marrow common lymphoid progenitors and B cell subsets as predictors of treatment-free remission in CML	Shaun Patterson (Glasgow)
12:05-12:15	**JOHN GOLDMAN PRIZE PRESENTATION** **Presenter:** Michael Deininger (Milwaukee) **Awardee 2024:** Jeffrey Lipton (Toronto)	

JOHN GOLDMAN PRIZE: SPECIAL LECTURE (5)
Chair: Michael Deininger (Milwaukee)

12:15-12:35	What is the goal of CML therapy? A physician's impression of a patient's impression and are we (the physicians) missing the boat?	Jeffrey Lipton (Toronto)
12:35-12:40	*Discussion*	

12:40-14:40 Lunch and Poster Viewing

13:30-14:30 **SATELLITE SYMPOSIUM**
Quality of life for patients with CML: Where are we now?
Chair: Daniela Žáčková (Brno)
Speakers: Lisa Machado (Toronto), Tomoiku Takaku (Saitama), Daniela Žáčková (Brno)

This symposium is organized and sponsored by Novartis

SPECIAL LECTURE (3):
Chair: Ravi Bhatia (Birmingham)

14:40-15:00	Gene-environment interactions during progression to blast phase MPN	Adam Mead (Oxford)
15:00-15:05	*Discussion*	

SCIENTIFIC SESSION 3: Blast phase CML and PH+ ALL
Chair: Katerina Machova Polakova (Prague)

15:05-15:20	**Keynote Presentation:** Novel approaches for blast phase CML	Steffen Koschmieder (Aachen)
15:20-15:25	*Discussion*	
	Selected Abstracts: *(12' + 3' discussion)*	
15:25-15:40	Multi-omic single-cell analysis uncovers a blast crisis-like subpopulation in the paired chronic phase cells from CML patients at diagnosis	Yingying Liu (Vancouver)
15:40-15:55	Identification and targeting of a novel IRF7-TBK1 inflammatory pathway in blast crisis chronic myeloid leukemia	Pavithra Shyamsunder (Singapore)
15:55-16:10	Transcriptomic analysis reveals the intricacies of Ph+ ALL: Examining gene expression patterns and deletions in relation to patient prognosis	Deborah White (Adelaide)

16:10-16:40 Coffee Break

MICHELE BACCARANI SPECIAL SYMPOSIUM: Clonal Disorders in Hematological Malignancies *(12' + 5' discussion)*
Chair: Ehab Atallah (Milwaukee)

16:40-16:50	Introductory overview – concepts and challenges	
16:50-17:07	Clonal hematopoiesis and risk of leukemia	Liran Shlush (Rehovot)
17:07-17:24	The expansion and progression of clonal hematopoiesis	Linde Miles (Cincinnati)
17:24-17:41	Clinical and biologic significance of MGUS	Jakub Radocha (Hradec Králové)
17:41-17:58	What is T cell clones of uncertain significance?	Gianpetro Semenzato (Padua)
17:58-18:15	Understanding monoclonal B-cell lymphocytosis: is it malignant?	Sameer Parikh (Rochester)
18:15-18:45	General Discussion	

18:50-21:00 **Poster Viewing and Welcome Get-Together**
Mentored Poster Walk 1
- *Biology Poster Walk Leaders: Mirle Schemionek-Reinders (Aachen), Deborah White (Adelaide)*
- *Clinical Poster Walk Leaders: Hemant Malhotra (Jaipur), Daniela Žáčková (Brno)*

Saturday, September 28, 2024

WORKSHOP FOR NON-CLINICAL SCIENTISTS #1: Cellular Therapies
Chairs: Daniela Krause (Mainz), Jerald Radich (Seattle)

07:30-07:35	Introduction	
07:35-08:00	Driving new CAR T cells	Marcela Maus (Boston)
08:00-08:10	*Discussion*	
08:10-08:35	Innate NK cell memory for enhanced immunotherapy	Rizwan Romee (Boston)
08:35-08:45	*Discussion*	
08:45-09:10	Microbiome disruption in cancer immunotherapy	Jonathan Peled (New York)
09:10-09:20	*Discussion*	
09:20-09:30	Conclusion	

08:45-09:45	**CONCURRENT MEET-THE-EXPERT SESSIONS (pre-registration required)**	
	1. Clonal hematopoiesis (translational)	Linde Miles (Cincinnati), Liran Shlush (Rehovot)
	2. Mechanisms of resistance	Susan Branford (Adelaide), Neil P. Shah (San Francisco)
	3. Pregnancy in CML	Elisabetta Abruzzese (Rome), Carla Boquimpani (Rio de Janeiro)

09:30-10:00 Coffee Break

SCIENTIFIC SESSION 4: TKI responses and Biomarkers
Chair: Simona Soverini (Bologna)

10:00-10:15	**<u>Keynote Presentation</u>:** The evolution and current status of predicting outcomes in CML	Nick Cross (Southampton)
10:15-10:20	*Discussion*	
	Selected Abstracts: *(12' + 3' discussion)*	
10:20-10:35	Systems biology of CML: Insights into primary TKI resistance and treatment-free remission	Richard Van Etten (Irvine)
10:35-10:50	Imatinib-responsive chronic myeloid leukaemia is associated with reduced OXPHOS capacity and mtDNA mutations	Ilaria S. Pagani (Adelaide)
10:50-11:05	A single-cell chromatin accessibility atlas reveals epigenetic drivers in primary imatinib resistance in chronic phase chronic myeloid leukemia	Sin Tiong Ong (Singapore)

11:05-11:20	The efficacy of asciminib against ABL-rearrangement of Ph-like Acute Lymphoblastic Leukaemia is dependent on the presence of the SH3 domain	Elias Lagonik (Adelaide)
11:20-11:35	Alterations in the BCR::ABL1 N-lobe and SH3 domain confer in vitro and clinical resistance to asciminib	Ariel Leyte-Vidal (San Francisco)
11:35-11:50	Predicting future blast crisis transformation at the time of chronic phase CML diagnosis	Sin Tiong Ong (Singapore)
11:50-12:00	**ESH SCHOLARSHIP FUND AWARD CEREMONY** **LEUKAEMIA UK INTERNATIONAL SCHOLARSHIP** **Chair:** Nick Cross (Southampton)	

12:00-13:55 Lunch and Poster Viewing

12:45-13:45 **SATELLITE SYMPOSIUM**
New perspectives in optimising TKI selection for CML patients
Chair: Valentín García-Gutiérrez (Madrid)
Speakers: Fausto Castagnetti (Bologna), Valentín García-Gutiérrez (Madrid), Dragana Milojkovic (London)

This symposium is organized and sponsored by Incyte

SPECIAL LECTURE (4):
Chair: Daniela Krause (Mainz)

13:55-14:15	Exposing the stem cells of Chronic Myeloid Leukemia using single-cell genomics	Göran Karlsson (Lund)
14:15-14:20	*Discussion*	

DEBATE: Frontline Asciminib Therapy
Chair: Tim Hughes (Adelaide)

14:20-14:25	Introduction	
Audience votes		
14:25-14:35	YES - best option for all patients in 2024	Delphine Rea (Paris)
14:35-14:45	NO - keep it in reserve for those who need it	Rüdiger Hehlmann (Weinheim)
14:45-15:00	*Discussion*	

SCIENTIFIC SESSION 5: New drugs and combinations
Chair: Tim Brümmendorf (Aachen)

15:00-15:15	**Keynote Presentation:** Incorporating new drugs in current treatment algorithms	Michael J. Mauro (New York)
15:15-15:20	*Discussion*	

Selected Abstracts: *(12' + 3' discussion)*

15:20-15:35	Olverembatinib (HQP1351) overcomes ponatinib and/or asciminib resistance in patients with heavily pretreated/ refractory chronic myeloid leukemia (CML)	Vivian G. Oehler (Seattle)
15:35-15:50	Preliminary safety and efficacy of ELVN-001, a selective active site inhibitor of BCR::ABL1 in CML	Fabian Lang (Frankfurt)
15:50-16:05	Asciminib provides long-term, durable molecular responses and a consistent safety profile in patients with T315I-mutated CML-CP with up to approximately 6 years' exposure: final analysis from a phase 1 trial	Jorge Cortes (Augusta)
16:05-16:20	Ponatinib and 5-Azacytidine for the treatment of chronic myelogenous leukemia in myeloid blast crisis. results of the PONAZA trial (NCT03895671).	Philippe Rousselot (Versailles)

16:20-16:50 Coffee Break

16:50-17:00 **JANET ROWLEY PRIZE PRESENTATION**
Presenter: Jerald Radich (Seattle)
Awardee 2024: Neil P. Shah (San Francisco)

JANET ROWLEY PRIZE: SPECIAL LECTURE (2)
Chair: Jerald Radich (Seattle)

17:00-17:20	What have we learned from treatment resistance?	Neil P. Shah (San Francisco)
17:20-17:25	*Discussion*	

17:30-19:00 ***Mentored Poster Walk 2***

- *Biology Poster Walk Leaders: Mirle Schemionek-Reinders (Aachen), Deborah White (Adelaide)*
- *Clinical Poster Walk Leaders: Hemant Malhotra (Jaipur), Daniela Žáčková (Brno)*

Sunday, September 29, 2024

07:00-08:00 John Goldman charity Fun Run, organized by the iCMLf (Pre-registration required)

WORKSHOP FOR NON-CLINICAL SCIENTISTS #2: Spatial Transcriptomics
Chairs: Mhairi Copland (Glasgow), Sin Tiong Ong (Singapore)

09:00-09:05	Introduction	
09:05-09:30	Insights from the molecular mapping of gastrointestinal cancer in space and time	Nigel Jamieson (Glasgow)
09:30-09:40	*Discussion*	
09:40-10:05	Multiplexing spatial transcriptomics, 4D in situ intravital data and 3D imaging to define bone marrow microenvironments in inflammation and blood cancer	Edwin Hawkins (Melbourne)

10:05-10:15 *Discussion*

10:15-10:25 Conclusion

SCIENTIFIC SESSION 6: Real World and Pediatric
Chair: Fausto Castagnetti (Bologna)

09:10-09:25	**<u>Keynote Presentation</u>:** Real-world data in CML: does it match what we know from clinical trials?	Valentín García-Gutiérrez (Madrid)
09:25-09:30	*Discussion*	
	Selected Abstracts: *(12' + 3' discussion)*	
09:30-09:45	Impaired longitudinal growth under tyrosine kinase inhibitor therapy - Investigating influencing factors in the German CML-PAED II cohort and the in-vitro effects of asciminib on bone metabolism	Stephanie Sembill (Erlangen)
09:45-10:00	Sex-related differences in CML outcomes in a real-world prospective registry (GQR LMC-NMP)	Lambert Busque (Montreal)
10:00-10:15	Propensity-score matching analysis comparing treatment outcomes of asciminib with ponatinib in later line treatment for chronic myeloid leukemia patients	Dennis Kim (Toronto)

10:15-10:45 Coffee Break

SPECIAL LECTURE (6):
Chair: Shinya Kimura (Saga)

10:45-11:05	Metabolism and drug resistance in acute myeloid leukemia	Jean-Emmanuel Sarry (Toulouse)
11:05-11:10	*Discussion*	

ESH INTERNATIONAL JOHN GOLDMAN RESEARCH AWARD CEREMONY 2024
Chair: Hervé Dombret (Paris)

11:10-11:15	Announcing the Awardee 2024	
11:15-11:25	Exploring the potential role of gut microbiota in improving outcomes of chronic myeloid leukemia patients	Carmen Fava (Turin)
11:25-11:30	*Discussion*	
11:30-11:40	**iCMLf PRIZE PRESENTATION:** **Presenter:** Giuseppe Saglio (Turin) **Awardees 2024:** Vijayalakshmi Venkatesh (Mumbai)	

iCMLf PRIZE: SPECIAL LECTURE (7)
Chair: Giuseppe Saglio (Turin)

11:40-12:00	It takes a village… the Saga of the reinvention of CML	Vijayalakshmi Venkatesh (Mumbai)
12:00-12:05	*Discussion*	

ESH INTERNATIONAL JOHN GOLDMAN RESEARCH AWARD 2021 & 2022: PRESENTATION OF RESULTS
Chair: Hervé Dombret (Paris)

12:05-12:15	Biological significance of BCR-ABL1 clonal hematopoiesis in Ph-positive acute lymphoblastic leukemia (Ph+ ALL): relevance for treatment-free remission	Emmanuelle Clappier (Paris)
12:15-12:20	*Discussion*	
12:20-12:30	Comprehensive and sensitive genomic characterisation of diverse mutation types associated with treatment resistance for patients with CML using an RNA-based model	Naranie Shanmuganathan (Adelaide)
12:30-12:35	*Discussion*	

12:35-12:40 Closing Remarks

MEETING CLOSURE