iCMLf International Chronic Myeloid Leukemia Foundation

ESH EUROPEAN SCHOOL OF HAEMATOLOGY

21st Annual John Goldman Conference on Chronic Myeloid Leukemia: Biology and Therapy

September 12-15, 2019
Palais des Congrès de Bordeaux, France

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

Thursday, September 12, 2019

10:00-13:30	Registration and *Poster Mounting*	
13:30-13:40	**WELCOME**	Jorge Cortes (Houston)
13:40-13:50	**iCMLf - A REVIEW**	Tim P. Hughes (Adelaide)
13:50-14:00	**JANET ROWLEY PRIZE PRESENTATION** **Presenter:** Junia Melo (Adelaide) **Awardee 2019:** Michael Deininger (Salt Lake City)	
14:00-14:20	**JANET ROWLEY PRIZE: SPECIAL LECTURE (1)** **Chair:** Junia Melo (Adelaide) Are we done or are we stuck? Frontiers in Chronic Myeloid Leukemia	Michael Deininger (Salt Lake City)
14:20-15:35	**SCIENTIFIC SESSION 1: TOP SCORING ABSTRACTS 2019** **Chairs:** Simona Soverini (Bologna), Lando Janssen (Nijmegen)	
14:20-14:35	A leukemic stem cell sub-population with insensitivity to BET inhibitors and tyrosine kinase inhibitors in CML	Ram Thakur (Lund)
14:35-14:50	An RNA-based multi-gene next generation sequencing (NGS) technique detects more cancer gene mutations than a DNA-based method for the assessment of patients with CML	Susan Branford (Adelaide)
14:50-15:05	The dysregulated CML stem/progenitor cell secretome alters the polarisation and function of Philadelphia chromosome negative bone marrow niche macrophages	Amy Dawson (Glasgow)
15:05-15:20	TFR4CML – Understanding the perspective of CML patients on stopping treatment	Giora Sharf (Netanya)
15:20-15:35	Individual response of CML patients to TKI dose reduction can reliably identify patients with high risk of molecular relapse after treatment cessation	Ingo Roeder (Dresden)

15:35-16:05	*Coffee Break*	
16:05-17:40	**SCIENTIFIC SESSION 2: STEM CELLS AND THE MICROENVIRONMENT** **Chair:** Catriona Jamieson (San Diego)	
16:05-16:25	**Keynote presentation** Deciphering the molecular and functional complexity of pre-leukemic and leukemic stem cells in CML	Peter Valent (Vienna)
	Selected Abstracts	
16:25-16:40	DYRK2 activity impairs the maintenance of CML stem/ progenitor cells	Daniel Lacorazza (Houston)
16:40-16:55	Lipid Raft-associated proteins on leukaemia cells and their importance for interactions with the bone marrow microenvironment	Raquel Pereira (Frankfurt)
16:55-17:10	Specific and targetable interactions with the bone marrow microenvironment govern outcome in imatinib-resistant CML	Rahul Kumar (Frankfurt)
17:10-17:25	Degrading BRD4 as a novel therapeutic approach to overcome multiple forms of LSC resistance in CML	Barbara Peter (Vienna)
17:25-17:40	Investigation of tunneling nanotubes induced by interferon alpha and tyrosine kinase inhibitors in CML	Maria Omsland (Bergen)
17:40	**Poster Viewing and Welcome Get-Together**	

Friday, September 13, 2019

08:00-10:00	**WORKSHOP FOR NON-CLINICAL SCIENTISTS #1: METABOLISM/MITOCHONDRIAL FUNCTION IN HSC AND LSC** **Chairs:** Daniela S. Krause (Frankfurt) and Vignir Helgason (Glasgow)	
08:00-08:05	Introduction	Daniela S. Krause (Frankfurt) Vignir Helgason (Glasgow)
08:05-08:30	The role of metabolism in cancer metastasis	Sarah-Marie Fendt (Leuven)
08:30-08:40	Discussion	
08:40-09:05	Fueling T cells against cancer	Jeffrey Rathmell (Nashville)
09:05-09:15	Discussion	
09:15-09:40	Metabolic requirement for hematopoietic stem cell fate, and its implication in the management of hematological malignancies	Keisuke Ito (New York)
09:40-09:50	Discussion	
09:50-10:00	Conclusion	

08:00-10:00 **SATELLITE SYMPOSIUM:**
ANTICIPATE YOUR NEXT MOVE IN CML PATIENTS RESISTANT OR INTOLERANT TO A 2G TKI
Chairs: Dragana Milojkovic (London), Francois-Xavier Mahon (Bordeaux)
Speakers: Susan Branford (Adelaide), Simona Soverini (Bologna), Gianantonio Rosti (Bologna)

This educational symposium is organized and funded by Incyte Biosciences

10:00-10:30 *Coffee Break*

10:30-11:30 **SCIENTIFIC SESSION 3: MECHANISMS OF RESISTANCE AND DISEASE PROGRESSION**
Chair: Kimmo Porkka (Helsinki)

Selected Abstracts

10:30-10:45	NF-kappa B-dependent proteasome activation as a mechanism of resistance to imatinib	Anna Eiring (El Paso)
10:45-11:00	Identification of protein-protein interactions necessary for maintenance of BCR-ABL signaling complex	Tomas Gregor (Brno)
11:00-11:15	Mass cytometry analysis of therapy induced alterations in signal transduction in suboptimal imatinib responders switching to nilotinib combined with Pegifn-α2b	Stein-Erik Gullaksen (Bergen)
11:15-11:30	A mutation acquisition conferring resistance of CML cells to TKI is a random process allowed by error-prone DNA reparation	Nikola Curik (Prague)

11:30-11:50 **SPECIAL LECTURE (2):**
Chair: Rüdiger Hehlmann (Mannheim)

Perspectives on the development of TKI and its impact on our current understanding of CML — Brian Druker (Portland)

11:50-12:00 **SESSION LEUKA-ESH: LEUKA INTERNATIONAL SCHOLARSHIP AWARD CEREMONY**
Chairs: Hervé Dombret (Paris), Nick Cross (Southampton)
Awardees 2019: Amani Al Outa (Beirut), Amy Dawson (Glasgow), Stein-Erik Gullaksen (Bergen), Rahul Kumar (Frankfurt), Quoc Thanh Nguyen (Ho Chi Minh), Raquel Pereira (Frankfurt), Lu Yu (Beijing)

12:00-14:00 *Lunch and Poster Viewing*

12:20-13:50 **SATELLITE SYMPOSIUM:**
PERSPECTIVES ON SCIENTIFIC ADVANCES AND INNOVATION IN CML
Chairs: François-Xavier Mahon (Bordeaux), Timothy P. Hughes (Adelaide)
Speakers: François-Xavier Mahon (Bordeaux), Susanne Saussele (Heidelberg), Timothy P. Hughes (Adelaide) Jerald Radich (Seattle)

This educational symposium is organized and funded by Novartis

14:00-15:20	**SCIENTIFIC SESSION 4: IMMUNOLOGY AND INFLAMMATION** **Chair:** Richard Clark (Liverpool)	
14:00-14:20	**Keynote presentation** The immune milieu of CML and its consequences	Agnes Yong (Adelaide)
	Selected Abstracts	
14:20-14:35	Increased immune effectors coupled with decreased immune suppressors strongly predict treatment-free remission in CML	Yazad Irani (Adelaide)
14:35-14:50	Loss of Abelson interactor-1 is linked to inflammatory hematopoiesis and accelerated aging of hematopoietic system	Max Petersen (Providence)
14:50-15:05	Inferring immunological control mechanisms from TKI dose alterations in CML patients	Ingmar Glauche (Dresden)
15:05-15:20	The 14q32.31 MIR300 DLK1-DIO3 oncosuppressor induces CML and AML cancer stem cell quiescence and inhibits NK cell immunity	Danilo Perrotti (Baltimore)
15:20-15:50	***Coffee Break***	
15:50-16:10	**SPECIAL LECTURE (3):** **Chair:** Jane Apperley (London)	
	Novel ways to activate and target NK cells with specificity to leukemia: from individual to off-the-shelf products	Jeff Miller (Minneapolis)
16:10-17:30	**SCIENTIFIC SESSION 5: MECHANISMS OF RESISTANCE AND NEW TARGETS** **Chair:** Nick Cross (Southampton)	
16:10-16:30	**Keynote presentation** Integrative phosphoproteome and interactome analysis identifies Sts-1 (UBASH3B) phosphatase as a tumor suppressor and possible therapeutic target in CML and Ph+-ALL	Oliver Hantschel (Lausanne)
	Selected Abstracts	
16:30-16:45	Prevalence, dynamics and clinical impact of BCR-ABL independent gene mutations in chronic phase CML patients	Thomas Ernst (Jena)
16:45-17:00	Two stones for one bird: combining asciminib and ponatinib to target clinically problematic BCR-ABL1 compound mutants	Thomas O'Hare (Salt Lake City)
17:00-17:15	Aurora kinase a/MDM2-mediated SETD2 loss of function in CML patients in blast crisis can be therapeutically targeted	Manuela Mancini (Bologna)
17:15-17:30	Validation of a drosophila model of wild type and T315I mutated BCR-ABL1 in CML: an effective platform for treatment screening	Amani Al Outa (Beirut)

17:30-17:45 **THE JOHN GOLDMAN AWARD CEREMONY**
Presenter: Hervé Dombret (Paris)
Awardee 2019: Ilaria S. Pagani (Adelaide)
Use of machine learning to integrate clinical data and biomarkers to optimize prediction of TFR

17:45 ***Mentored Poster Walk 1***

Biology Poster Walk Leaders: Bing Carter (Houston) and Katerina Machova (Prague)
Clinical Poster Walk Leaders: Bob Gale (London) and Gianantonio Rosti (Bologna)

Saturday, September 14, 2019

08:00-10:00	**SPECIAL SYMPOSIUM** **Mechanisms of Resistance to Target-Specific Agents** **Chairs:** Giovanni Martinelli (Bologna), Mhairi Copland (Glasgow)	
08:00-08:10	Welcome and introduction	
08:10-08:22	*TKI resistance in CML: is it all about mutations*	Michael Deininger (Salt Lake City)
08:22-08:27	Discussion	
08:27-08:39	*Elucidating mechanisms of response and resistance to mutant IDH inhibitors*	Andrew Intlekofer (New York)
08:39-08:44	Discussion	
08:44-08:56	*Mechanisms of resistance to FLT3 inhibitors and how to overcome them*	Neil Shah (San Francisco)
08:56-09:01	Discussion	
09:01-09:13	*Leucegene approach to decipher AML chemosensitivity: insights into Venetoclax sensitivity*	Guy Sauvageau (Montreal)
09:13-09:18	Discussion	
09:18-09:30	*How lymphoid malignancies escape CART cells*	Andrei Thomas-Tikhonenko (Philadelphia)
09:30-09:35	Discussion	
09:35-10:00	General Discussion	

10:00-10:30 ***Coffee Break***

10:30-10:50 **TESSA HOLYOAKE MEMORIAL LECTURE: SPECIAL LECTURE (4)**
Chair: Franck Nicolini (Lyon)

Heterogeneity and lineage restriction within the hematopoietic stem cell compartment — Sten Eirik Jacobsen (Stockholm)

10:50-11:32 **BRIEF ORAL COMMUNICATIONS (BIOLOGY)**
Chair: Tomasz Skorski (Philadelphia)

10:50-10:57 Large amplicon droplet digital PCR for DNA-based monitoring of pediatric CML — Markus Metzler (Erlangen)

10:57-11:04	CXCR4-LASP1 interaction – differences between breast cancer and CML	Jochen Frietsch (Jena)
11:04-11:11	Targeting CML progenitor cells using immunoliposome conjugated begelomab	Mohammad Houshmand (Turin)
11:11-11:18	Mitochondrial metabolism: a key factor in the response of chronic myeloid leukemic cells upon exposure to tyrosine kinase inhibitors	Anne Trinh (Lille)
11:18-11:25	BMPR1B and JAK2/STAT3 inhibition targets BMP4-niche mediated leukemic stem cells that persist during CML remission	Sylvain Lefort (Lyon)
11:25-11:32	Aberrant DNA Methylation is associated with differential gene expression in immature cells CD34+ CD15- from patients with primary Chronic Myeloid Leukemia.	Thomas Tassin (Clermont-Ferrand)
11:32-12:07	**BRIEF ORAL COMMUNICATIONS (CLINICAL)** **Chair:** Juan Luis Steegmann (Madrid)	
11:32-11:39	High platelet counts and bleeding signs due to acquired Von Willebrand syndrome at diagnosis of pediatric CML	Meinolf Suttorp (Dresden)
11:39-11:46	Duplex sequencing for ultra-low frequency mutation detection in hematological malignancies	Jake Higgins (Seattle)
11:46-11:53	Kinetics of molecular recurrence after treatment-free remission-eligible patients in chronic phase CML	Vincent Alcazer (Lyon)
11:53-12:00	Tyrosine kinase inhibitors discontinuation in CML patients: a meta-analysis of studies over the last 10 years	Stephanie Dulucq (Bordeaux)
12:00-12:07	Activity patterns in fatigued and non-fatigued CML patients using tyrosine kinase inhibitor therapy	Lando Janssen (Nijmegen)
12:07-14:00	*Lunch and Poster Viewing*	

12:30-13:30	**CONCURRENT MEET-THE-EXPERT SESSIONS (Pre-registration required)**	
	How I Treat CML	Tim P. Hughes (Adelaide)
	TKI cardiovascular toxicity	Jeff Lipton (Toronto) and Michael Mauro (New York)

14:00-14:45	**SCIENTIFIC SESSION 6: BIOMARKERS** **Chair:** Joelle Guilhot (Poitiers)	
	Selected Abstracts	
14:00-14:15	Genotypes of the gene encoding the membrane transporter SLC22A4 are associated with molecular relapse-free survival after discontinuation of imatinib therapy in patients with CML	Katerina Machova (Prague)

14:15-14:30	Late relapses after TKI-discontinuation are not uncommon and exhibit different kinetics as compared to early relapses – a preliminary report from after–SKI	Johan Richter (Lund)
14:30-14:45	CIP2A: its validation as a predictive biomarker of subsequent progression to blast crisis in CML	Claire Lucas (Liverpool)
14:45-15:15	***Coffee Break***	
15:15-15:35	**SPECIAL LECTURE (5):** **Chair:** Rick Van Etten (Irvine)	
	Adaptive Oncogenesis	James DeGregori (Denver)
15:35-16:55	**SCIENTIFIC SESSION 7: THERAPEUTIC INTERVENTIONS** **Chair:** Michele Baccarani (Bologna)	
15:35-15:55	**Keynote presentation** 20 years of TKI therapy in CML: What have we learned?	Charles Schiffer (Detroit)
	Selected Abstracts	
15:55-16:10	Final analysis of the French phase III spirit trial investigating doses of imatinib and combination strategies	François Guilhot (Poitiers)
16:10-16:25	Combination of asciminib+imatinib in previously treated CML patients: phase 1 study results	Tim P. Hughes (Adelaide)
16:25-16:40	Combination of asciminib+nilotinib or asciminib+dasatinib in previously treated CML patients: phase 1 study results	Delphine Réa (Paris)
16:40-16:55	Efficacy and safety of bosutinib by Charlson Comorbidity Index in previously treated patients with CML: results from the phase 4 BYOND study	Carlo Gambacorti-Passerini (Monza)
16:55-17:05	**JOHN GOLDMAN PRIZE PRESENTATION** **Presenter:** Brian Druker (Portland) **Awardee 2019:** François-Xavier Mahon (Bordeaux)	
17:05-17:25	**JOHN GOLDMAN PRIZE: SPECIAL LECTURE (6)** **Chair:** Brian Druker (Portland)	
	Curing CML: To be, or not to be, that is the question	François-Xavier Mahon (Bordeaux)
17:25	***Mentored Poster Walk 2***	

Biology Poster Walk Leaders: Bing Carter (Houston) and Katerina Machova (Prague)
Clinical Poster Walk Leaders: Bob Gale (London) and Gianantonio Rosti (Bologna)

Sunday, September 15, 2019

07:00-08:00	**JMG CML FUN RUN** (Pre-registration required) *Get your Sunday going strong when you join us for an early 5km run, around Bordeaux Lake facing the Congress Center.*

08:30-10:30	**WORKSHOP FOR NON-CLINICAL SCIENTISTS #2: ROLE OF INFLAMMATION IN CML/MPNs** **Chairs:** Tim Brümmendorf (Aachen), Rebekka Schneider-Kramann (Rotterdam)	
08:30-08:35	Introduction	Tim Brümmendorf (Aachen), Rebekka Schneider-Kramann (Rotterdam)
08:35-09:00	Homeostatic interferon priming in haematopoietic stem cells	Marieke Essers (Heidelberg)
09:00-09:10	*Discussion*	
09:10-09:35	Gli1 and stromal cells in MPN	Rebekka Schneider-Kramann (Rotterdam)
09:35-09:45	*Discussion*	
09:45-10:10	The role of interferon and other inflammatory cytokines in the pathogenesis and treatment of CML/MPN	Steffen Koschmieder (Aachen)
10:10-10:20	*Discussion*	
10:20-10:30	Concluding Remarks	
08:50-10:40	**SCIENTIFIC SESSION 8: TREATMENT-FREE REMISSION** **Chair:** Susanne Saussele (Heidelberg)	
08:50-09:10	**Keynote presentation** A report on 114 patients who experienced treatment free remission in a single institution during a 15 years period: long term follow-up, late relapses and second attempts.	Philippe Rousselot (Versailles)
	Selected Abstracts	
09:10-09:25	Single-cell roadmap of the evolution of T cell and NK cell Response after tyrosine kinase inhibitor discontinuation	Satu Mustjoki (Helsinki)
09:25-09:40	Very long-term follow-up of stop imatinib-1 (STIM 1) study	Gabriel Etienne (Bordeaux)
09:40-09:55	Lineage of residual BCR-ABL1-positive cells in CML patients in treatment-free remission	Ilaria S. Pagani (Adelaide)
09:55-10:10	Treatment-free remission (TFR) in CML in 2006 to 2013: a comprehensive population-based study	Jim Canet (Bordeaux)
10:10-10:25	Brazilian experience in imatinib discontinuation: report of two trials	Katia Pagnano (Campinas)
10:25-10:40	Treatment-free remission (TFR) in patients with CML in chronic phase (CML-CP) and deep molecular response (DMR) to dasatinib: 2-Year DASFREE update	Neil Shah (San Francisco)

10:40-10:50	**iCMLf PRIZE PRESENTATION:** **Presenter:** Jorge Cortes (Houston) **Awardee 2019:** Carolina Pavlovsky (Buenos Aires)	
10:50-11:10	**iCMLf PRIZE: SPECIAL LECTURE (7)** **Chair:** Jorge Cortes (Houston)	
	CML monitoring and treatment discontinuation in emerging regions: from clinical trials to clinical practice, are we there yet ?	Carolina Pavlovsky (Buenos Aires)
11:10-11:30	***Pharmacoeconomics*** **Chair:** Andreas Hochhaus (Jena)	
	The long-term impact of TFR on economics	François-Xavier Mahon (Bordeaux)
	Budget impact analysis of discontinuing Tyrosine Kinase Inhibitors in patients with chronic myeloid leukemia achieving a complete molecular response by using probabilistic Markov approach	Antoine Benard (Bordeaux)
11:30-12:30	**CONCURRENT MEET-THE-EXPERT SESSIONS (Pre-registration required)**	
	Treatment free remission	Shinya Kimura (Saga) and Neil Shah (San Francisco)
	Hematopoietic stem cell heterogeneity	Sten Eirik Jacobsen (Stockholm)
	CAR-T cells: the present and the future	Andrei Thomas-Tikhonenko (Philadelphia)
12:30	***Meeting Adjourned***	