



**SATURDAY, DECEMBER 9, 2017**

**5:30PM-7:30PM**

**631. Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy: Poster I**

***Saturday, December 9, 2017: 5:30 PM-7:30 PM***

***Bldg A, Lvl 1, Hall A2 (Georgia World Congress Center)***

Program: Oral and Poster Abstracts. Type: Poster  
Hematology Disease Topics & Pathways: Adult, apoptosis, antibodies, Biological, Diseases, Therapies, CML, Mechanisms, Technology and Procedures, epigenetics, Study Population, Clinically relevant, hematopoiesis, Myeloid Malignancies, flow cytometry, TKI, NGS, RNA sequencing, signal transduction

1581 Nilotinib/Interferon- $\alpha$  Combination Rapidly Enhances Leukaemia-Associated Antigen-Specific Cytotoxic T-Lymphocyte Immune Responses, Limits Natural Killer Cell Maturation and Triggers B Cell Remodelling

1582 ABL001 with Catalytic-Site Inhibitors Limit the CML Immature Cell Population: Re-Differentiation of CML-iPSCs Study

1583 Role of Signal Transducing Adaptor Protein (STAP) Family in Chronic Myelogenous Leukemia

1584 CXCL12-Expressing Bone Marrow Niches Differentially Regulate CML Compared to Normal Stem Cells

1585 Mutation Screening at Diagnosis Reveals a High Frequency of ASXL1 Mutations in CML Patients Who Fail to Achieve Molecular Remission Criteria after One Year of TKI Treatment

1586 Allosteric Bcr-Abl Inhibitor ABL001 Overcomes Bcr-Abl Tyrosine Kinase Inhibitor Resistance and Enhances MDM2 Inhibitor CGM097 Activity in Blast Crisis CML Cells

1587 Role of Somatic Mutations in Clonal Evolution of Chronic Myeloid Leukemia from Chronic Phase to Blast Phase

1588 Targeting WEE1 Kinase after G2/M Checkpoint Arrest Induces Apoptosis in Chronic Myeloid Leukemia Progenitors



## **632. Chronic Myeloid Leukemia: Therapy: Poster I**

**1589** An e13a2 Type of BCR-ABL Transcript Has a Significant Adverse Impact on the Achievement of a Sustained Deep Molecular Response and on the Maintenance of a Treatment Free Remission after Stopping Tyrosine Kinase Inhibitors

**1590** Long-Term Cardiac, Vascular and Hypertensive Safety of Bosutinib in Patients with Philadelphia Chromosome-Positive (Ph+) Leukemia Resistant or Intolerant to Prior Therapy

**1591** Impact of BCR-ABL Tyrosine Kinase Inhibitors on Atherosclerosis Plaque Rupture

**1592** In Vitro Effects of BCR-ABL Tyrosine Kinase Inhibitors on Endothelial Cells Survival and Functions

**1593** Very Early Molecular Response at 1 Month Is a Predictor of the Outcome of Chronic Phase Chronic Myeloid Leukemia Patients Treated with Tyrosine Kinase Inhibitors

**1594** Long-Term Outcome of CML Patients Treated with Second-Generation Tyrosine Kinase Inhibitors in the Second Line: A Single Center Experience

**1595** Pilot Study of Imatinib Discontinuation in Patients with Chronic Myeloid Leukemia with Deep Molecular Response (EDI-PIO) – Evaluation of Pioglitazone in Treatment-Free Remission

**1596** E14a2 and e14a2+e13a2 BCR-ABL Transcripts Are Associated with Earlier Cytogenetic and Molecular Response Rates in CML-CP Treated with Imatinib

**1597** Long-Term Follow-up of the ALLG CML8 Twister Study of Treatment-Free Remission (TFR) in Patients with Chronic Myeloid Leukemia (CML)

**1598** Impact of Treatment Cessation on Overall Disease Outcomes in Patients with Chronic Myeloid Leukemia in Chronic Phase (CML-CP) Attempting Treatment-Free Remission (TFR): Findings from Enestfreedom and Enestop

**1599** Dynamics of Methylation Profiling in Response to Tyrosine Kinase Inhibitor Therapy in Chronic Myeloid Leukemia

**1600** Long-Term Outcome in Children and Adolescents with Chronic Myeloid Leukemia in Chronic Phase Treated with High-Dose Imatinib. the Italian Experience



**1601** Molecular Recurrence-Free Survival (MRecFS) Following Imatinib Vs. Nilotinib in Patients with Chronic Myeloid Leukemia in Chronic Phase (CML-CP): Matched Analysis of Patients in EURO-SKI and Enestfreedom

**1602** Plasma Fms-Related Tyrosine Kinase 3 Ligand (Flt3L) Levels at Diagnosis Correlate with Treatment Response in Chronic Myeloid Leukemia

**1603** Comparison of Molecular Responses between e14a2 and e13a2 *BCR-ABL1* Transcripts in Patients with Chronic Myeloid Leukemia in Chronic Phase Treated with Front-Line Second Generation Tyrosine Kinase Inhibitors: Taiwan CML Study

**1604** First-Line Dasatinib in BCR-ABL1+ Chronic Myeloid Leukemia in Early Chronic Phase: A Gimema Prospective Multicentric Observational Study

**1605** Variables Associated with Patient-Reported Symptoms in Patients with Chronic Myeloid Leukemia Receiving Tyrosine Kinase Inhibitors

**1606** Second Generation Tyrosine Kinase Inhibitors (2G-TKI) in the Frontline Treatment of Elderly Patients with Chronic Myeloid Leukemia

**1607** Outcomes after Sequential Tyrosine Kinase Inhibitors Treatment in Chronic Phase Chronic Myeloid Leukemia

**1608** RIZ1 Gene Promoter Methylation Increases with Progression of Chronic Myeloid Leukaemia to Advanced Phases

**1609** Incidence of Secondary Malignancies in Patients with Chronic Myeloid Leukemia in Chronic Phase (CML-CP) in the Era of Tyrosine Kinase Inhibitors (TKI)

**1610** Xpert<sup>®</sup> BCR-ABL Ultra, a High Sensitivity Assay, Demonstrates a Limit of Detection Reaching MR4.5 and below

**1611** Evaluating the Role of Lower Dose Dasatinib in Newly Diagnosed Early Chronic Phase-Chronic Myeloid Leukemia (CML-CP)

**1612** Changes in RT-qPCR Levels during and after TKI Interruptions for Attempted Conceptions in Women with CML

**1613** Dasatinib-Induced Lymphocyte Elevation and Imbalance of *T Cell Receptor V Beta* Gene Expression in Chronic Phase Chronic Myelogenous Leukemia Patients

**1614** ABCG2 but Not ABCB1 RNA Levels at Diagnosis and during Treatment Correlates with Response to Imatinib and 2G-Tkis Front-Line Therapy in Chronic Phase CML Patients



**1615** Imatinib (IM) in Combination with Hydroxyurea Showed Significantly Lower Major Molecular Response Rates at 6 Months but Similar MMR at 18 Months in Patients with CML1st CP Compared to IM Alone. Final Results of the CML2004 Study. NCT 02480608

**1616** Observational Study of CML Italian Patients Who Discontinued TKIs

**1617** Efficacy and Safety of Ponatinib in Chronic Phase-Chronic Myeloid Leukemia (CP-CML) According to the Extent of Treatment with Prior Tyrosine Kinase Inhibitors (TKIs): Final (5-Year) Results of the PACE Study

**1618** Bosutinib Vs Imatinib for Newly Diagnosed Chronic Myeloid Leukemia in the BFORE Trial: Results By 3-Month *BCR-ABL1* Transcript Level

**1619** Cardiovascular Scoring and Age-Related Mutations Predict the Occurrence of Adverse Vascular Events in CML Patients during Nilotinib Therapy

**1620** Bosutinib in Newly Diagnosed Chronic Myeloid Leukemia (CML): Gastrointestinal (GI), Liver, and Hematological Safety Characterization in the BFORE Trial

**1621** Cumulative Incidence of Treatment-Free Remission (TFR) for Patients with Chronic Myeloid Leukemia (CML): The Adelaide Experience

**1622** Interim Results of the Canadian Tyrosine Kinase Inhibitor Discontinuation Trial for 2<sup>nd</sup> Attempt of Treatment Free Remission: Treatment Free Remission Accomplished By Dasatinib (TRAD)

**1623** Survival Outcome of Secondary Solid Cancer in Patients with Chronic Myeloid Leukemia

**1624** A Conservative Tailoring of Ponatinib Dose in Chronic Myeloid Leukemia Patients Can Diminish Adverse Events While Maintaining Efficacy

**1625** Arterial Thrombotic Events in CML Patients Treated with First-Line Nilotinib: Incidence, Management and Impact on the Long Term Outcome - a Gimema CML WP Analysis

**1626** Evaluation of an Automated Immunoassay for Quantification of Imatinib in Plasma

**1627** Altered Expression of *Pdgfra* and Its Downstream Signalling Components May be Causal in the Development of Imatinib Induced Thrombocytopenia in CML Patients Receiving Imatinib Treatment

**1628** 10-Year Outcome of Chronic Myeloid Leukemia Patients Resistant to Frontline Imatinib



**1629** Identification of a 'Safe Haven' for RT-qPCR Responses in CML: Can We Reduce the Frequency of Molecular Monitoring?

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**SUNDAY, DECEMBER 10, 2017**

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**6:00 PM-8:00 PM**

**631. Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy: Poster II**

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Program: Oral and Poster Abstracts Type: Poster

**Sunday, December 10, 2017: 6:00 PM-8:00 PM**

**Bldg A, Lvl 1, Hall A2 (Georgia World Congress Center)**

**2860** Telomerase Inhibition Impairs Self-Renewal of  $\beta$ -Catenin Activated Myeloproliferative Neoplasm Progenitors, **Wenxue Ma, MD, PhD**

**2861** Splenic Red Pulp Macrophages Provide a Secondary Stem Cell Niche for Chronic Myeloid Leukemia Stem Cells, **Elias D Bührer, MD**

**2862** Bcr-Abl1 Kinase-Independent Upregulation of Fc $\gamma$ RIIb Mediates Malignant Signaling That Is Critical for Leukemogenesis, **Mirle Schemionek, PhD**

**2863** IFN- $\alpha$  Upregulates the Expression of C/EBP $\beta$  and Induces Myeloid Differentiation and Exhaustion of CD34<sup>+</sup> CML Stem Cells, **Asumi Yokota, PhD**

**2864** Characterization of ABL Compound Mutation Using Sanger and Subcloning Sequencing in Tyrosine Kinase Inhibitor Resistant Chronic Myeloid Leukemia, **Sukjoong Oh, MD, PhD**

**2865** *Hoxa9* and *Hoxa10* Induce CML Myeloid Blast Crisis Development through Activation of *Myb* Expression, **Bandana Ajay Vishwakarma, BSc, MSc, PhD**

**2866** Association between 9p21 Chromosome Polymorphisms rs1333040 and rs7865618 and Chronic Myeloid Leukemia, **Federica SORA, MD $\phi$**

**2867** Standardization of Two Dpcr Platforms for Detection of BCR/ABL1 - Minimal Residual Disease (MRD) in Ph<sup>+</sup> Chronic Myeloid Leukemia (CML), **Carmen Fava, MD, PhD**



## 632. Chronic Myeloid Leukemia: Therapy: Poster II

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Program: Oral and Poster Abstracts Type: Poster

**Sunday, December 10, 2017: 6:00 PM-8:00 PM**

**Bldg A, Lvl 1, Hall A2 (Georgia World Congress Center)**

**2868** Isolated Extramedullary (EMD) Blastic Transformation of Chronic Myeloid Leukemia (CML-BP) in the TKI Era: Characteristics, Treatments and Outcomes

**Ahmad Ghorab, MD, MSc**

**2869** Comparative Risk Assessment of Imatinib, Nilotinib and Dasatinib in Randomized Controlled Trials: A Meta-Analysis, **Ahmad Ghorab, MD, MSc**

**2870** *Imatinib Suspension and Validation Study: Results from the Isav Study at 62 Months*, **Silvia Mori, PhD**

**2871** Atherosclerotic Arterial Disease-Related Mortality in Chronic Myeloid Patients Treated with Tyrosine Kinase Inhibitors **Remco J Molenaar**

**2872** No Excess Risk of Second Malignancies in Chronic Myeloid Leukemia (CML) Patients Treated with Tyrosine Kinase Inhibitors (TKIs), **Lilian Iglesias**

**2873** The Impact of Early Molecular Response at 3 Months on Long-Term Survival Was Enhanced in the CP CML Patients Treated with Second-Generation Tyrosine Kinase Inhibitors

**Sung-Eun Lee, MD**

**2874** Sample Exchange to Standardize Molecular Monitoring for CML: The EUTOS Experience

**Martin C. Müller, MD**

**2875** Results from Enestgoal: A Phase 2 Study of Treatment-Free Remission (TFR) in Patients (pts) with Chronic Myeloid Leukemia in Chronic Phase (CML-CP) Who Switched from Imatinib to Nilotinib, **Ellen K Ritchie, MD**



**2876** Comparison of the Outcome between Newly Diagnosed Patients in the Accelerated Phase and Chronic Phase with Chronic Myeloid Leukemia Treated with Frontline Tyrosine Kinase Inhibitors, ***Qian Jiang, MD***

**2877** Association of Tyrosine Kinase Inhibitors with Vascular Adverse Events: A Cohort Study Using Pooled Electronic Health Record, ***Olivia Copelan, BA***

**2878** Treatment-Free Remission (TFR) Among Patients (pts) with Chronic Myeloid Leukemia in Chronic Phase (CML-CP) Not Initially Eligible for Treatment Discontinuation Due to Unstable Deep Molecular Response (DMR): Enestfreedom and Enestop, ***Timothy P. Hughes, MD***

**2879** Delayed Expansion of Murine BCR-ABL1<sup>+</sup> Leukemia By Genetic and Pharmacological Inhibition of NOX2, ***Anna Martner, PhD<sup>1</sup>***

**2880** Dasatinib Induced Reversible Nephrotic Range Proteinuria Occurs More Frequently Compared to Other Tyrosine Kinase Inhibitors in the Treatment of Chronic Myeloid Leukemia, ***Ali Alahmari, MD***

**2881** Management of Chronic Myeloid Leukemia (CML) during Pregnancy Among Patients (pts) Treated with a Tyrosine Kinase Inhibitor (TKI): A Single-Center Experience, ***Rita Assi, MD***

**2882** Response and Outcomes of Third-Line Tyrosine Kinase Inhibitor Therapy on Patients with Chronic Phase Chronic Myeloid Leukemia, ***Maliha Khan***

**2883** The Potential of Exosomes Derived from Chronic Myelogenous Leukemia Cells As Biomarker Based on the BCR-ABL mRNA Transcript, ***Ka-Won Kang, MD***

**2884** Role of Erythropoietin in the Late Anemia of Patients with Chronic Myeloid Leukemia Treated Frontline with Imatinib, ***Laura Cesini***

**2885** Impact of Tyrosine-Kinase Inhibitors (TKIs) on Primary Hemostasis – Evaluation of Effects *In Vitro*, ***Ralf Knoefler, MD***





**2886** Discovery of Novel Mutations Exclusively Shared By Accelerated and Blast Crisis Phase CML Patients Using Whole Exome Sequencing: Implication in Hunt for Common Biomarker /Drug Target of CML Progression, ***Psmh Pakistan Society For Molecular and Clinical Hematology***

**2887** Concomitant Medications and Comorbidities Affect Early Response in CML Patients Treated with Imatinib: A Retrospective Analysis of 340 Patients from the Polish Adult Leukemia Group (PALG) Registry, ***Joanna Gora Tybor***

**2888** Hepatitis B Virus Seropositivity in Chronic Myeloid Leukemia Patients Receiving Tyrosine Kinase Inhibitors: Preliminary Results of a Single-Center Cross-Sectional Study, ***Nurgul Ozgur Yurttas, MD***

**2889** Preliminary Experience of Imatinib after Nilotinib in the First Line Treatment of Chronic Myeloid Leukemia, ***Ester Pungolino***

**2890** Assessment of Standardization and International Scale (IS) Alignment Efforts of BCR-ABL1 Testing By the Chinese CML Alliance in an International External Quality Assessment Program, ***Ya-Zhen Qin***

**2891** Comparison of Digital PCR and Quantitative Pcr for Molecular Monitorization of Chronic Myeloid Leukemia Patients, ***Juan Manuel Alonso Dominguez, MD, PhD, MSc***

**2892** The Target UK Study: Real-World Evidence of Molecular Response to Tyrosine Kinase Inhibitors Supports European Leukemianet 2013 Recommendations for the Management of Chronic Myeloid Leukaemia, ***Adam J Mead, MD, PhD<sup>12</sup>***

**2893** Echocardiographic Findings in Patients (pts) Receiving Tyrosine Kinase Inhibitors (TKIs) for the Treatment of Chronic Myeloid Leukemia (CML), ***Jorge E. Cortes, MD<sup>1</sup>***

**2894** Cytogenetic and Molecular Responses after 2 Years of Tyrosine Kinase Inhibitor (TKI) Treatment in Simplicity, an Observational Study of Chronic-Phase Chronic Myeloid Leukemia (CP-CML) Patients (Pts) in Routine Clinical Practice, ***Jorge E. Cortes, MD***



**2895** Bosutinib Versus Imatinib for Newly Diagnosed Chronic Myeloid Leukemia: 12-Month Patient-Reported Outcomes from the BFORE Trial, **Jorge E. Cortes, MD**

**2896** Arterial Occlusive Events (AOEs) in the Phase 2 Ponatinib PACE Trial: 5-Year Update in Heavily Treated Patients (Pts) with Chronic-Phase Chronic Myeloid Leukemia (CP-CML), **Jorge E. Cortes, MD**

**2897** Treatment Characteristics and Deep Molecular Response in Chronic Phase – Chronic Myeloid Leukemia Patients Treated with Second-Line Nilotinib or Dasatinib: A Multi-Country Retrospective Chart Review Study **Jorge E. Cortes, MD**

**2898** Nilotinib in Combination with Pegylated Interferon Alfa-2b for CP-CML Leads to High Molecular Response Rates: Interim Results of the Pinnacle Study, **David Yeung, PhD, BSc, FRACP, FRCPA, MBBS**

**2899** Optimizing Dose of Bosutinib to Minimize Adverse Events While Maintaining Efficacy in Patients with Newly Diagnosed Chronic Myelogenous Leukemia, **May Garrett**

**2900** *Impact of Body Mass Index on Outcome in Patients with Chronic Myeloid Leukemia in Chronic Phase Treated with Imatinib in First-Line*, **Franck Emmanuel Nicolini, MD, PhD**

**2901** *Response to Ponatinib Is Not Related to the Drug Plasma Levels in Chronic Phase CML*  
**Franck Emmanuel Nicolini, MD, PhD**

**2902** Molecular Responses and Outcomes of Pediatric CML Treated with Front-Line Imatinib and a Comparison between Pediatric and Adult Cohorts' **Hsi-Che Liu, MD**

**2903** Results from the U.S. *Life after Stopping TKIs (Last)* Study **Ehab Atallah, MD**



**2904** Both CD4<sup>+</sup>CD25<sup>+</sup>Foxp3<sup>+</sup> Regulatory T Cells and CD3<sup>-</sup>CD56<sup>+</sup> NK Cells Affect the Response of Newly Diagnosed Chronic Myeloid Leukemia Patients to Treatment with a Tyrosine Kinase Inhibitor **Fumihito Tajima, MD**

**2905** A Real Life Evaluation of Efficacy and Safety of Ponatinib Therapy in CML Patients **Luigia Luciano, MD<sup>1</sup>**

**2906** Efficacy and Safety of Generic Imatinib after Switching from Innovator Imatinib in Patients Treated for Chronic Myeloid Leukemia **Iman Aboudalle, MD**

**2907** No Influence of BCR-ABL1 Transcript Types e13a2 and e14a2 on MR4.5 in Patients with Chronic Myeloid Leukemia Treated with Nilotinib Frontline **Alexis Genthon**



**MONDAY, DECEMBER 11, 2017**

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**7:00 AM-8:30 AM**

**631. Chronic Myeloid Leukemia: Biology and Pathophysiology, excluding Therapy: Poster III**

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Program: Oral and Poster Abstracts Type: Poster  
Bldg A, Lvl 1, Hall A2 (Georgia World Congress Center)

**4170** Activation of p53 Enhances Antileukemia Activity of Bcr-Abl Tyrosine Kinase Inhibitors in a Murine Model of CML **Bing Z Carter, PhD**

**4171** Vitamin K3 (menadione) Induces Cytotoxicity in Chronic Myeloid Leukemia Stem Cells By Upregulating DYRK2 through the Inhibition of SIAH2 Ubiquitin Ligase **Chun Shik Park, PhD**

**4172** Pattern of Mutational Changes in Patients with Chronic Phase CML Who Are Treated with Frontline TKI and Transform to Blast Phase CML, **Preetesh Jain, MBBS, MD, DM, PhD**

**4173** Loss of G0S2 in Kinase-Independent TKI Resistance and Blastic Transformation of CML **Anna M. Eiring, PhD**

**4174** Oncogenic Heterogeneous Nuclear Ribonucleoprotein D-like Promotes the Growth of Chronic Myeloid Leukemia Cells through Post-Transcriptional Regulation of Pre-B-Cell Leukemia Homeobox 1, **Dehuan Ji**

**4175** Tumor Suppressor, NORE1A (RASSF5), Is an Icsbp-Dependent Inhibitor of Aberrant Stress Granulopoiesis, **Olatundun Williams, MD**

**4176** An Italian Multicentre Study Using Different Digital PCR Instruments on BCR-ABL1 Positive Patients at Different Levels of CML Disease, **Filomena Daraio, PhD**



4177 Mir-424 and Mir-503 Regulates Cobll1 Expression during the CML Progression

***Seung Hun Han, PhD***

4178 Expression Levels of PD-1 on CD8+ T Cells in Chronic Myeloid Leukemia with and without *BCR-ABL1* kinase Mutation ***Min Young Lee, MD, PhD***