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The Hague, 5 December 2020

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ASH2020 **Abstract Numbers 1077 and 1329**

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New data from HARMONY demonstrate the power of Big Data analytics to inform personalized medicine in blood cancer

— New analytics unveiled critical insights that can improve the treatment of Acute Myeloid Leukemia and Multiple Myeloma
— HARMONY Big Data Platform harnesses the power of data to benefit of patients with blood cancers
— The new data is presented at the 62nd Annual Meeting of the American Society of Hematology (ASH)

The HARMONY Alliance announces new analyses demonstrating how Big Data can facilitate personalized medicine in patients with blood cancers, also known as Hematologic Malignancies. Using data from around 12,000 AML and MM patients comprised in the HARMONY Big Data Platform, the researchers obtained fascinating insights into the molecular basis of Acute Myeloid Leukemia (AML) and developed an improved risk stratification model for Multiple Myeloma (MM). These results are presented during the 62nd American Society of Hematology Annual Meeting.

Harmony Alliance Provides Novel Insights into Acute Myeloid Leukemia Based on a Pan-European NGS Data Collection (abstract 1077 - Bullinger et al)

Lars Bullinger, HARMONY Partner Charité Berlin, Germany:
"We have analyzed genomic data of 4,986 patients with AML. We could confirm the co-occurrence of certain mutations. In addition, we obtained insight into which mutations occur first and which later in the disease process. We have also investigated the association of mutation patterns with clinical outcomes such as remission, relapse, and survival. For instance, many patients with high-risk mutation patterns benefit only little from an allogeneic stem cell transplantation (alloSCT), but we found specific high-risk genotype combinations that predict a much larger survival benefit."

A New Risk Stratification Model (R2-ISS) in Newly Diagnosed Multiple Myeloma: Analysis of Mature Data from 7,077 Patients Collected By European Myeloma Network within Harmony Big Data Platform ([abstract 1329](#) - D'Agostino et al)

Mattia D'Agostino, HARMONY Partner University of Turin, Italy:
"Clinical outcomes for patients with MM vary greatly, with survival ranging from a few months to more than ten years. Investigating data from 7,077 patients with newly diagnosed MM, we discovered that patients who are currently considered as 'intermediate-risk patients' constitute a quite diverse group with varying risk of progression or death. We identified a new prognostic system identifying 4 risk classes. With this model, about half of the patients can be classified as low or low-intermediate risk, and about half of them can be classified as intermediate-high or high risk. Oncologists can use our improved risk stratification model to better estimate patients' prognosis at the time of MM diagnosis. Moreover, this model favors the design of MM treatments tailored according to the individual risk of each patient."

Comprising data from 45,000 patients with [blood cancers](#), makes the HARMONY Big Data Platform one of the largest of its kind in the world. HARMONY scientists use the Platform to characterize the molecular landscape of Hematologic Malignancies, understand their pathophysiology, and identify novel drug targets. Big data analytics has the potential to transform the treatment of patients with blood cancers. The ability to personalize the treatment of a patient based on molecular understanding of a disease or risk stratification will provide treatment strategies in the future to optimize outcomes for the patients.

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More information
— [www.harmony-alliance.eu](#) **| #bigdataforbloodcancer | @HARMONYnetEU**
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