Myelodysplastic syndromes (MDS) encompass a heterogeneous group of clonal hematopoietic disorders, characterized by ineffective hematopoiesis, peripheral blood cytopenias, and a substantial risk of progression to acute myeloid leukemia (AML). Timely diagnosis, accurate prognosis, and optimized treatment are crucial for the management of patients with MDS. With the rapid advancements in technology, Artificial Intelligence (AI) offers a transformative approach in reshaping our understanding and management of MDS.

In this presentation, Dr. Nazha will delve into the transformative role of AI in the management of MDS. He'll explore how AI-powered models enhance the diagnostic precision by analyzing intricate genetic and clinical data and advanced imaging, refine prognostic capabilities by predicting disease progression and transformation to AML, and optimize treatment selection, pinpointing specific therapies tailored to individual patient needs. Moreover, He will venture into the promising frontier of generative AI, which opens an opportunity to use multimodel approach to improve MDS diagnosis and treatment, heralding a new era in MDS and cancer research.