

ADITI SHASTRI, M.D.

Positions:

Associate Professor of Medicine

Associate Professor of Developmental & Molecular Biology

Division of Hematologic Malignancies & Bone Marrow Transplant

Montefiore Medical Center & Albert Einstein College of Medicine

Member, Ruth L. and David S. Gottesman Institute for Stem Cell and Regenerative Medicine

Research (Albert Einstein College of Medicine)

Research interests:

1.Understanding the role of the leukemic stem cells (LSC) in AML & MDS and

therapeutic targeting of STAT3 : Signal Transduction & Activator of Transcription 3 (STAT3), is a transcription factor that is over-expressed in hematologic malignancies and associated with decreased overall survival. We are targeting STAT3 with multiple therapeutic agents with novel mechanisms and have already generated promising preclinical data. We hope to be able to preclinically translate several promising therapies such as antisense inhibition of STAT3 & STAT3 degraders into early phase clinical trials in MDS & AML.

2.Exploring associations between health disparities and adverse genomics in patients with hematologic malignancies We have previously used large genomic datasets of patients with myeloid malignancies to highlight health disparities. We are continuing to explore the relationship of health disparities and how it relates to adverse presentations of hematologic malignancies using large clinical datasets and translational murine models.

Current grant funding:

Leukemia Lymphoma Society
TRP Grant (Shastri, PI)

07/2019-06/2022

Project: Antisense Inhibition of STAT3 As A
Therapeutic Strategy Against Leukemic Stem Cells

MDS Foundation (Shastri, PI)
Young Investigator Grant

9/2021-8/2023

Project: STAT3 Degradation As A Therapeutic
Strategy Against Therapy Resistant MDS

Recent publications (selected):

Shastri A; Will B; Steidl U; Verma A. Stem Cell Alterations In Myelodysplastic Syndromes. *Blood*, 2017 Feb, PMID: 28159737

Darbinyan K*; **Shastri, A***; Budhathoki, A*; Helbig, D; Pradhan K et all. Hispanic Ethnicity is Associated with Younger Age at Presentation and Worse Survival in Acute Myeloid Leukemia. *Blood Advances*. * Equally Contributed 2017 Oct. PMID: 29296859

Shastri A et al. Antisense Inhibition of STAT3 As A Therapeutic Strategy Against MDS & AML Stem Cells. *Journal of Clinical Investigation*, 2018 Dec, PMID: 30252677

Adrianzen Herrera D, Pradhan K, Snyder R, Karanth S, Janakiram M, Mantzaris I, Braunschweig I, Budhathoki A, Shah UA, Verma AK, Murthy SB, **Shastri A**. Myelodysplastic syndromes and the risk of cardiovascular disease in older adults: A SEER Medicare analysis. *Leukemia*. 2019 Dec 16. PMID: 31844145