

# Servier Pharmaceuticals

PRECISION MEDICINE: BIOMARKER DEVELOPMENT



*“In the future, real-time utilization of technologies like Tapestri® can reveal clonal evolution trajectories that may inform adaptive treatment regimens and improve clinical outcomes.”*

**DR. DYLAN MARCHIONE, IDH HEME BIOMARKER LEAD**

---

## ABOUT THE SCIENTIST

As part of the late-stage and lifecycle management group, Dr. Marchione is responsible for biomarker strategy, operations, and analysis across multiple trials in IDH1 mutated heme malignancies and works closely with colleagues across the clinical development, CRO, Academic, and clinical KOL landscape. Currently, he is focused on driving multi-omic analyses of patient samples to better understand the mechanisms of action of TIBSOVO, the first FDA-approved IDH1 inhibitor, and relevant combination therapies, along with mechanisms of primary and acquired resistance.

---

## PROJECT BACKGROUND

AML is a cancer of the blood and bone marrow marked by rapid disease progression and is the most common acute leukemia affecting adults with approximately 20,000 new cases estimated in the U.S. each year. The majority of patients with AML eventually relapse. Relapsed or refractory AML has a poor prognosis. The five-year survival rate is approximately 29.5%. IDH mutations are present in about 6 to 10 percent of AML cases.

Ivosidenib (IVO) is an oral, potent, targeted inhibitor of mutant IDH1 (mIDH1) and is FDA-approved for the treatment of mIDH1 relapsed/refractory (R/R) AML and newly diagnosed (ND) AML in adults  $\geq 75$  years (yrs) of age or with comorbidities precluding intensive induction chemotherapy (IC).

### SAMPLE TYPE:

- Bone marrow aspirates (BMA)
- Bone marrow mononuclear cells (BMMCs)
- Peripheral blood mononuclear cells (PBMCs)

### PANEL:

- Tapestri Single-cell DNA Acute Myeloid Leukemia Panel

### SERVICES:

- End-to-end Pharma Assay Development (PAD) services
- Sample management
- Resuspension and QC of cell suspension
- Encapsulation and barcoding of samples on the Tapestri platform
- Preparation of targeted libraries
- QC of targeted libraries
- Sequencing of pooled libraries
- Fully analyzed report

### ADDITIONAL RESOURCES:

- [Press release](#)
- [Presentation](#)

CONTACT US TO LEARN MORE

info@missionbio.com  
415 854 0058

MISSIONBIO.COM

## TAPESTRI REVEALS CLONAL EVOLUTION AND INFORMS CLINICAL OUTCOMES

Through their continuing collaboration, Servier worked with Mission Bio's Pharma Assay Development (PAD) services to utilize the Tapestri® single-cell DNA sequencing technology to serially assess hundreds of samples from patients with IDH1-mutated AML who have been treated with TIBSOVO.

Three separate studies and the clinical response data were summarized and suggests that better and more durable responses are observed in the setting of monotherapy and patients with newly diagnosed relative to relapse and refractory disease.

Among patients who have newly diagnosed AML, better responses are observed in the setting of the AZA combination relative to IVO monotherapy. Dr. Marchione's goal was to understand what are the underlying molecular processes that explain these distinct clinical outcomes and how to strategically apply biomarker analysis to better understand these responses.

