

# Supercharge Your AML Drug Development



A JSR Life Sciences Company

**FACTSHEET**

## Supercharge Your AML Drug Development

Acute Myeloid Leukemia (AML) is a relentless blood cancer—complex, fast-progressing, and genetically diverse. Finding effective treatments is difficult due to its varied mutations and therapy resistance. However, advances in targeted therapies, combinations, and immunotherapy are promising hope to patients. At Crown Bioscience, we empower your AML research with state-of-the-art preclinical tools and clinically relevant platforms.

### Crown Bioscience has comprehensive, integrated tools for AML drug discovery

#### Fully characterized PDX models for clinically relevant testing

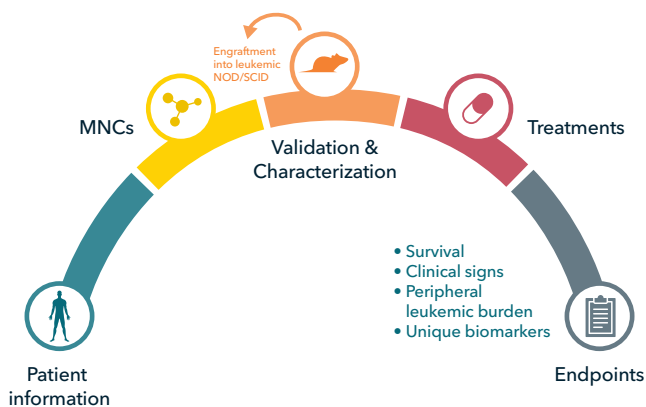
- **Diverse AML Subtypes** for comprehensive therapeutic evaluation. Coverage across different AML subtypes and representative of patient population including FLT3-ITD, FLT3-TKD, IDH1-R132H and IDH2-R140Q gene mutations. Investigate resistance with our SoC, and immunotherapeutics pretreated models.
- **Genomic & Transcriptomic Insights** to guide targeted therapy. Integrated upstream and downstream services with *in vitro* screening and biomarker capabilities.
- **Drug Response Tracking** for precision medicine applications.

#### CDX and Syngeneic Models: Reliable & Reproducible

- **Well-Characterized Cell Lines** for reproducible results
- **Systemic and Imaging Models** available for easier monitoring of tumor burden and treatment response.
- **Rapid Model Development** for efficient preclinical research. Comprehensive portfolio for the study of AML subtypes or single gene alterations

#### Next-Level Discovery Tools for AML Drug Discovery

- **Single-Cell RNA Sequencing & Genomics** - Identify novel biomarkers and resistance mechanisms.



- **Proteomics & Epigenetics** - Understand disease progression and treatment response.
- **Flow Cytometry** - Gain deeper insights into AML biology.
- **AI-Powered Data Analytics** - Enhance predictive modeling for therapeutic strategies.

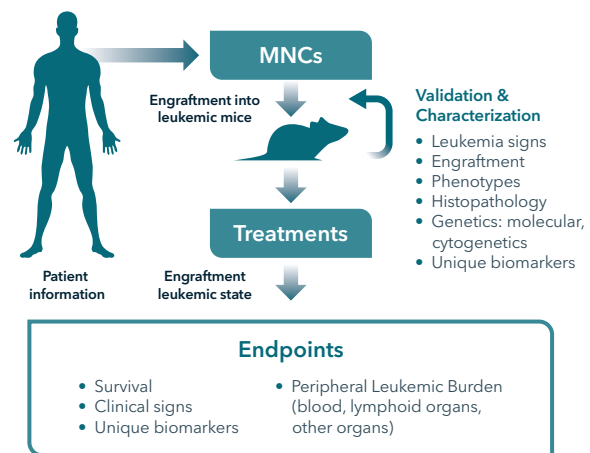
#### Customized Solutions to Meet Your Needs

- **Customized Solutions to Meet Your Needs** - No need to wait for scheduled screenings; we can launch studies based on your timeline and requirements.
- **Custom-Tailored Study Design** - Accelerate drug efficacy and resistance profiling with solutions tailored to your exact specifications.
- **Biomarker Discovery** - Identify novel AML biomarkers and resistance mechanisms for more precise therapeutic targeting.

#### AML PDX Study Workflow

Crown Bioscience's AML PDX models allows researchers to evaluate potential therapies and determine next steps in the drug discovery process. Assess survival rates, clinical symptoms, leukemic burden, and unique biomarkers with confidence.

- **Patient MNC Collection** - Mononuclear cells (MNCs) are collected from AML patients.
- **Engraftment in Leukemic Mice** - MNCs are transplanted into immunodeficient mice for disease modeling.
- **Validation & Characterization** - Assess tumor engraftment, genetic markers, and unique biomarkers.
- **Treatment Phase** - Evaluate novel therapeutics in a controlled preclinical setting.
- **Data Analysis & Outcomes** - Assess survival, clinical symptoms, and leukemic burden.



## Case Study: Narazacilb shows strong anti-AML activity in PDX models

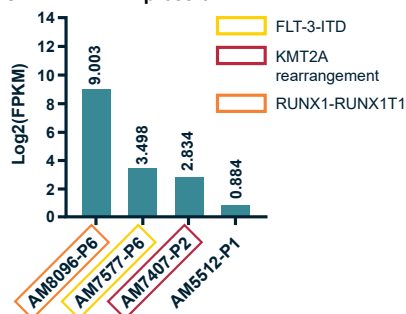
Crown Bioscience's acute myeloid leukemia (AML) portfolio encompasses advanced preclinical models and cutting-edge therapeutic evaluations. A notable study highlights narazacilb, a novel multi-kinase inhibitor targeting CSF1R, FLT3, and CDK6, demonstrating significant anti-AML activity in defined preclinical models.

Li et al. shows this compound's targeted action against key kinases implicated in AML pathogenesis\*.

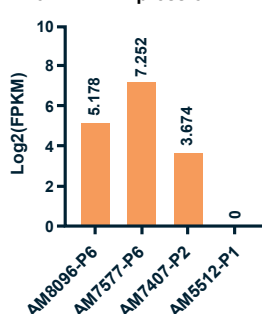
Notable data:

### Gene expressions among different AML PDX Models

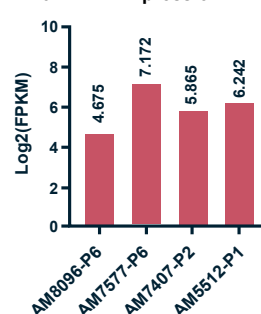
CSF1R mRNA Expression in AML PDX



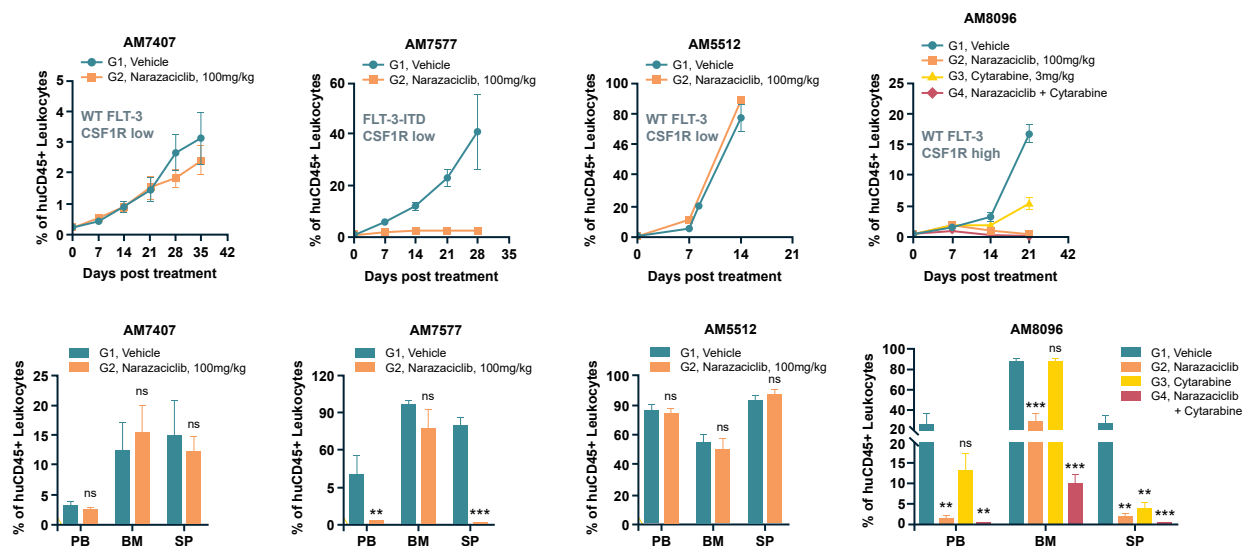
FLT-3 mRNA Expression in AML PDX



CDK6 mRNA Expression in AML PDX



### Narazacilb showed response in AML PDX models with CSF1Rhi and/or mutant FLT3-ITD variants



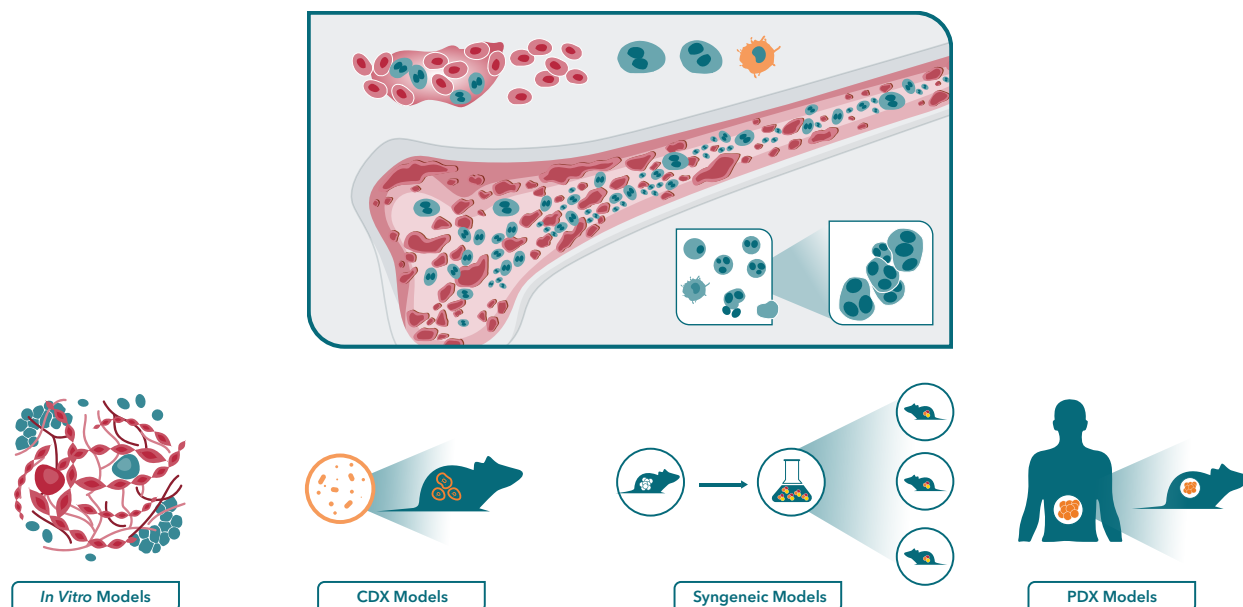
**Discussion:** preclinical data justifies a further clinical testing of narazacilb to treat AMLs with FLT3-ITD and/or FLT3i-resistant FLT3-TKD mutations due to its preferential inhibition on FLT3-TKD mutant variants over wild type FLT3. Narazacilb is currently under early-stage clinical evaluation (NCT05731934), and it can potentially be developed as a novel AML treatment.

\*Yang, T., Ke, H., Liu, J. *et al.* Narazacilb, a novel multi-kinase inhibitor with potent activity against CSF1R, FLT3 and CDK6, shows strong anti-AML activity in defined preclinical models. *Sci Rep* **14**, 9032 (2024). <https://doi.org/10.1038/s41598-024-59650-y>



## Partner with Crown Bioscience today to accelerate your AML research!

By partnering with Crown Bioscience, you'll access state-of-the-art preclinical models and analytical tools to drive your AML research forward efficiently and effectively.



## Global Reach, Local Expertise

With sites across North America, APAC, and Europe, and a team of dedicated scientists, we customize AML studies to meet your specific research and drug development needs.



## Get in touch



US: +1 858 622 2900  
UK: +44 (0)1530 234871

busdev@crownbio.com  
www.crownbio.com

