inovotion
WHICH MOLECULE WILL STAND OUT

Cytarabine for Acute Myeloid Leukemia treatment

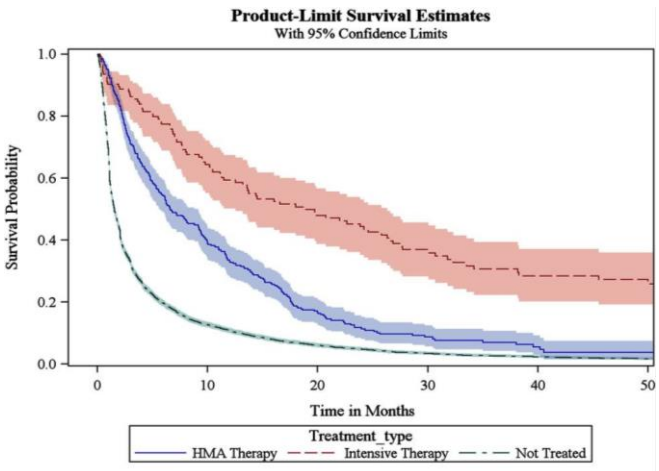
early *in vivo* efficacy evaluation assay

Inovotion standardises a new model of cancer on the chicken embryo model

- ***In vivo*** **prescreening assay**
- **Suited for efficacy and toxicity evaluation of anticancer compounds**
- **Fully predictive**
- **Fast (4-6 weeks)**
- **Cost effective (up to 70% of cost saving)**
- **High level of accuracy**

Acute Myeloid Leukemia (AML) is a type of blood cancer often associated with a poor prognosis. About 1 million AML cases were diagnosed in 2015 worldwide. Because of its poor outcome, the challenge of finding new treatments for this disease is all the more important. Nowadays, a treatment protocol including Cytarabine is commonly used for this pathology, with over 500 clinical trials being conducted with Cytarabine in 2019.

The standard mouse xenograft model is commonly used for the study of AML. However, considering the amount of drug candidates failing at the pre-clinical stage, R&D costs are rising with this standard model, making the discovery and development of new compounds for AML a significant challenge.



Intensive therapy: cytarabine + anthracycline

HMA therapy: azacitidine or decitabine

Median overall survival of patients with AML by treatment type
Source: B. C. Medeiros *et al.* (2015)

INOVOTION's R&D Team continuously develops new models, with our latest fully validated offering featuring the MV4-11 AML cell line and treatment with Cytarabine.

Thanks to INOVOTION's line-up of fast, reliable and cost-effective models, the scientific community can now rely on a robust *in vivo* screening technology platform to validate early and select the most promising compounds to further invest on.

AML treatment
with Cytarabine

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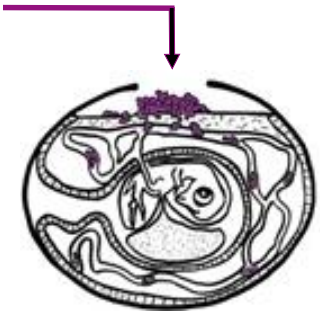
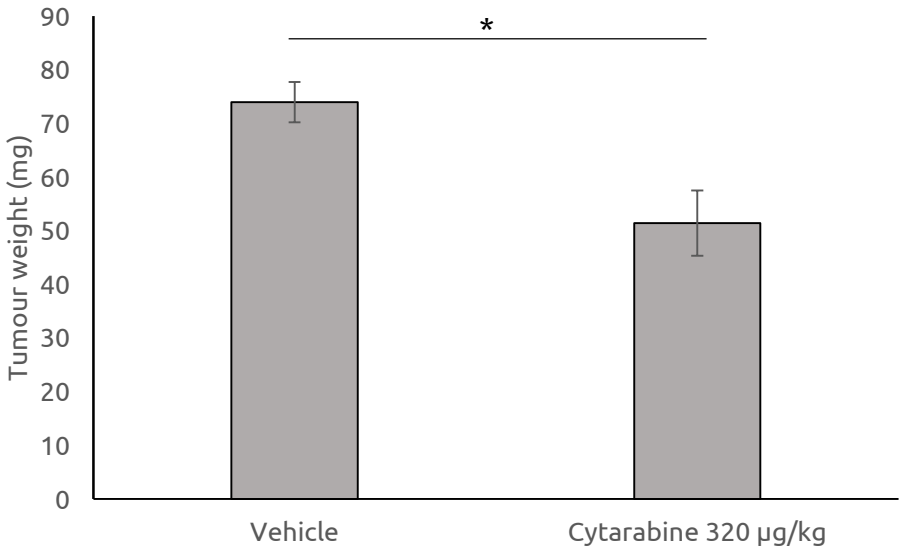
MV4-11



- Tumour cell (MV4-11, AML) graft on the upper CAM
- Treatment with **Cytarabine**
- Treatment period (9 days)
- Tumor weight analysis

Tumour Growth



	Tumor analysis					p values versus
	n	Weight (mg)	SD	SEM	% regression	Neg Ctrl
Vehicle (Neg Ctrl)	23	74,00	18,03	3,76	N/A	/
Cytarabine (320 µg/kg)	20	51,44	27,19	6,08	30,49	0,0103

Efficacy evaluation of Cytarabine on MV4-11 on tumor growth

About us

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Mission

Because we know that one of your main preoccupations is to optimize your preclinical and discovery studies, INOVOTION has developed a unique and cutting-edge *in vivo* technology.

As a Contract Research Organization (CRO) dedicated to *in vivo* evaluation for drug discovery, particularly in oncology, INOVOTION is a sought-after partner for drug discovery pharmaceutical and biotech companies as well as academic labs all over the world.

Our main missions are to:

- Help you find the best anticancer candidate treatment
- Detect the first *in vivo* toxicity effects of your candidate compounds
- Improve the productivity of your preclinical and discovery process by maximizing your lead optimization phase
- Accelerate the overall drug discovery process to answer unmet medical needs in oncology

Compounds types

- Small Molecules
- Peptides
- Antibodies
- Checkpoint inhibitors
- Proteins
- Natural compounds
- Viruses
- Nanostructures

Cell lines / PDX

- Standard cell lines
- Wild type or genetically modified
- Patient cells - PDX
- Cell lines panel

Treatments types

- Compound by itself
- Synergetic effects
- Sequential effects

Read-out

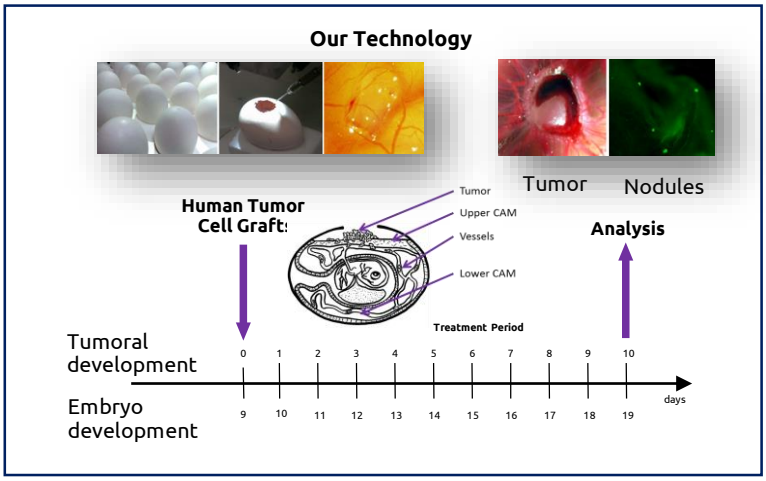
- Tumor growth
- Metastatic invasion analysis
- Toxicity
- Angiogenesis
- Tumor infiltration

Efficacy Evaluation

Target Validation

Toxicity Evaluation

Multi-cancer Screening



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