



**A CRO FOR  
PRECLINICAL  
SERVICES IN  
ONCOLOGY**

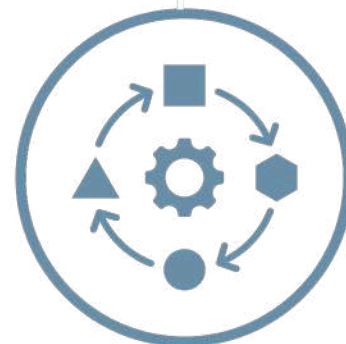
**Antineo**





# OUR STRENGTHS





## OUR VERSATILITY

The reactivity, adaptability and flexibility of a human-sized compagny.



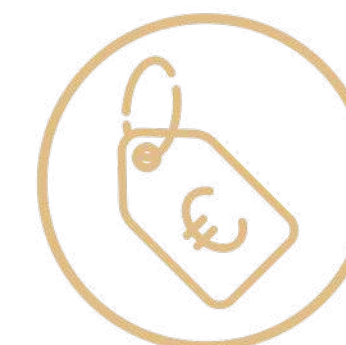
## OUR PERSONALIZED ADVICE

A Scientific Advisory Board of clinical experts to understand your needs and projects.



## SECONDARY RESISTANCE MODELS

Secondary resistance models to standards of care established and characterized through RNAseq and immunophenotyping of the tumor microenvironment.



## OUR COMPETITIVE PRICES

To provide our customers with excellent value for money compared to the competition.





# ABOUT US



# Spin-off of the Team Anticancer Antibodies Centre de Recherche en Cancérologie (CRCL)

## Company

CRO created in May 2015,  
specialized in proof-of-  
concept studies in oncology



## Location

BioParc Rockefeller  
Bâtiment BIOSERRA 2  
Lyon



## Regulation

- CIR agreement 2020-2025
- Fully authorized animal house and personnel



## Team

Scientists and efficient team  
recognized for its expertise in  
onco-pharmacology at the  
international level



## Customers

French and international  
clients composed of  
pharmaceutical,  
biotechnology companies  
and academic institutions



## Track-record

- 200+ studies
- 40 sponsors
- 6 ongoing partnerships







OUR TEAM





**Renaud Marin-Sidgwick**  
CEO



**Marie Tautou, PhD**  
Study Director  
Head of Business Development



**Charles Dumontet, MD-PhD**  
CSO - Consultant



**Aurélie Cadiou**  
PhD student



**Jean-Philippe Druet**  
Executive Assistant



**Doriane Mathé**  
Study Manager



**Marine Fellmann**  
Study Manager



**Pierre-Antoine Choffour**  
Study Manager



**Flore Sarraute**  
Apprentice





# THERAPEUTIC AREAS

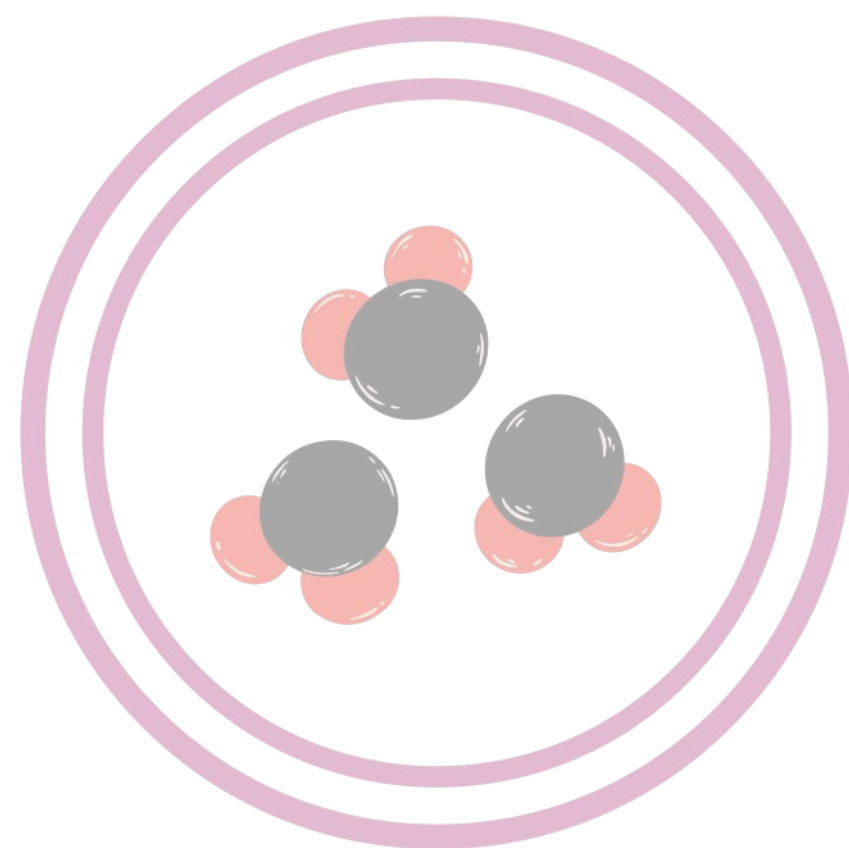


# Oncology and immuno-oncology

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## Small molecules

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## Biological molecules

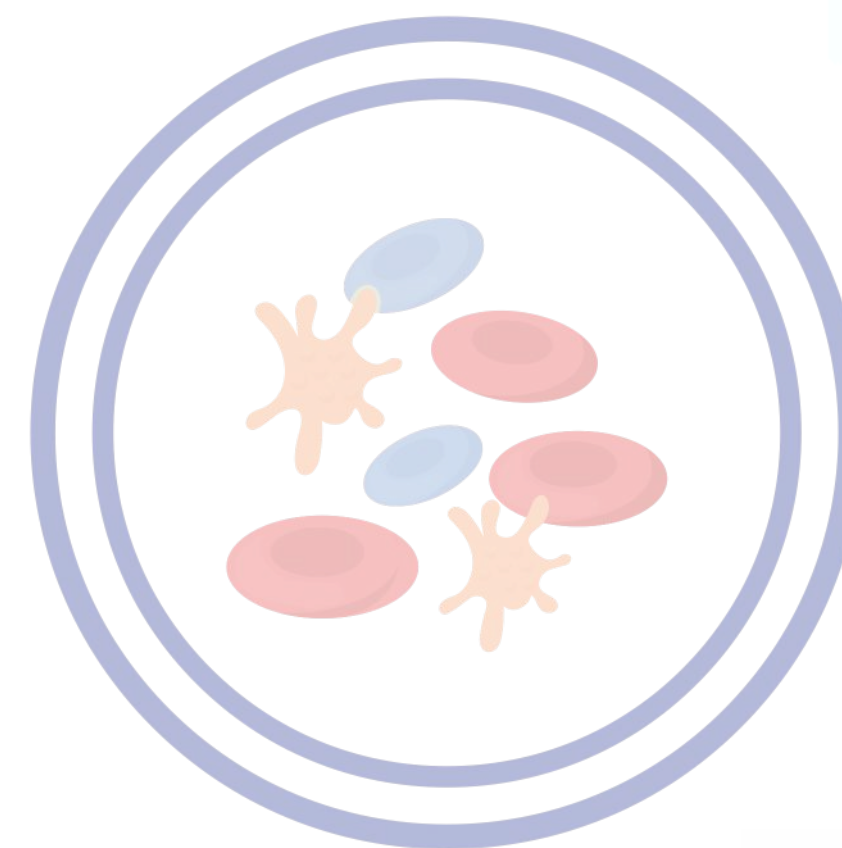
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Antibodies, peptides



## Cellular and gene therapies

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# OUR SERVICES

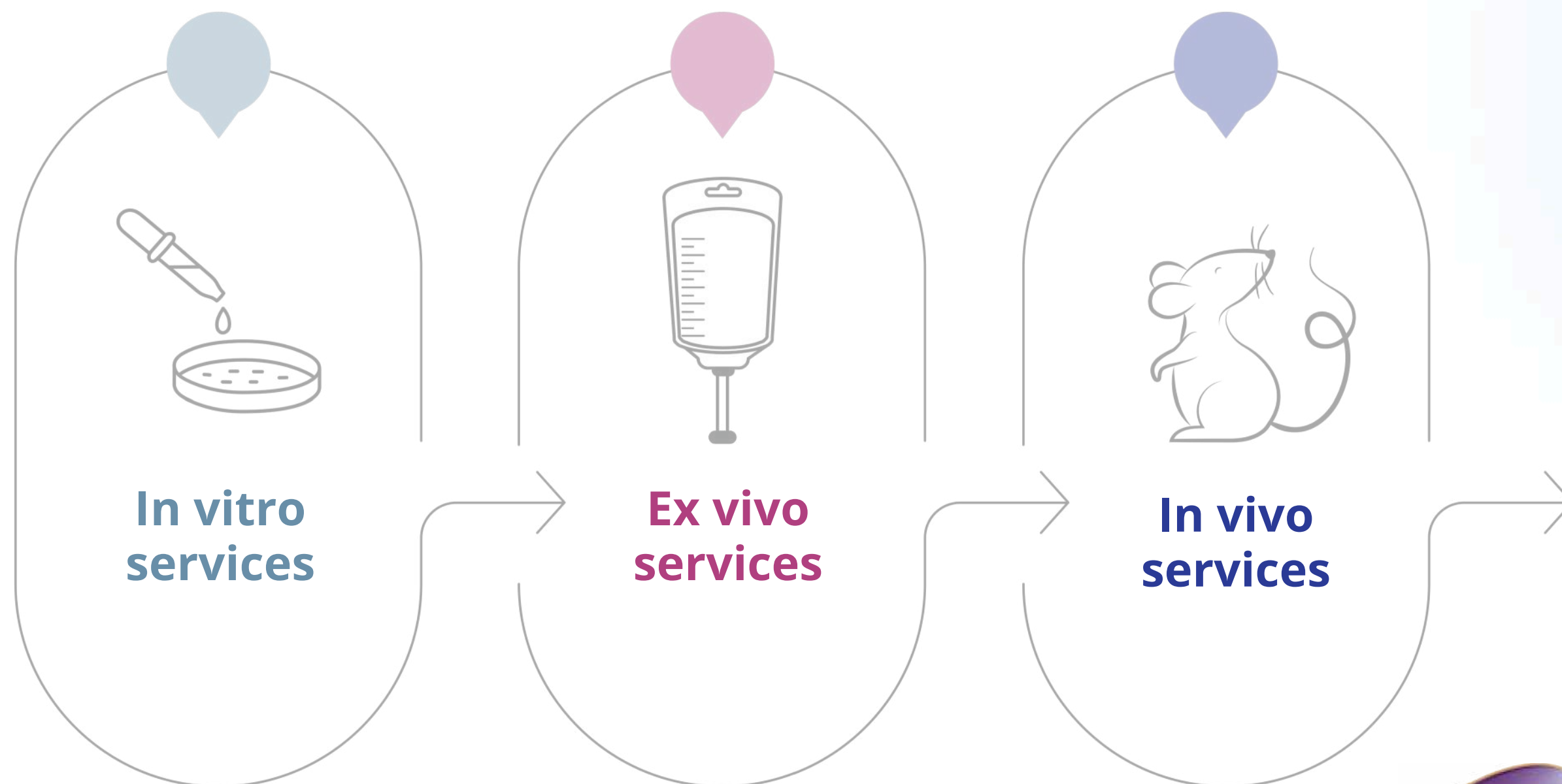


# Antineo's services



Optimize and accelerate  
the development of our  
customers' compounds

**Provide advice, expertise  
and services**







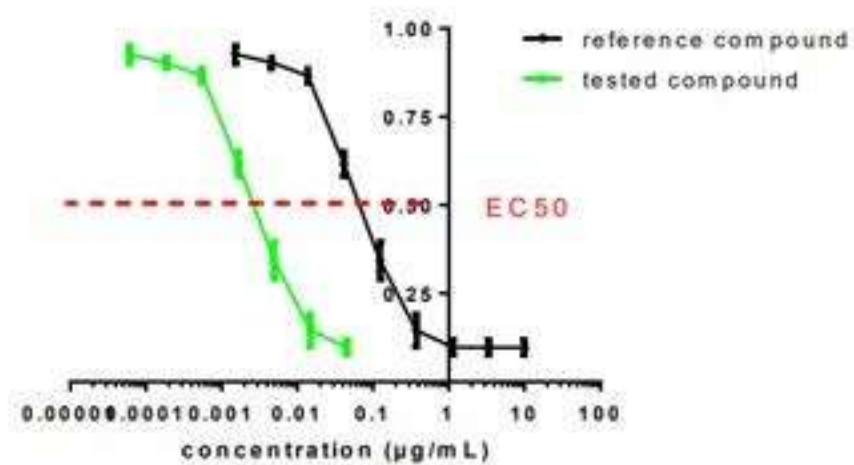
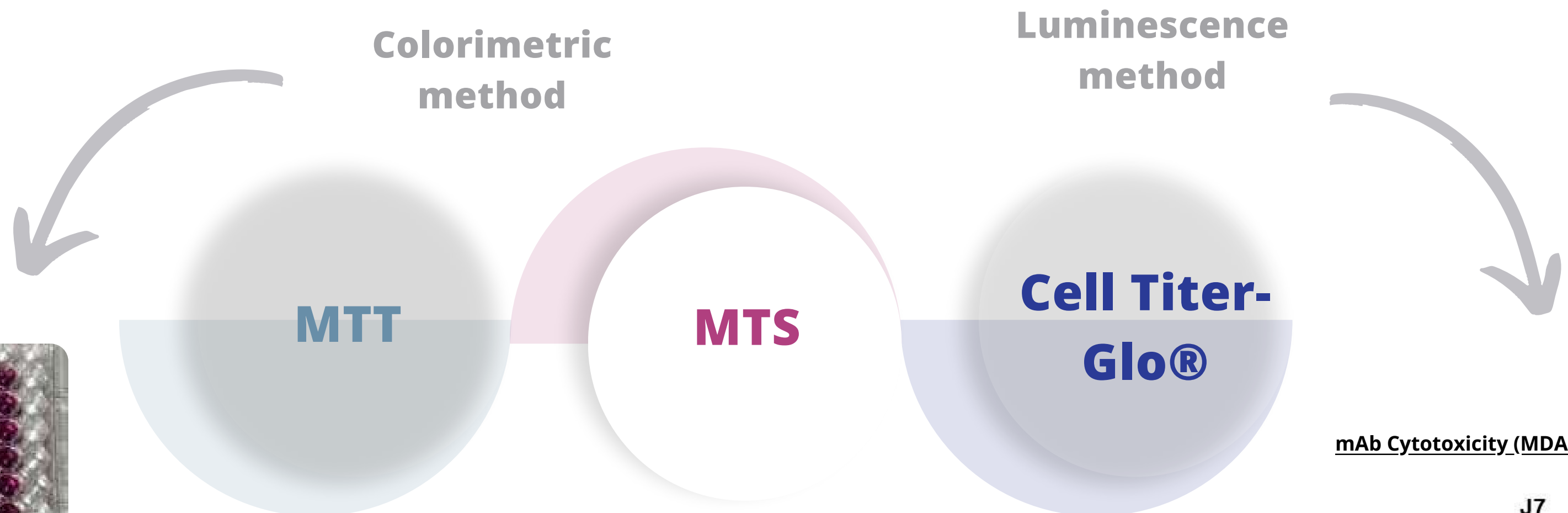
# IN VITRO SERVICES



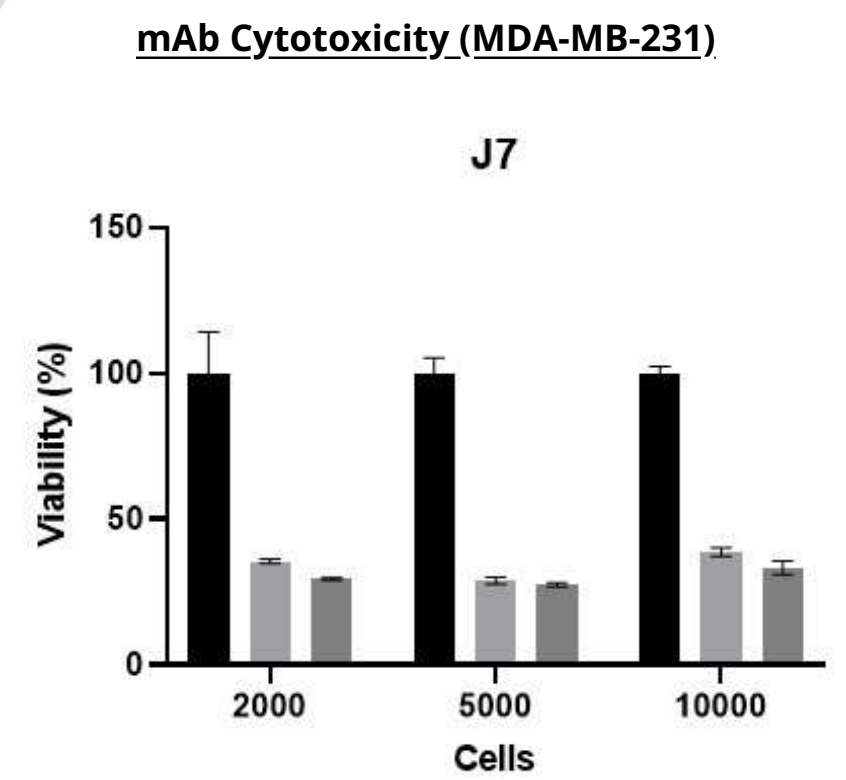
# Cytotoxicity assays



Determination of IC50 / EC50  
Synergy / Antagonism assay



Cell viability / Cell metabolic activity /  
Cytotoxicity / Cell proliferation

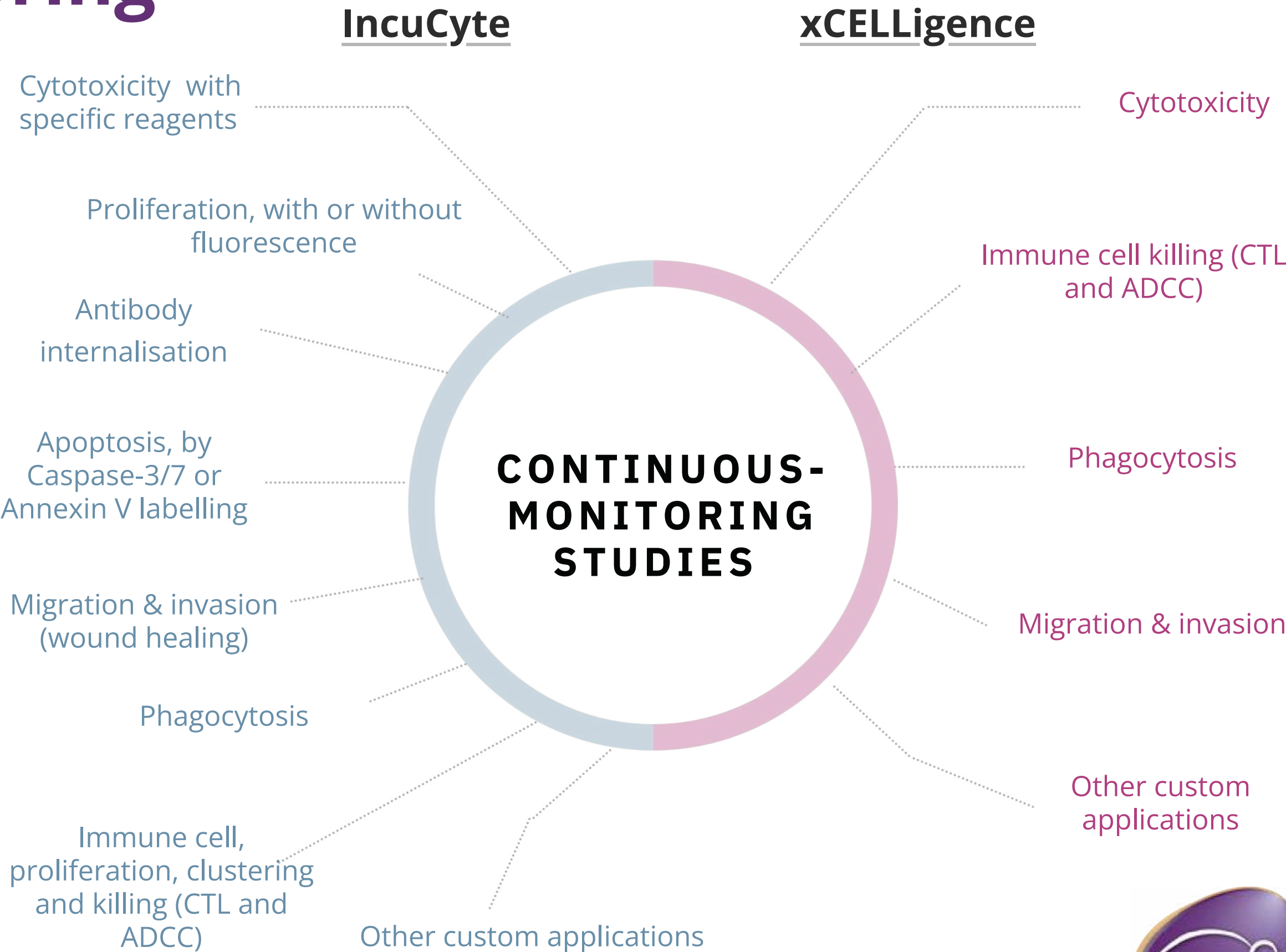




# Continuous-monitoring studies



Realize a real-time analysis of a variety of cellular and immunological processes





# Characterisation of samples

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# Flow Cytometry - (FACS)



Qualitative and quantitative multiparametric analyses

BD FACS CANTO™

Classical

3 lasers : 8 markers\* maximum

LSR FORTRESSA™

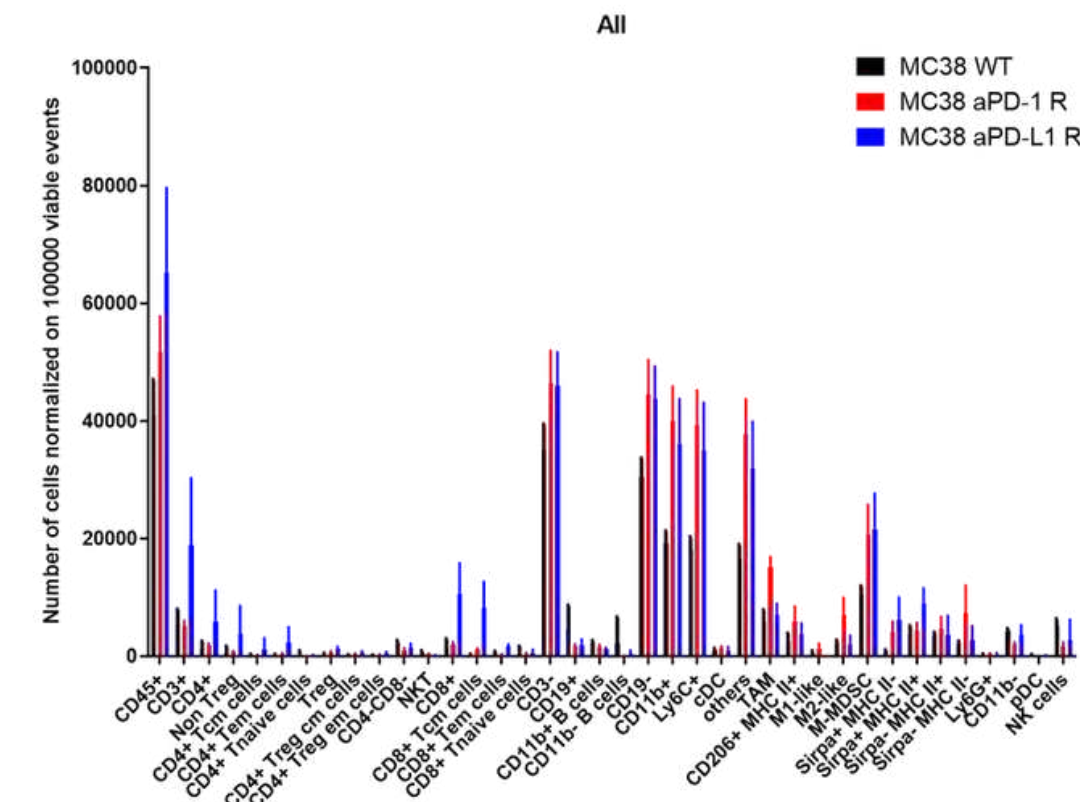
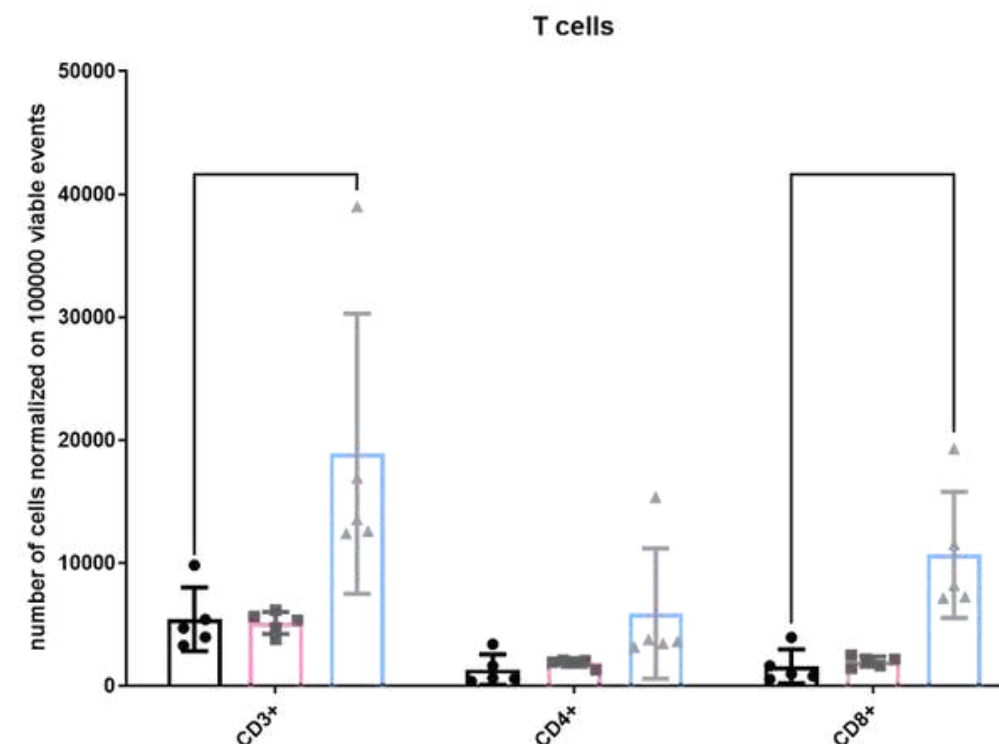
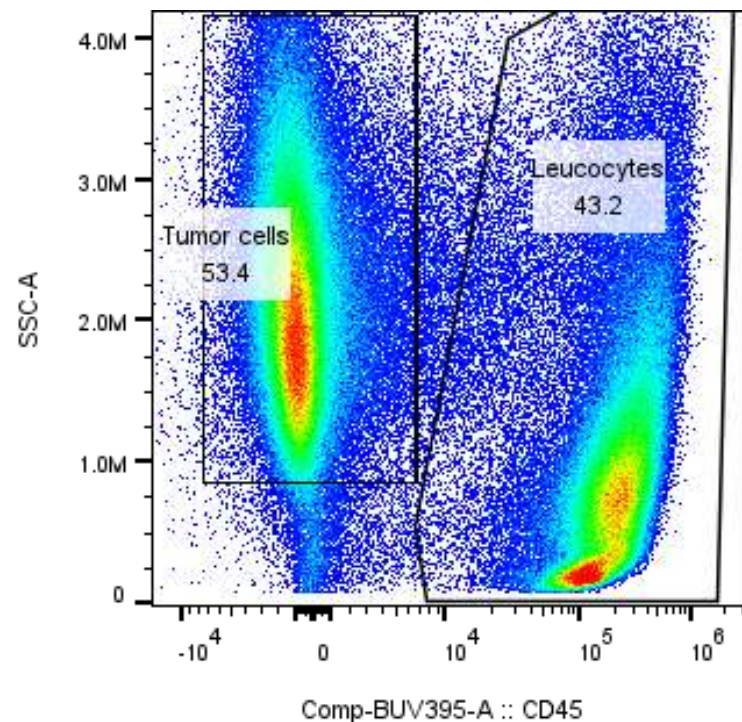
Classical

4 lasers : 18 markers\* maximum

CYTEK

Spectral

5 lasers : up to 29 markers\*







# EX VIVO SERVICES



# Immunology services



Isolate the cells of interest and characterise your target molecule by Flow Cytometry



- **Analysis on fresh samples** : on blood products (blood bags) and by products (buffy coat)
- Most assays can be performed as **end point** and **continuous-monitoring** studies



T cell based assays

Myeloid Cells based assays

ADCC assays with fresh NK cells

ADCP assays with fresh myeloid cells

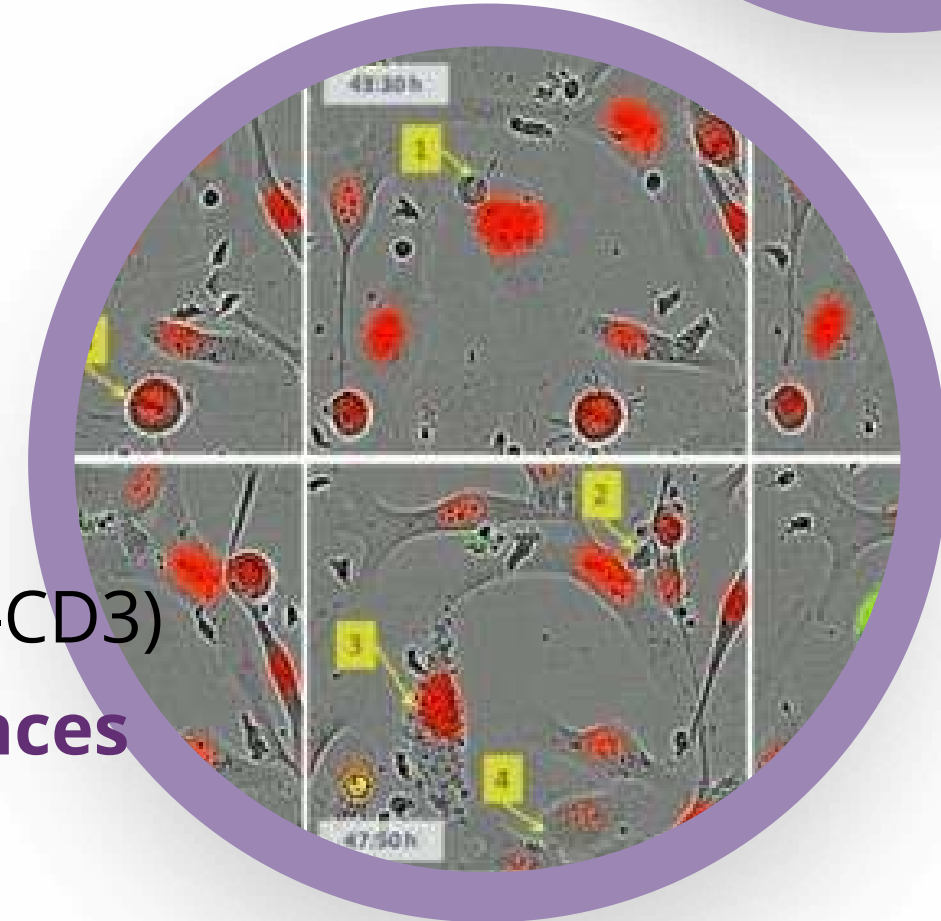


# Development of immunotherapies



Highlight the target and decipher the mechanisms of action of therapeutic antibodies

- **Immunology ex vivo assays** (T cell activation by IFN $\gamma$  measurements, CTL assays, Macrophage polarisation etc.)
- In vitro or ex vivo **ADCC, ADCP and CDC assays** (calcein release)
- Original methods for **in vivo assessment of ADCC and CDC activities**
- Titration / Internalization / By-stander effect (ADC) ...
- Original in vitro and in vivo assays for **bispecific antibodies** (anti-CD3)
- A unique panel of tumour models presenting **secondary resistances to immunotherapies**







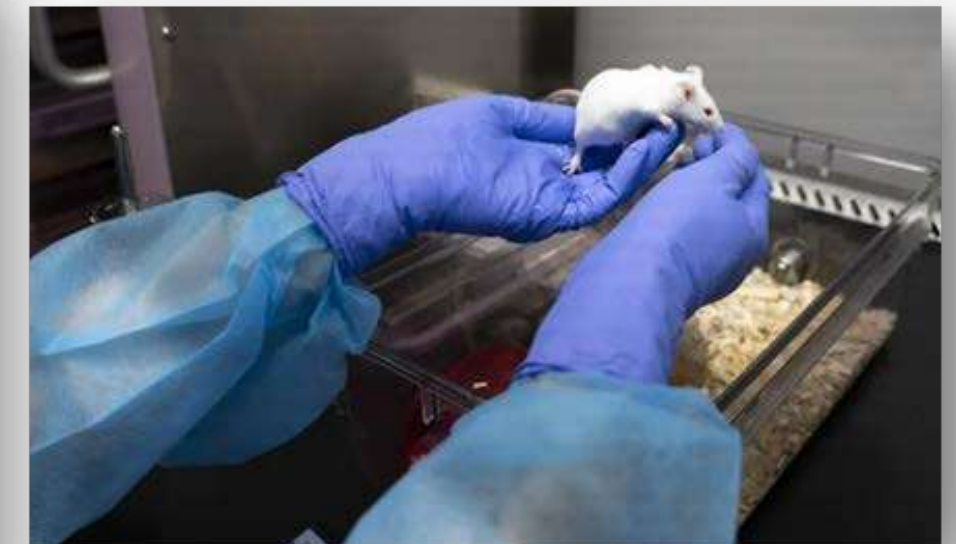
# IN VIVO SERVICES



# Animal facilities

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- **High standards facility** with strictly controlled environment
- **Multiple types of experiments** : study cancer progression, assess the effectiveness and innocuity of novel therapies,...
- **Wide range of animal models** from **immune-competent** (C57Bl/6, CD1...) to **immune-deficient** (SCID-CB17, NSG, NOG, NOD-SCID...) and **humanized models** (BRGSF-HIS, huNOG-EXL)
- Capacity **over 3,000 mice**
- **Ethical compliance** and **expertise in animal experimentation**





## Standard of care therapies

- As reference for the tested compound
- For comparison studies
- For combinaison / synergy studies

## Choice of tumor models

- 100+ cell-derived xenograft models
- 40 murine syngeneic models for immuno-oncology
- Subcutaneous or orthotopic implantation

## Protocol adapted to our clients' compounds

- Route (IV / IP / PO / IT)
- Galenic formulations (liposome encapsulation)
- Schedule of injection
- Schedule and duration of follow-up
- Weekly updates
- Choice of end-point (with control or individual ethical end-points)



# In vivo analysis



Recommendations on the choice of the best indication and model



Systemic and haematological toxicity of your compounds in rodents (VetScan / MS9)



Pharmacokinetics properties in mouse and rat



Antitumor efficacy in human or mice tumour models



Combination / comparison with gold standards



Demonstrate the antitumor activity of a novel agent in animal models, as well as defining the dosage and schedule that is both efficient and non-toxic



Orthotopic models\*



Immunophenotyping of the tumour micro environment



An original offer of secondary resistances to reference therapies (CDX and syngeneic)



The development of models of resistance

\*In Vivo Syngeneic Tumor Models with Acquired Resistance to Anti-PD-1/PD-L1 Therapies

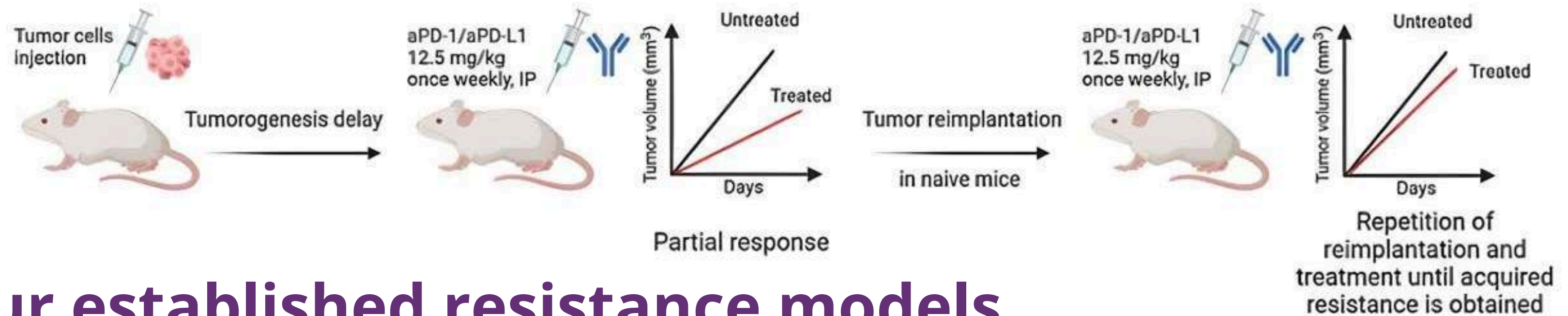




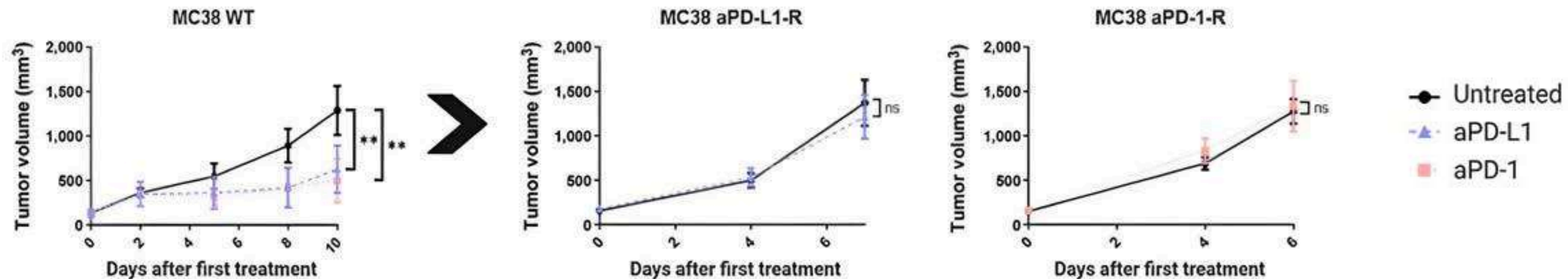
# ORIGINAL RESISTANT TUMOR MODELS



# Acquired resistance to anti-PD(L)1



## Our established resistance models



*\*In Vivo Syngeneic Tumor Models with Acquired Resistance to Anti-PD-1/PD-L1 Therapies*



# CDX Models

## Lymphoma

Follicular Lymphoma - (RL model) :

- *Rituximab / GA101 / R-CHOP / R-DHAP*

Mantle Cells Lymphoma - (Granta model) :

- *Rituximab*

Diffuse large B cells lymphoma - (Toledo model) :

- *Rituximab*

Burkitt's lymphoma

- Raji model : *Rituximab*
- Daudi model : *CAL-101*

## Myeloma

Plasma cells myeloma model

RPMI8226

- *Daratumumab*

Multiple myeloma MM.1S

- *Daratumumab*

## Breast

Tubular Adenocarcinoma BT474

- *T-DM1*

MDA-MB-361 model

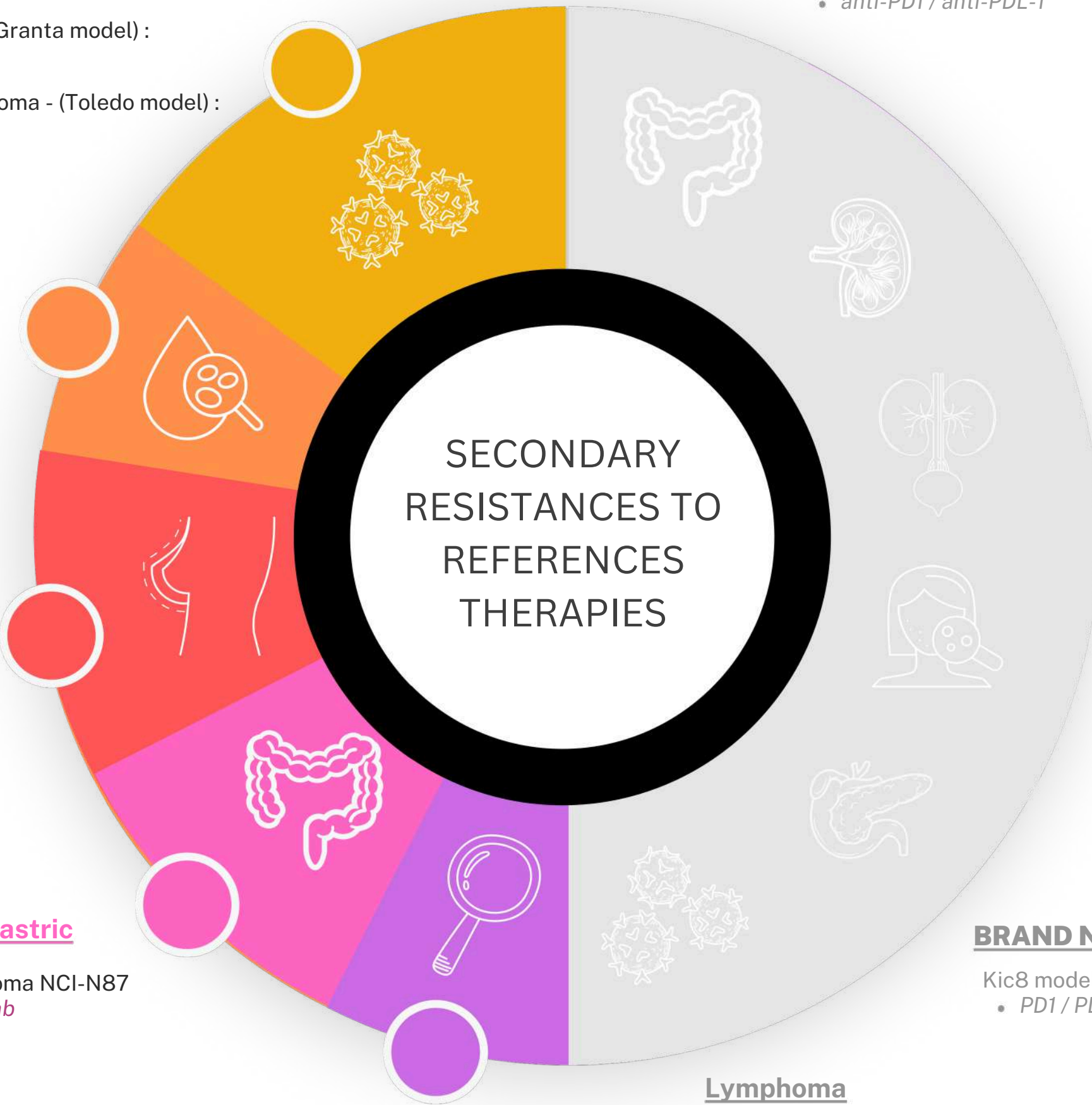
- *Trastuzumab T-DM1*

## Colorectal / Gastric

Gastric carcinoma NCI-N87

- *Trastuzumab*

**Bespoke services : On demand  
development of resistant models  
(Syngeneic or CDX models)**



## Colon

MC38 model

- *anti-PD1 / anti-PDL-1*

## Bladder

MBT-2 model

- *anti-PD1*

MB49 model

- *anti-PD1 / anti-PDL-1*

## Kidney

RENCA model

- *anti-PD1 / anti-PDL-1*

## Melanoma

B-raf

- *anti-PD1 / anti-PDL-1*

N-Ras

- *anti-PD1 / anti-PDL-1*

Tyr N-Ras models

- *anti-PD1 / anti-PDL-1*

## BRAND NEW : Pancreas

Kic8 model

- *PD1 / PDL1 / Gemcitabine*

## Lymphoma

P388 model

- *anti-PD1 / anti-PDL-1*



# CDX Models

## Lymphoma

Follicular Lymphoma - (RL model) :

- *Rituximab / GA101 / R-CHOP / R-DHAP*

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## Colorectal / Gastric

Gastric carcinoma NCI-N87

- *Trastuzumab*

Bespoke services : *On demand development of resistant models (Syngeneic or CDX models)*

# Syngeneic Models

## Colon

MC38 model

- *anti-PD1 / anti-PDL-1*

## Bladder

MBT-2 model

- *anti-PD1*

MB49 model

- *anti-PD1 / anti-PDL-1*

## Kidney

RENCA model

- *anti-PD1 / anti-PDL-1*

## Melanoma

B-raf

- *anti-PD1 / anti-PDL-1*

N-Ras

- *anti-PD1 / anti-PDL-1*

Tyr N-Ras models

- *anti-PD1 / anti-PDL-1*

## BRAND NEW : Pancreas

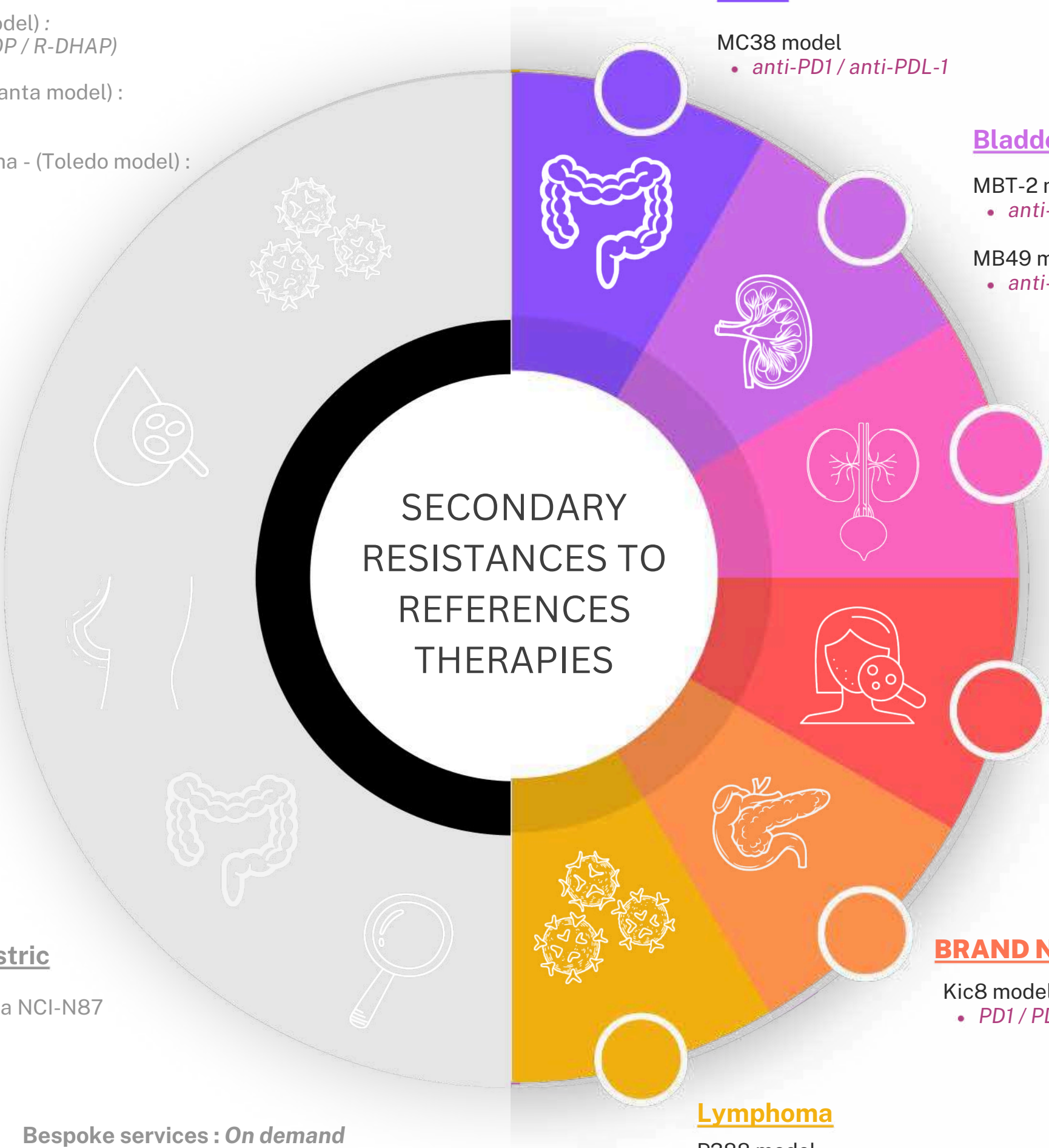
Kic8 model

- *PD1 / PDL1 / Gemcitabine*

## Lymphoma

P388 model

- *anti-PD1 / anti-PDL-1*





# Partner platforms



**CIQLE**

Microscopy platform for  
Immunohistochemistry  
(IHC)



**PROFIL  
EXPERT**

High throughput  
sequencing,  
microdissection and  
single cell technologies

**HawkCell**

**HAWKCELL**

Platform for Magnetic  
Resonance Imaging  
(MRI)



**IMTHERNAT**

PET-Scan  
(Radiolabelling)



**ANAQUANT**

Detection and  
quantification of  
proteins by mass  
spectrometry



**PAREAN  
BIOTECHNOLOGIES**

Immune omics analysis  
(Single cell)



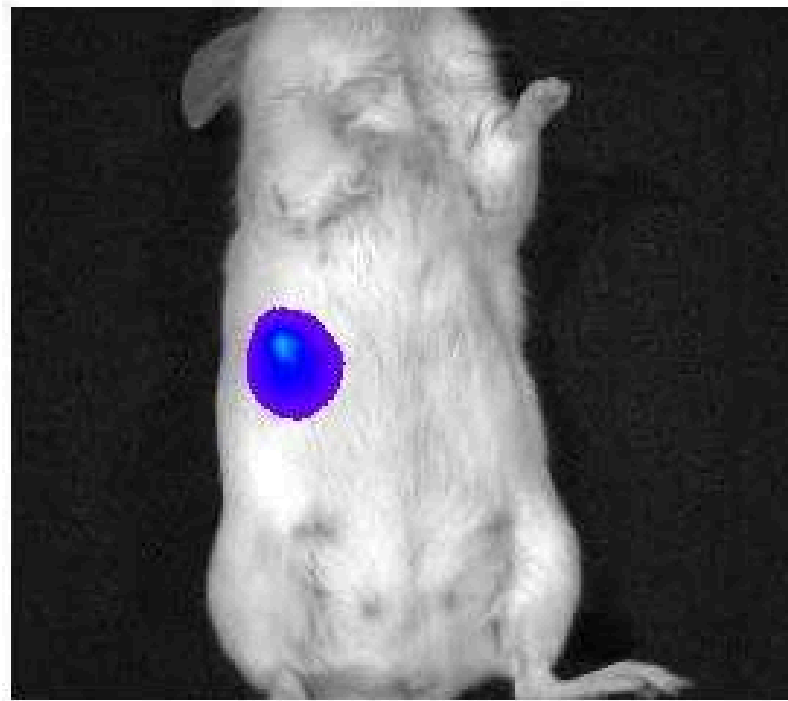


**OUR NEWS**

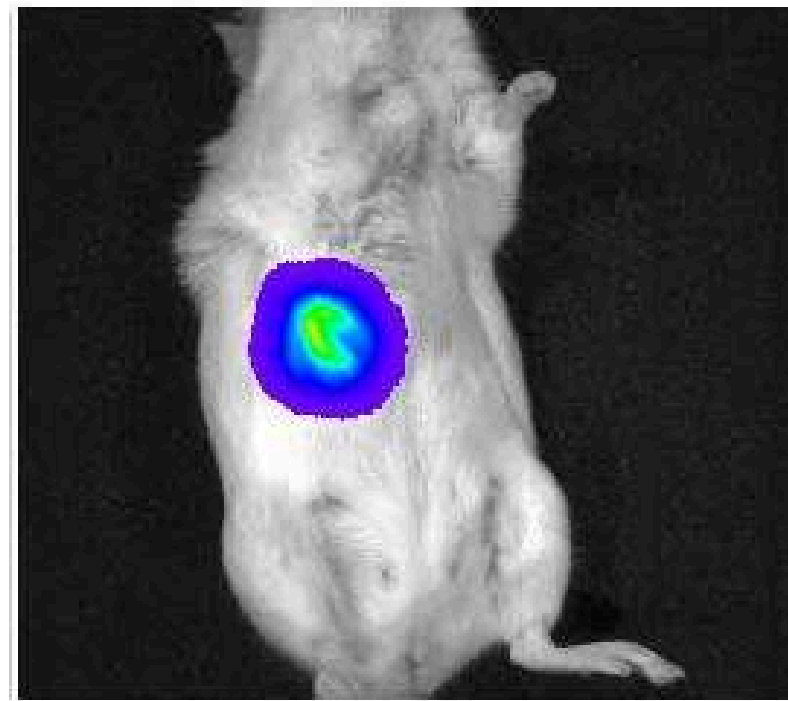


# IVIS® Lumina Series III Imager

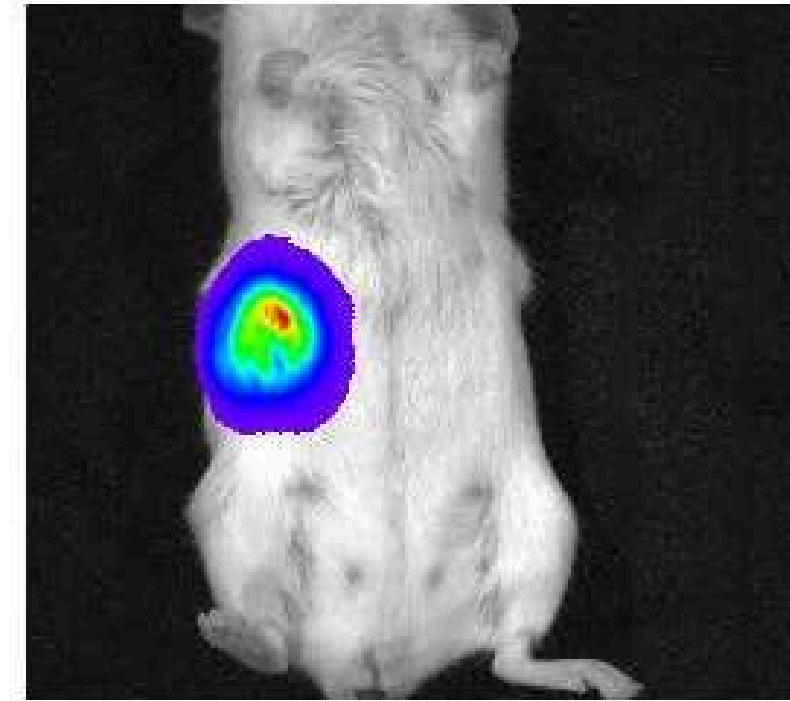
## MDA-MB-231 cell line



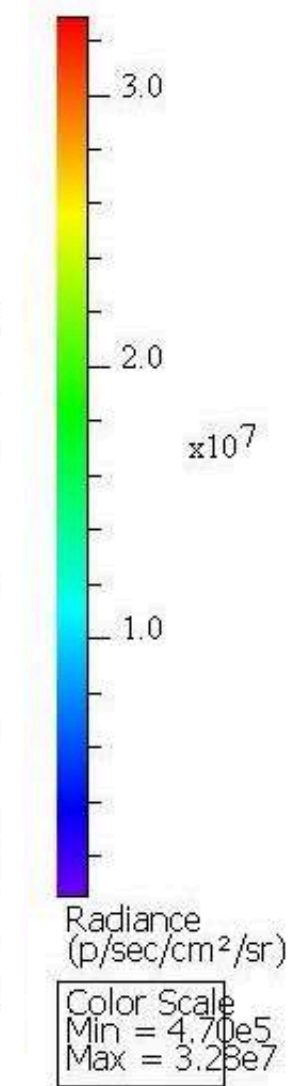
2023-04-05



2023-04-12



2023-04-26



- **In vivo and 2D imaging** of the tumors/metastasis
- **Precise tumor monitoring and follow-up**
- **Animal saving**
- **Biodistribution and efficacy studies**

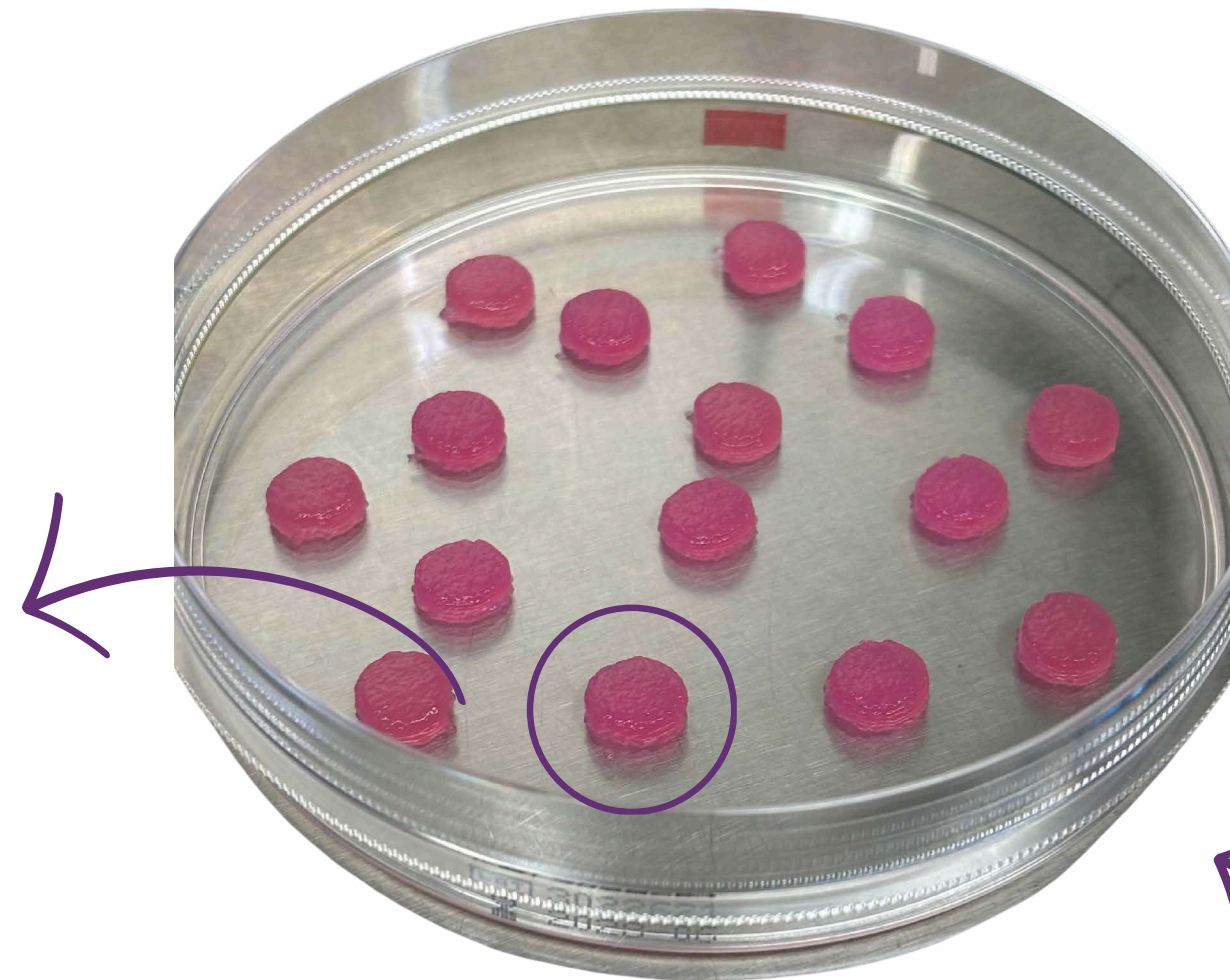


Hepatic metastases of an  
MDA-MB-231 Luciferase  
(+) model by intrasplenic  
implantation



# 3D Bioprinting - *Ongoing development*

BT 474-GFP cell line



- Recapitulate the tumor microenvironment - (TME)
- High-throughput screening
- Minimising animals used and costs

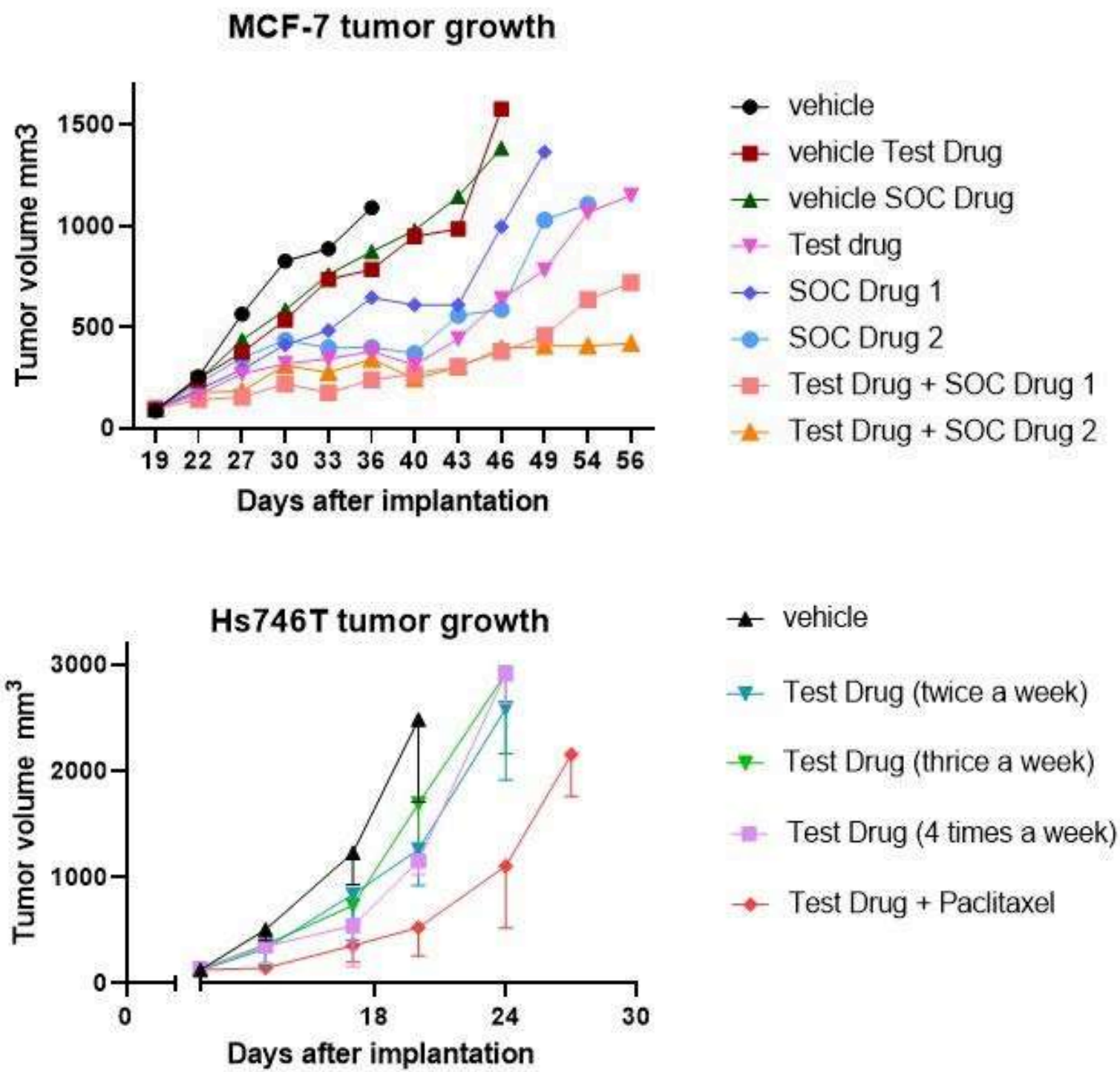




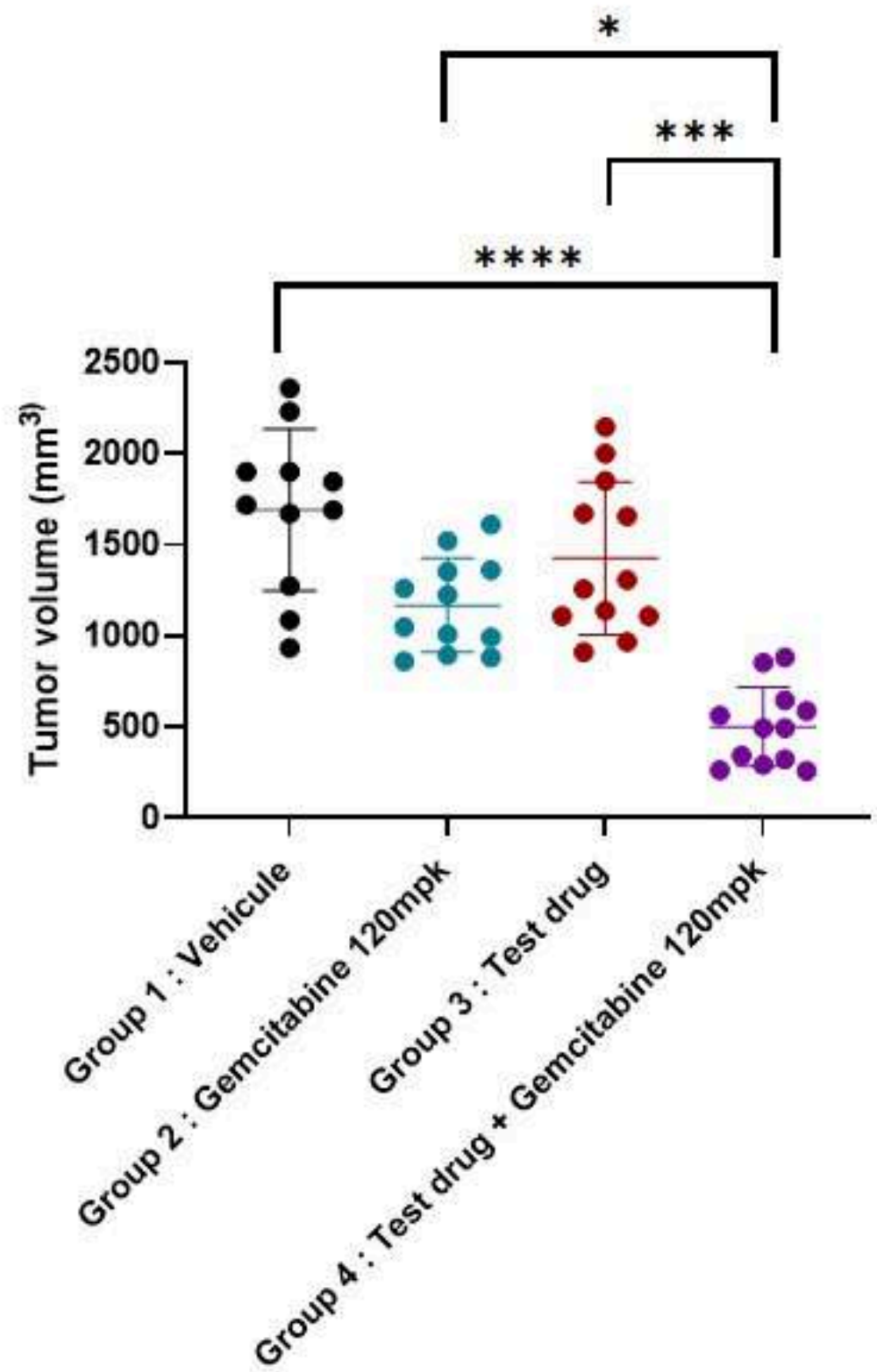
# CASE STUDIES



# Efficacy study

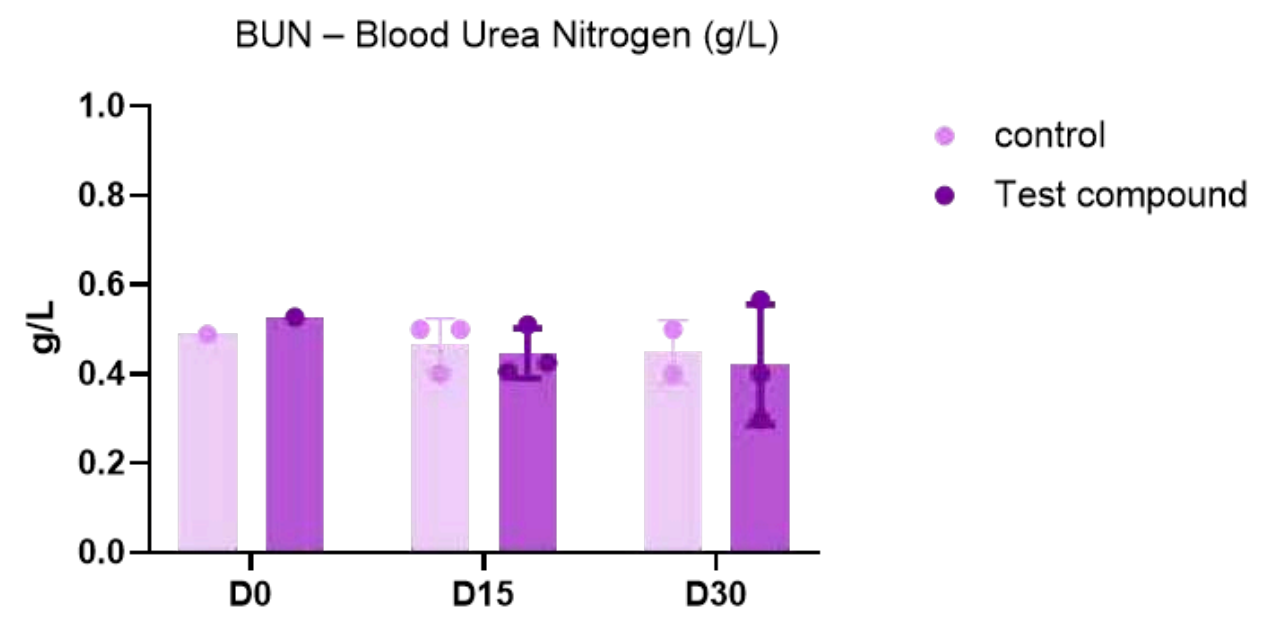
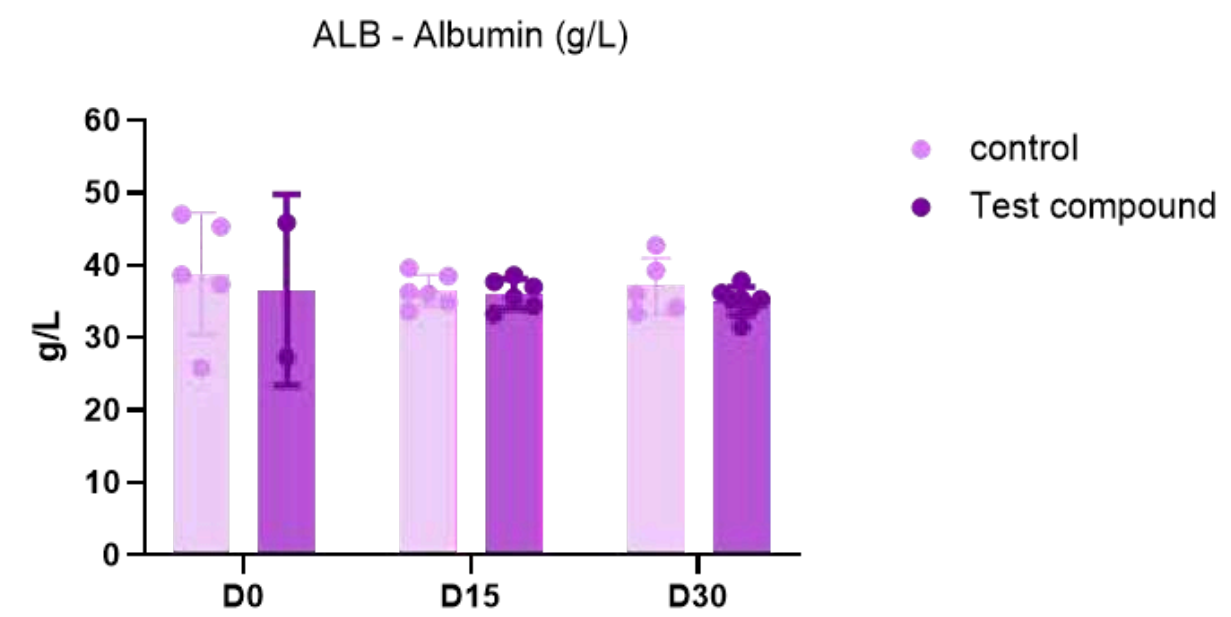
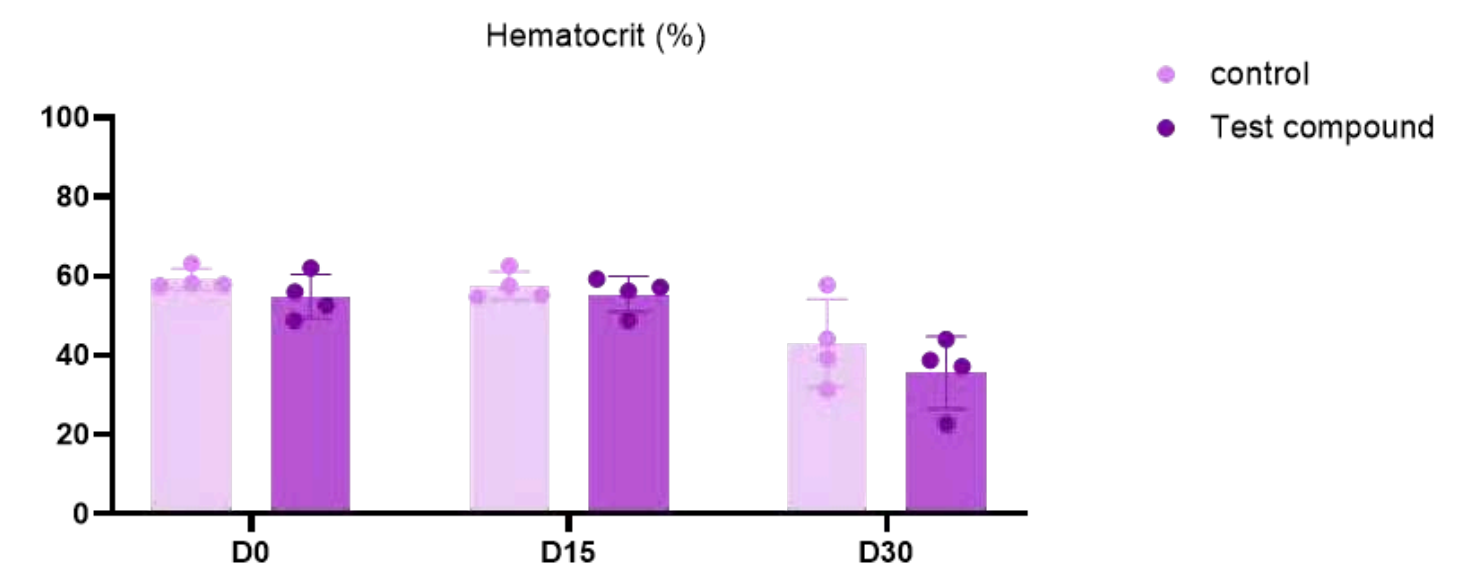
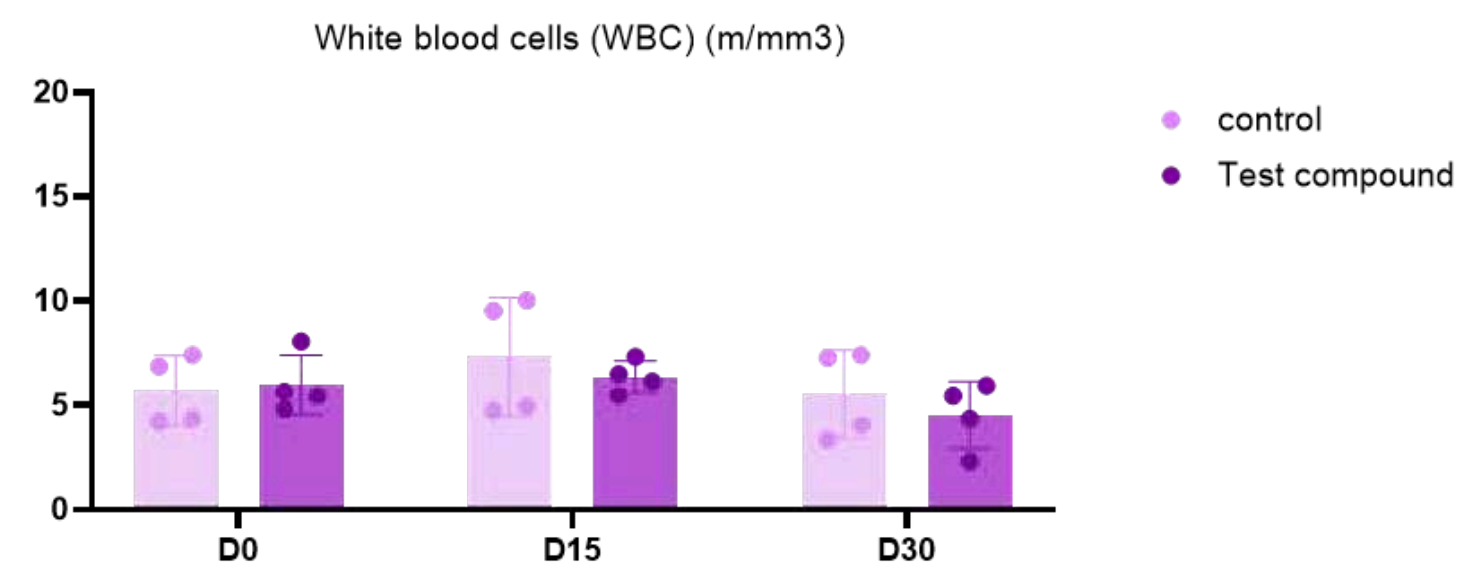


KIC8 Gemcitabine-resistant tumor growth



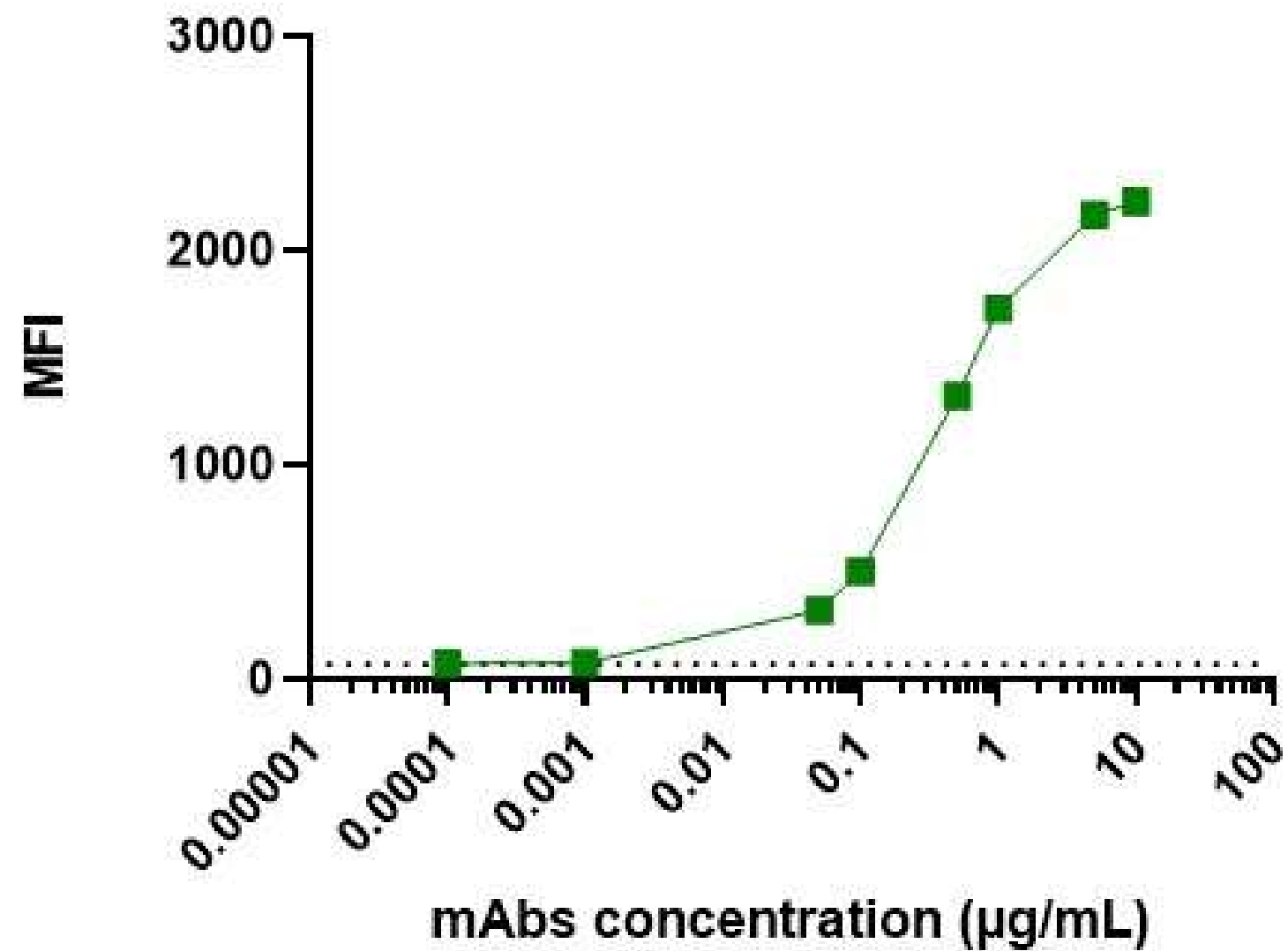


# Toxicity study – Haematological analysis

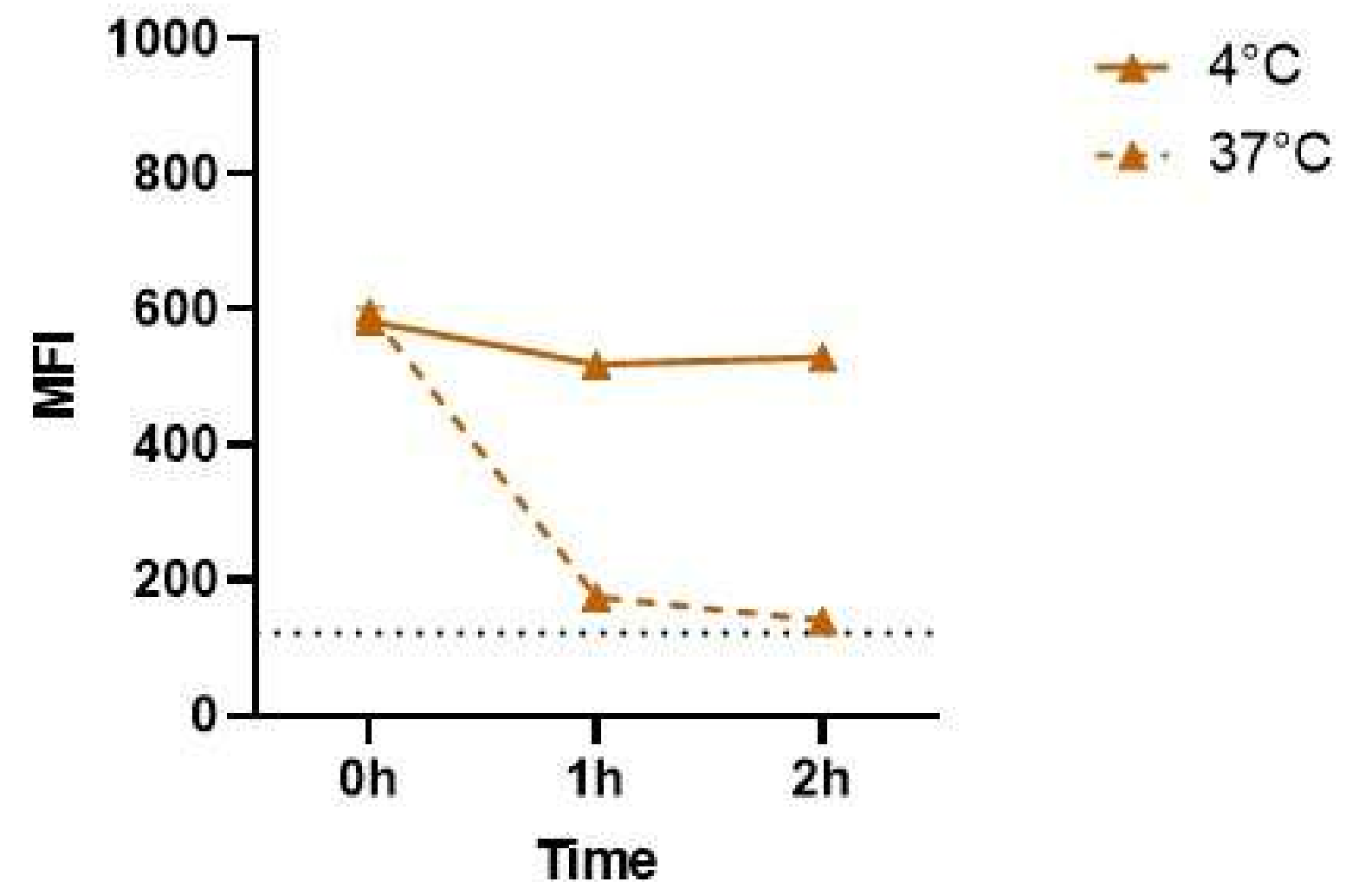




## mAb Titration assay (SK-BR3)



## mAb Internalization assay (SK-BR3)







**THEY  
TRUST US!**



**EVEXTA BIO**

**SAYENS** SATT  
CATALYSEUR D'INNOVATIONS

**yomi**  
P H A R M A

**ad** advanced  
biodesign

**mablink**

**Stroma** Care

**Roche**

**Breach Bio**

**CASINVENT**

**GAMAY** MABS  
P H A R M A

**Jalon**  
THERAPEUTICS

**PULSALYS**

**CRCL** CENTRE DE  
RECHERCHE EN  
CANCÉROLOGIE  
DE LYON

April 2025

Corporate presentation

**Antineo**



# THANK YOU!



 (+33) 4 72 36 15 71

 [www.antineo.fr](http://www.antineo.fr)

 ANTINEO  
2e étage - Bâtiment BIOSERRA 2  
60F avenue Rockefeller  
69008 LYON

 [Antineo](#)