### **HEALTHTECH - THERAPEUTIC**

CLINICAL STAGE COMPANY

BRING THE IMMUNE SYSTEM ONE STEP AHEAD OF CANCER

NEXT GEN. PRECISION MEDICINES

ANTICIPATING TUMOR EVOLUTION

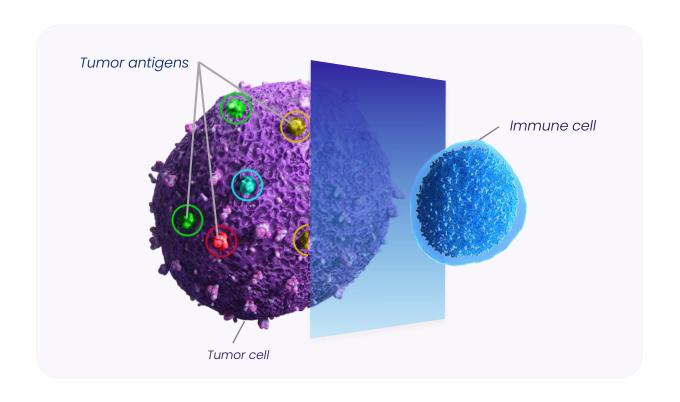
M. BRUN COMMUNICATIONS MANAGER mbrun@brenus-pharma.com

07.01.25 BIOTUESDAYS



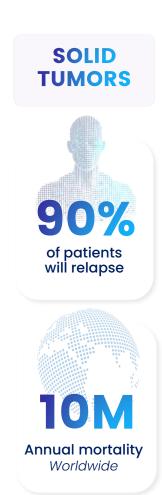


# Treatments fail to anticipate **tumors' evolution** and **relapse mechanisms** due to **tumor plasticity**: a key driver of cancer mortality



Multiple & evolving targets

Hiding from the immune system





# A unique value proposition for solid tumors Anticipating tumor's evolution to overpass current limitations

PEPTIDIC VACCINES SHARED NEOANTIGENS	mRNA VACCINES	CAR-T CELLS	Brenus	Therapeutic platform generating first-in-class candidates
5 to 209	Max 30	Max 3	REPRESENTATIVE	• Largest repertoire: 250+ antigens
Gene extrapolation	Gene extrapolation = biases			Proteomics target validation
Medium to low patients eligibility			OFF-THE-SHELF	High eligibility
Off the shelf	Invasive, patien	t-per-patient	OFF-THE-SHELF	Mimicking resistances in vitro
	O a maralari da ma		STANDARDIZED	GMP manufacturing
Intermediate	Complex, long, expensive		STANDARDIZED	Control of cost & supply

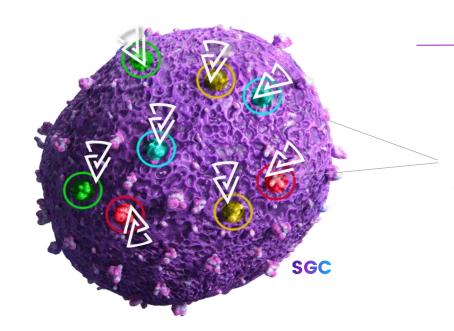


# Brenus "Stimulated Ghost Cell" innovation: The successful equation to anticipate disease progression

## ANTICIPATING **HETEROGENEITY**OF THE TARGETED INDICATION

Strict & Al-powered selection of starting material : **Allogeneic tumor cell lines** 

- Representative oncogenic drivers
- Cold & Hot tumors
- Resistance capacities



## SAFELY ENSURING IMMUNE SYSTEM ACTIVATION & EDUCATION

Haptenation and inactivation process to initiate a potent immune response against tumor cells

## MIMICKING PATIENT'S TUMORS RELAPSING CONDITIONS

In vitro exposition to standards of care treatments:
+200 targets expressed, including cancer related
antigens (CRA), linked to therapeutic pressure and
resistance

Multi-omics characterization of targets matching >5000 patients' biopsies

Stimulated Ghost Cells (SGC) presenting haptenated cancer-related antigens

### Multispecific antitumor response demonstrated consistently DC PRIMING VIA HAPTENATED PROTEINS **WAS CONFIRMED** 1. Intradermal injection injection Antigen processing and presentation 2. CrossmMo-DC + Vehicle mMo-DC + STC-1010 presentation Dendritio 3. Multispecific T-cellS 1,4% STC-1010 42,8% SOLVENT CD8+ TCRseq OF A DONOR T-cells expansion **BEFORE AND AFTER TREATMENT**



#### **CONSISTENTLY VALIDATED ON VARIOUS MODELS**

in vivo: CT26, MC38 ANTI-PDI RESISTANT,

MC38 WILD-TYPE

in ovo: CHORIOALLANTOIC MODEL

ex vivo: POTENCY IMMUNO ASSAY TO

INDUCE TUMOR KILLING

#### INDUCTION OF INNATE & ADAPTATIVE SPECIFIC IMMUNE RESPONSE

TUMOR KILLING: 90% OF TUMOR CELLS (CRC)

**UNDER APOPTOSIS AFTER 72H** 



4. Tumor killing

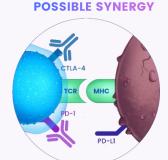


#### **IMMUNE CHECKPOINT MODULATORS:**

Effector

T-cellS

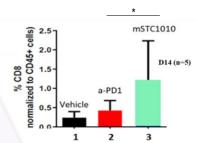
Tumor Antigens Tumor cells

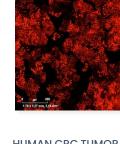


Immune cells reactivation

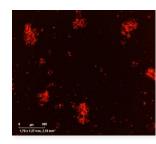
Strengthen memory process

#### **SIGNIFICANT T-CELLS INFILTRATION INTO TUMORS**



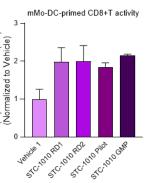


**HUMAN CRC TUMOR CELLS +** NON-SPECIFIC LT<sub>CD8+</sub>



**HUMAN CRC TUMOR CELLS +** STC-1010 ACTIVATED LTCD8+

### SITC2024 **ROBUST BATCH TO BATCH ANTITUMOR EFFECT** mMo-DC-primed CD8+T activity



### Highly skilled & dedicated team

Brenus

Led by expert co-founders

BIGORP
Acquired by NovoNordisk
\$170M

Jacques GARDETTE Co-founder/President

Serial entrepreneur in healthcare & digital health



Ber Co-

Benoit PINTEUR PharmD
Co-founder/CSO

SGC Technology's inventor Pharmaceutical R&D expert





SERVIER \*

PharmD CEO

Medical & Marketing expert WW Immuno-oncology launches







Aymeric BORDET CFO SKEMA, CCA

Health & Tech industries
From seeds to \$100M SERIES B



14 collaborators

with extensive experience in major companies & institutions

Covering R&D, CMC,
Medical affairs, Partnering
& Communication

3 PhDs, 5 PharmDs

Gender balance ♀ 57% - ♂ 43%

### Brenus' scientific comittee cumulating +1500 international peer-reviewed articles





Pr F.GHIRINGHELLI MD, PhD Board Chairman Pr of Oncology (FR)



Pr O.J FINN PhD
Pr of Immunology (US)



Pr I.MELERO MD, PhD
Pr of Immunology (ES)



Pr M.YARCHOAN MD, PhD Pr of Oncology (US)





Pr A.ITALIANO MD, PhD Pr of Oncology (FR)



Pr of Oncology (NE)





## A DISRUPTIVE TECHNOLOGY

Anticipating tumor escape



## A LIMITLESS POTENTIAL



Generating patented first-in-class therapies in solid tumor

## A technological relay to solve unmet needs

### We are pioneers in next-generation immuno oncology treatment



Proteomics-driven precision & prediction approach



Allogeneic and standardized GMP-ready platform 9 oncology centers engaged for Phase I



1 treatment = broad targeted patient population 609K eligible patients in 2029



Awarded Biotech of the year 2024 in France \$30M invested since 2020



14 professionals 3 PhDs, 5 PharmDs ♀ 57% 43% ♂ 43% ♂



### Leveraging our off-the-shelf platform to generate strong candidates in solid tumors





Strong protection worldwide



Platform & Product protected **22** patents granted in key countries (USA, EU, JPN, AUS, ...)





























