MaaT Pharma

Microbiota as a Therapy

Company Presentation
August 2022

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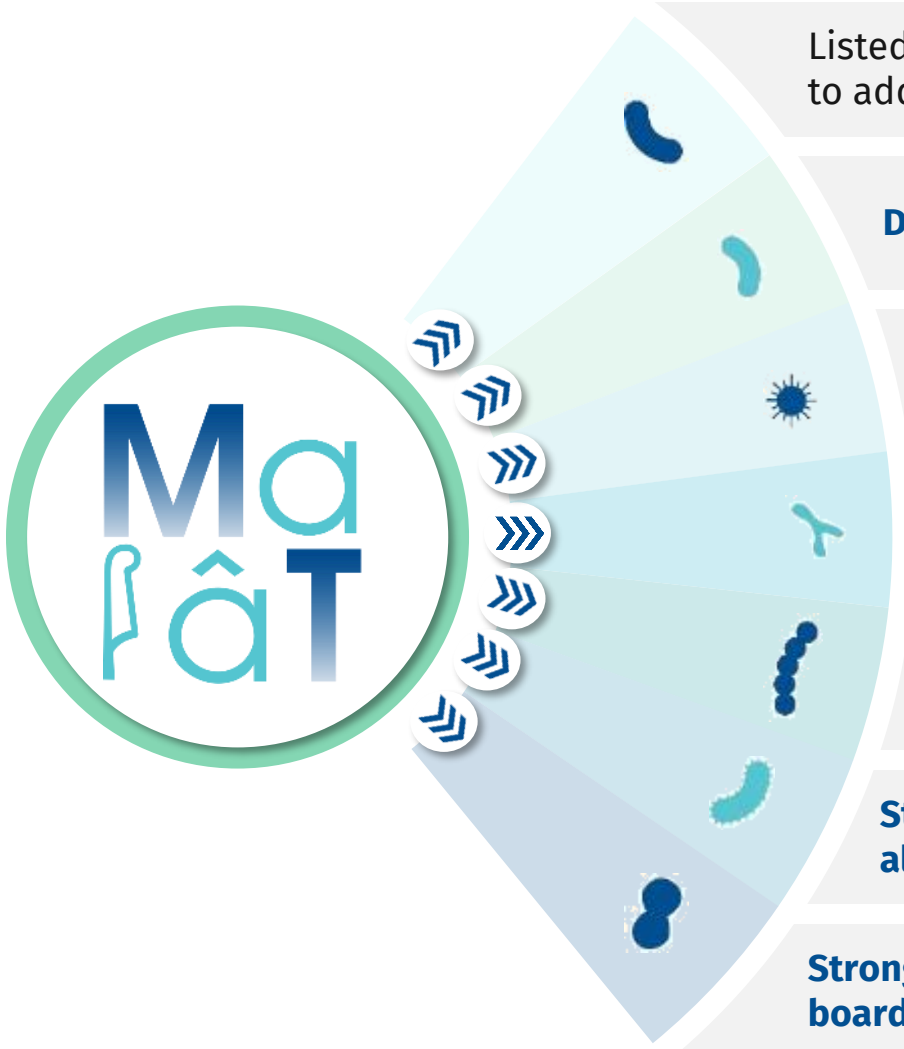
A Uniquely-Positioned Microbiome Company



Listed on **Euronext (MAAT)** Pioneering development of **Microbiome Ecosystem Therapies** to address **hematological malignancies and oncology**

Differentiated approach, lead asset in Phase III in aGvHD

Multi-asset clinical and preclinical pipeline with **near-term, value-creating catalysts**

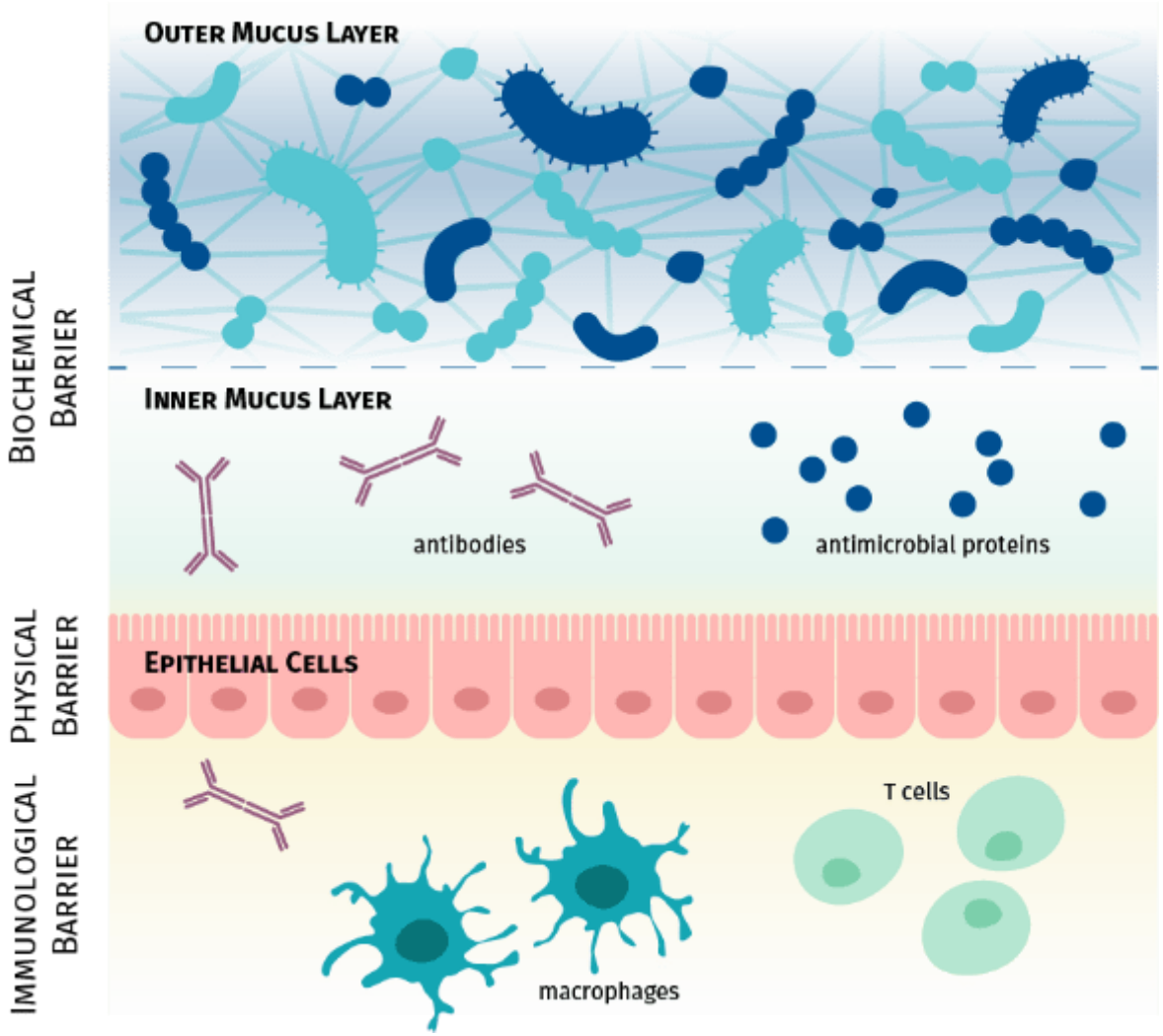
Proprietary gutPrint® metagenomics technology platform driving product candidate generation

European cGMP production facilities supporting versatile product range and optimized positioning

Strong IP portfolio of 13 patent families that **provides protection until 2036-2041 in all major markets**

Strong leadership team with a proven track record and supported by a **scientific advisory board of global experts** and **top tier specialist investors**

Host – Microbiota Interactions are Critical for a Functional Immune System



Cross-section of a healthy gut

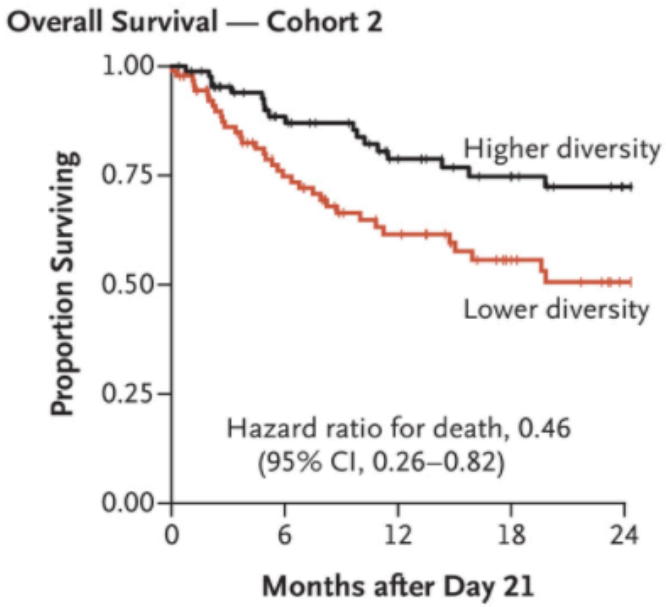
A rich and diversified gut ecosystem actively modulates the immune system functionality

- A diversified microbiome contributes to the education and modulation of our immune system throughout life
- Bacterial richness and mucus layer prevent colonization by pathogens and improve gut barrier
- 80% of cellular host defense are localized in the gut (including innate and adaptive systems)

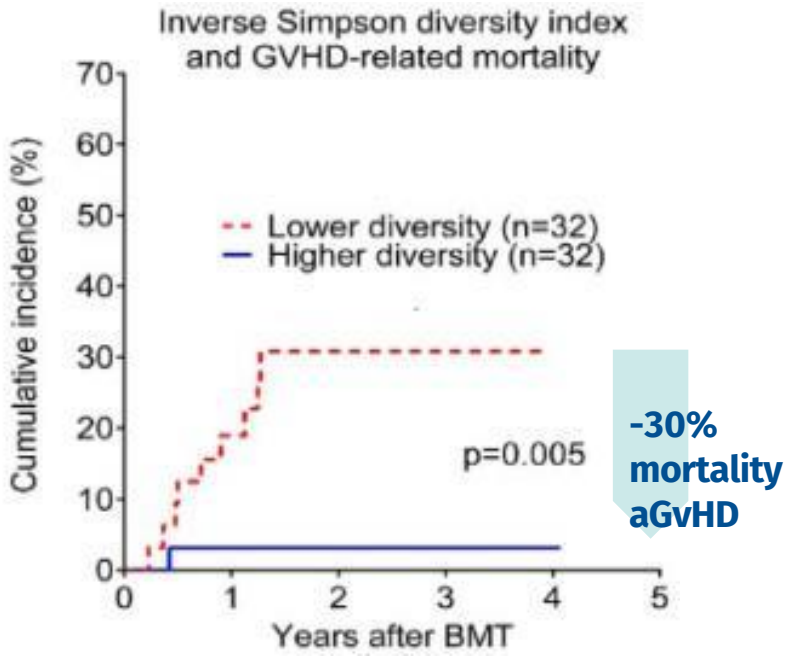
Diversity matters!
Higher gut microbiome diversity is associated with …

Liquid Tumors

Higher survival rate in patients receiving allo-HSCT *,1



Lower incidence and lower mortality from aGvHD*,2

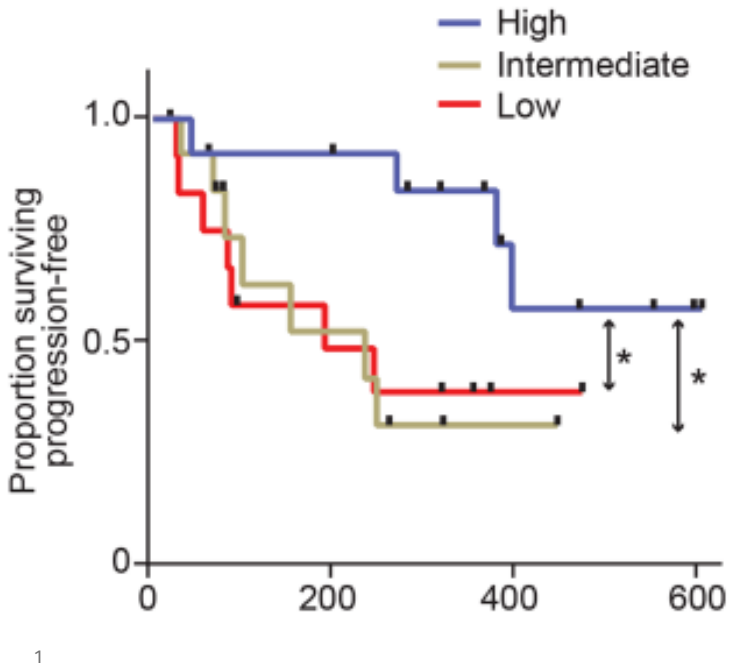


-30% mortality aGvHD

MaaT Pharma MET Inverse Simpson (mean): **24**

Solid Tumors

Higher response rate to ICI* in patients with metastatic melanoma3



1

*allo-HSCT: allogeneic hematopoietic stem cell transplantation; aGvHD: acute Graft-vs-host-Disease; ICI: Immune Checkpoint Inhibitors

[1]Peled, J.U. & al N Engl J Med 2020;382:822-34; [2]Ghani, 2021 ; Jenq RR. et al, Biol Blood Marrow Transplant 21 (2015) 1373e1383; Pamer, Blood, 2014 ; [3]Gopalakrishnan et al., Science, 2017, see also Routy et al, Science, 2018 ; Vetizou et al Science 2015;

MaaT Pharma's Microbiome Ecosystem Therapy (MET) platform has generated a diverse line of product candidates

Microbiome Ecosystem Therapies (MET)

gut Print

cGMP Platform

Native

MaaT013

MaaT033

- ✓ **High diversity**
- ✓ Full ecosystem
- ✓ **Butycore™** (immune balance)

Ongoing Phase 3 aGvHD

Ongoing Phase 2 I/O

Completed Phase 1b Allo-HCT

Co-cultured

MaaT03X

- ✓ **Indication-specific designed ecosystem** (from clinical data)
- ✓ Innovative **ecosystem co-culture technology**

Preclinical Solid Tumors I/O

[1] **Butycore™**: Group of 15 different genera known to produce short-chain fatty acids with anti-inflammatory properties

Looking ahead: addressing growing market opportunities with severe medical need

MaaT013
~ 2,000 patients[1]

MaaT033
~ 22,000 patients[1]

MaaT03X
>200,000 patients[1]

MaaT03X

3rd line SR GI aGvHD

10x

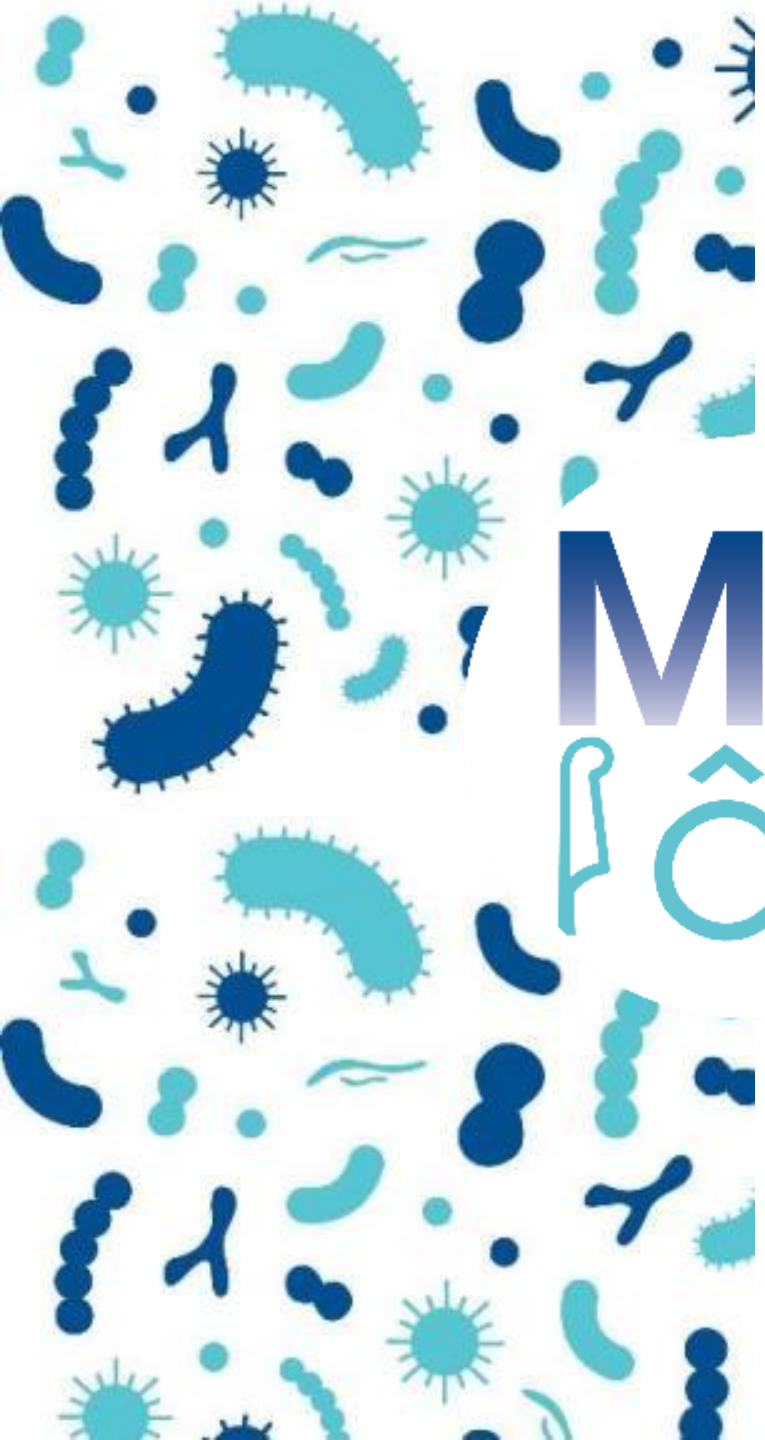
Improvement of survival for allo-HSCT

>10x TAM

Solid Tumors in combination with ICI

Long-term Expansion (Immune / inflammatory)

[1] *EU5, US, and Japan*



MaÎâT

Hemato-Oncology

MaaT013 and MaaT033 aim to restore the gut microbiota to improve survival in patients with liquid tumors

Intestinal dysbiosis is associated with higher mortality in hemato-oncology

Patients with liquid tumors

Chemotherapy
Antibiotics
Irradiation, Immunosuppressors

Loss of diversity (dysbiosis)
- Infections
- Complications

Allogenic Hematopoietic Stem Cell Transplantation (allo-HSCT)

~ 22 000 patients/yr[1]

MaaT033 Prophylaxis

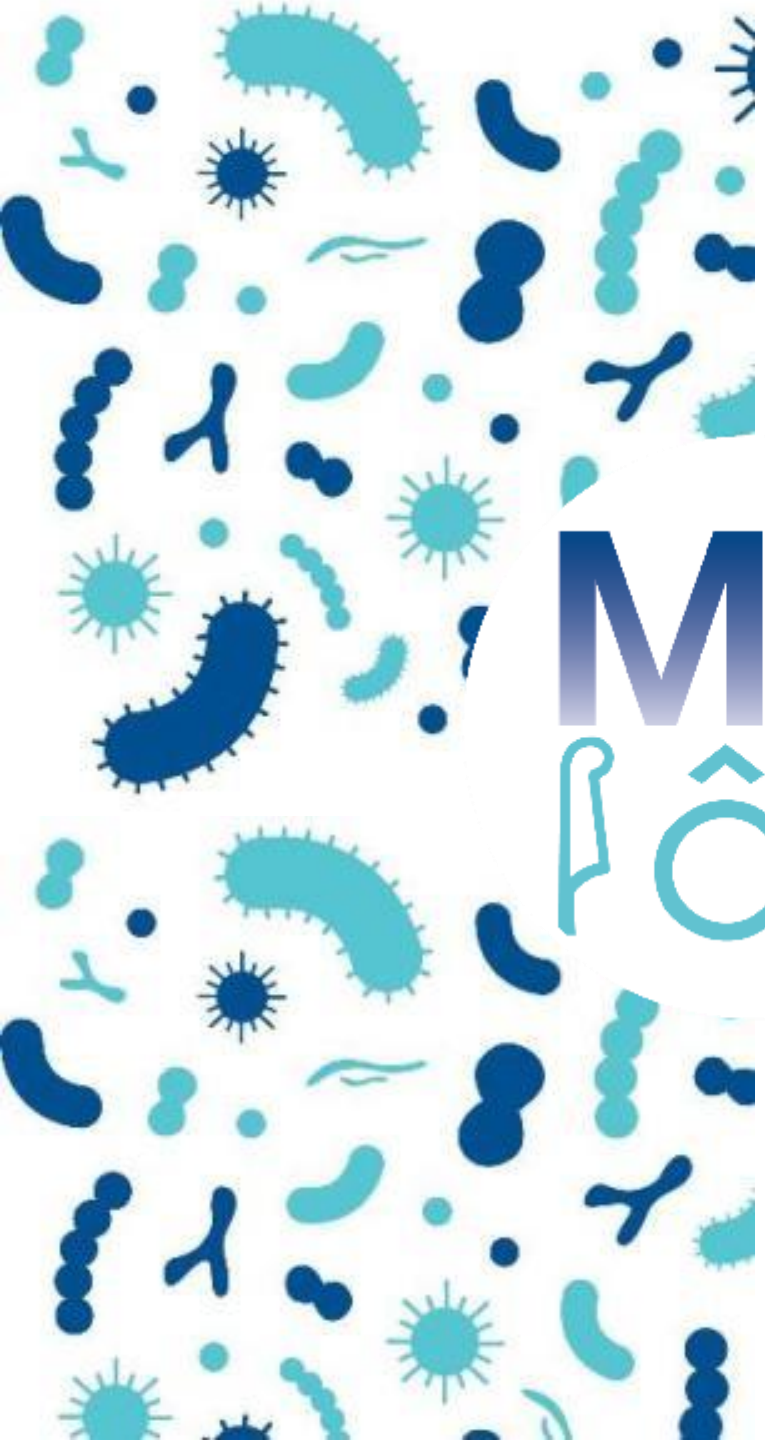
50%

MaaT013 Treatment

Acute Graft-versus-Host Disease (aGvHD)

~ 10 000 patients/yr[2]
~ 50% steroid-resistant[3]
~ **70-90%**[3] 1-yr mortality
~ >70%[3] with GI symptoms in 3rd line

1. EU5 + US : (~ 20 500 primary procedures with an additional 7%-10% recurring), 2. EU5 + US, [3] According to MAGIC database

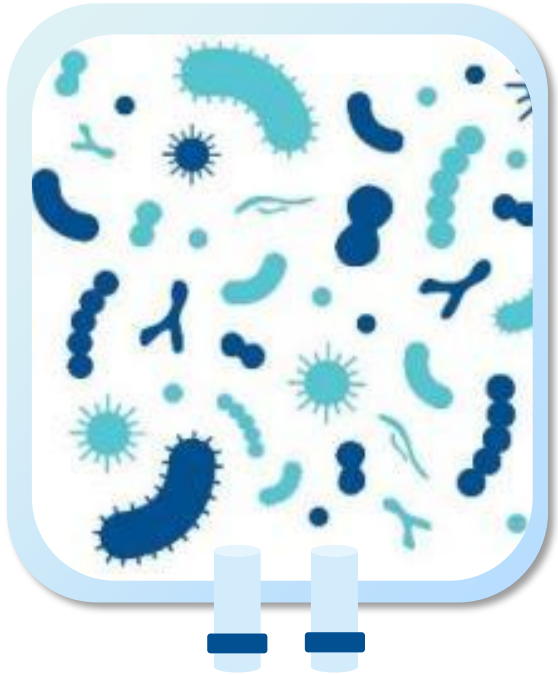


MaîâT

Hemato-Oncology

Treatment of acute Graft-vs-host-Disease (aGvHD)

MaaT013: restore the microbiome to *cure* acute Gastro-Intestinal graft vs. Host disease.



Characteristics

Pooled microbiota: a high-richness, high-diversity, full ecosystem, Microbiome Ecosystem Therapy containing Butycore™

Administration

3 doses *(150 mL enema bag)*

Available Clinical Data

- ✓ HERACLES Phase 2 Clinical Trial, N=24, 2L
- ✓ Early Access Program, data from N=52, 3L-6L, program still ongoing
- • >110 patients treated to date

Efficacy evaluation (GI ORR at Day28)

Complete response (CR), Very Good Partial Response (VGPR), Partial Response (PR)

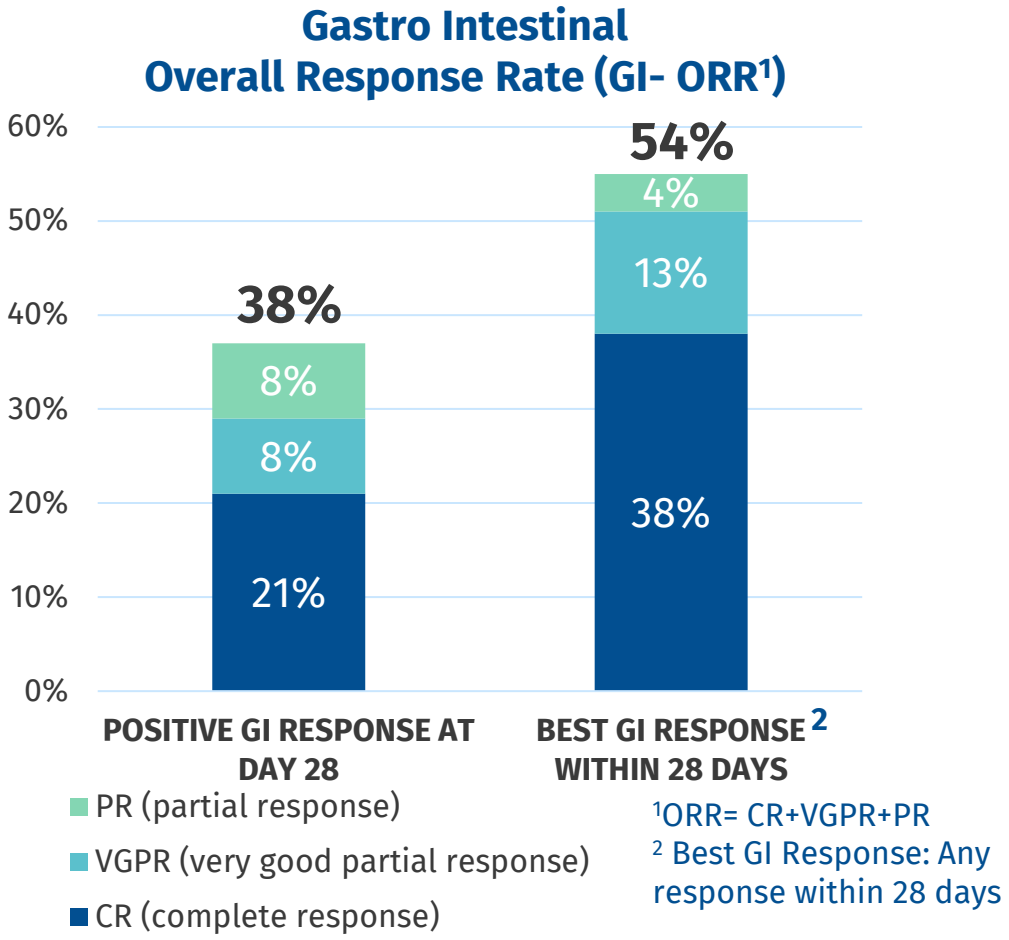
Current indication

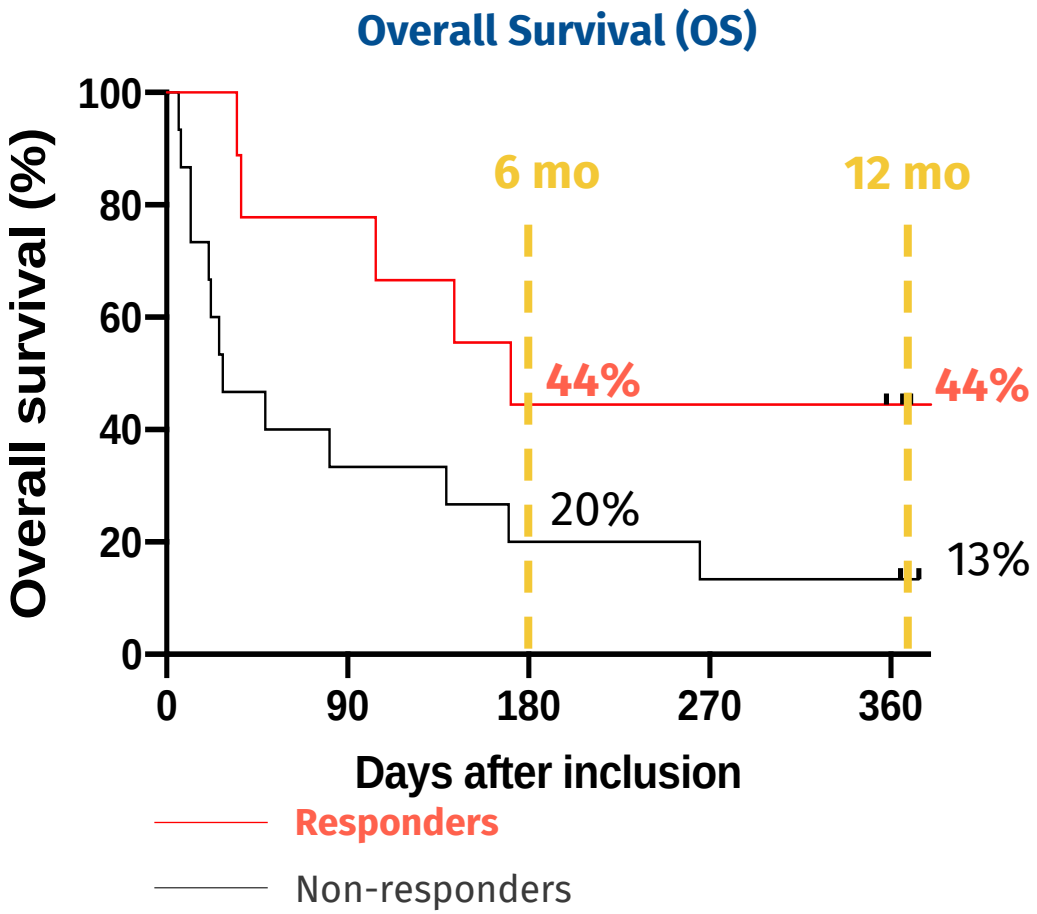
Gastrointestinal acute Graft-versus-Host Disease

MaaT013 has received Orphan Drug Designation from FDA and EMA

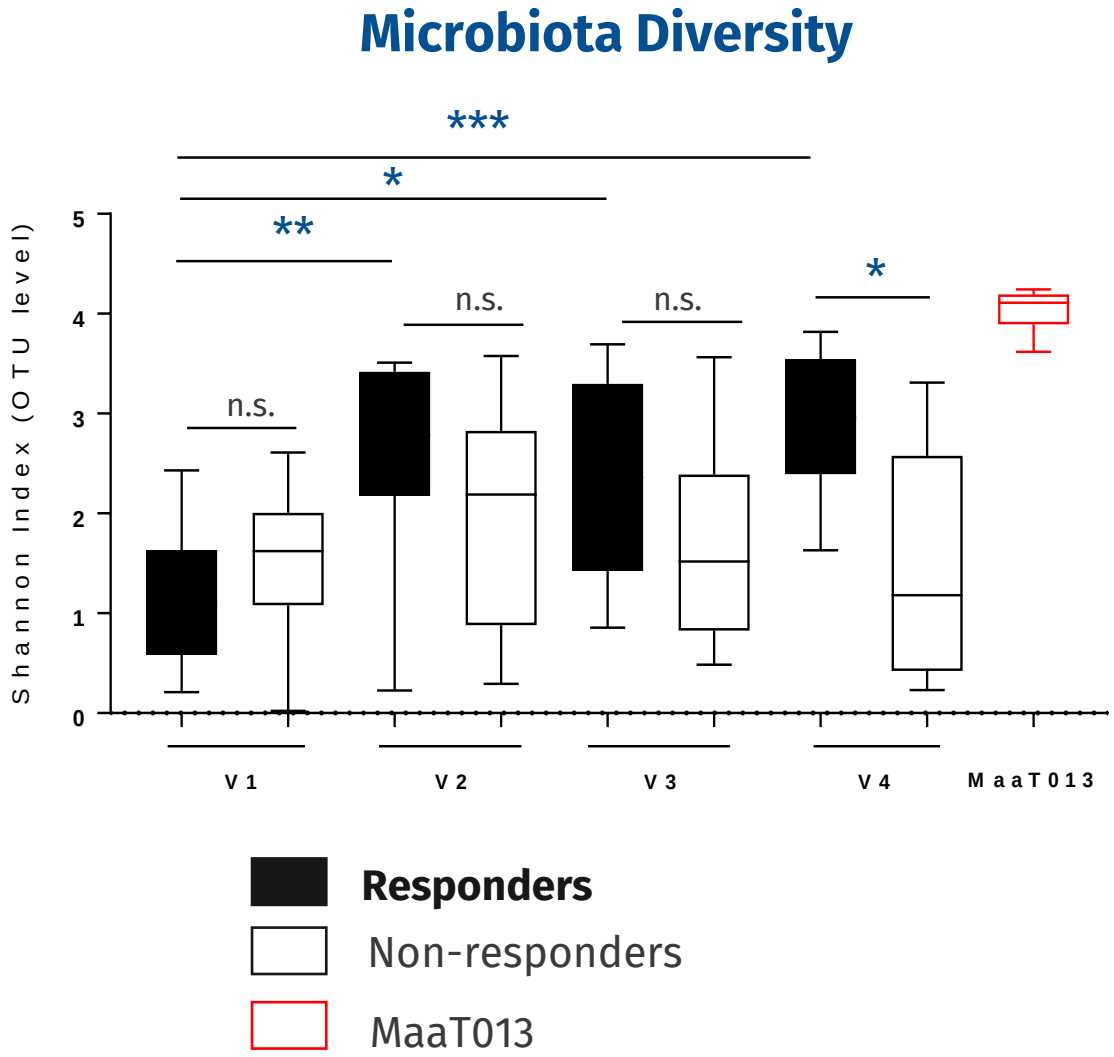
HERACLES Phase 2 Clinical Trial
Promising results in a very severe (III-IV) GI aGvHD population

- N=24 patients, 96% grade III (4% grade IV), 2nd line (Steroid-resistant)
- Very good safety and tolerability profile





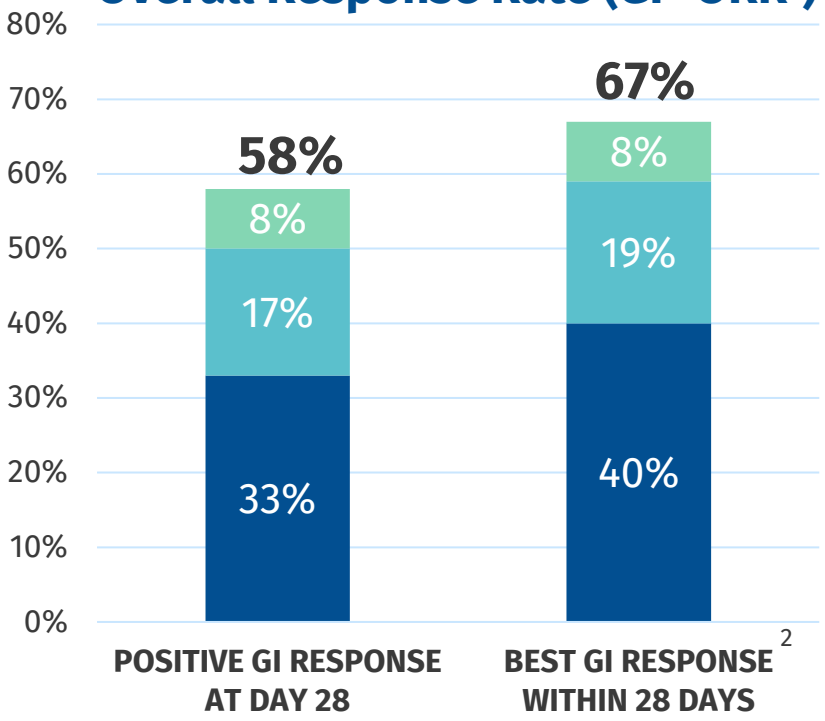
HERACLES: MaaT013 increases Responders' gut microbiome diversity



Early Access Program (EAP): Promising confirmation in an advanced, severe and more diverse GI aGvHD population

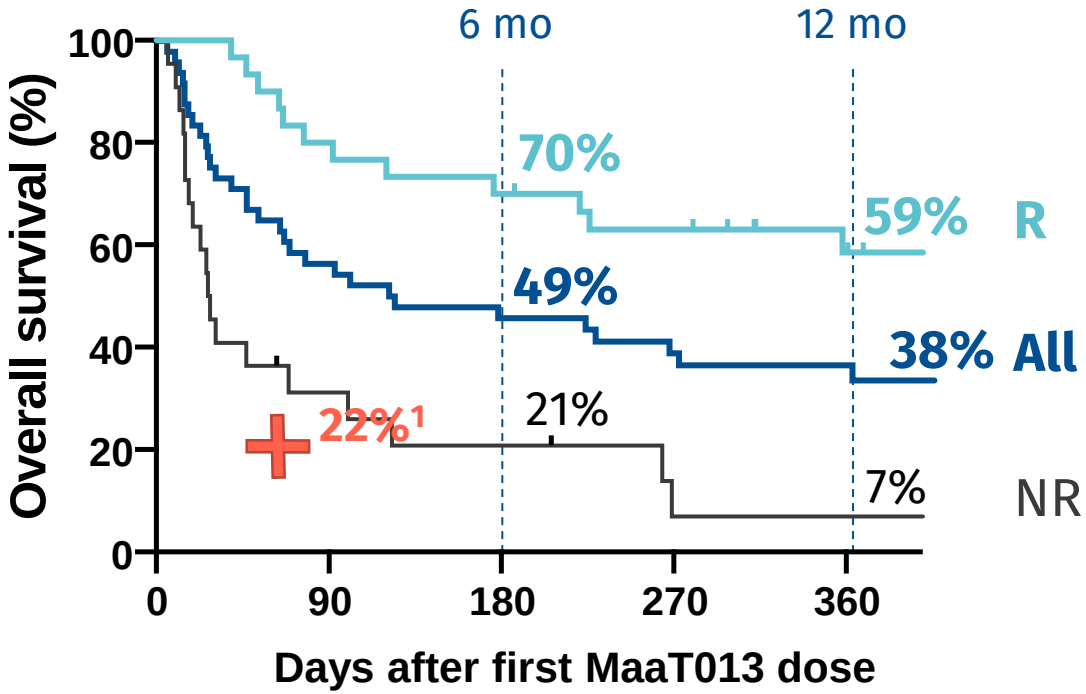
- N=52 83% SR; 94% grade III, Up to 6 lines of prior treatment (median: 3 ; 77% received ruxolitinib)
- Good tolerability and safety profile in a fragile population

Gastro Intestinal
Overall Response Rate (GI- ORR[1])



[1]ORR= CR+VGPR+PR
[2] Best GI Response: Any response within 28 days

Overall Survival Rate
Responders vs. Non responders



[1]OS expected in ruxolitinib-resistant patients at **2** months (REACH1 study)

The ARES Phase 3 study is designed to establish MaaT013 as the 3rd line agent in GI aGvHD treatment

- Pivotal single-arm trial of MaaT013 as 3rd line (steroid-resistant & ruxolitinib-resistant) in n=75 GI-aGvHD patients
- Primary endpoint: GI-ORR at Day28

EUROPE :

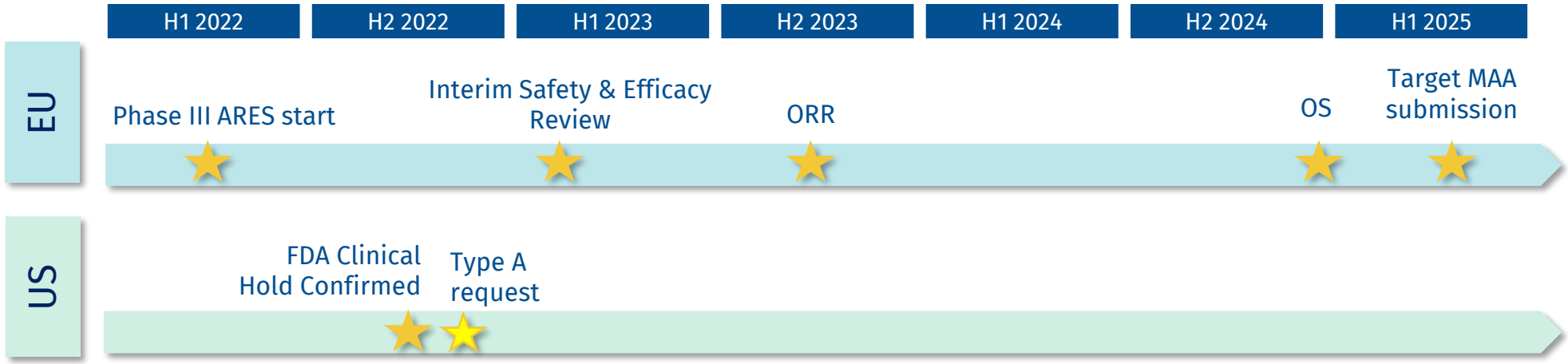
- ✓ First patient dosed in Q1 2022
- ✓ CTA approved in 5 European countries, including 2 more during Q3 22. Expected to further expand in EU.

USA:

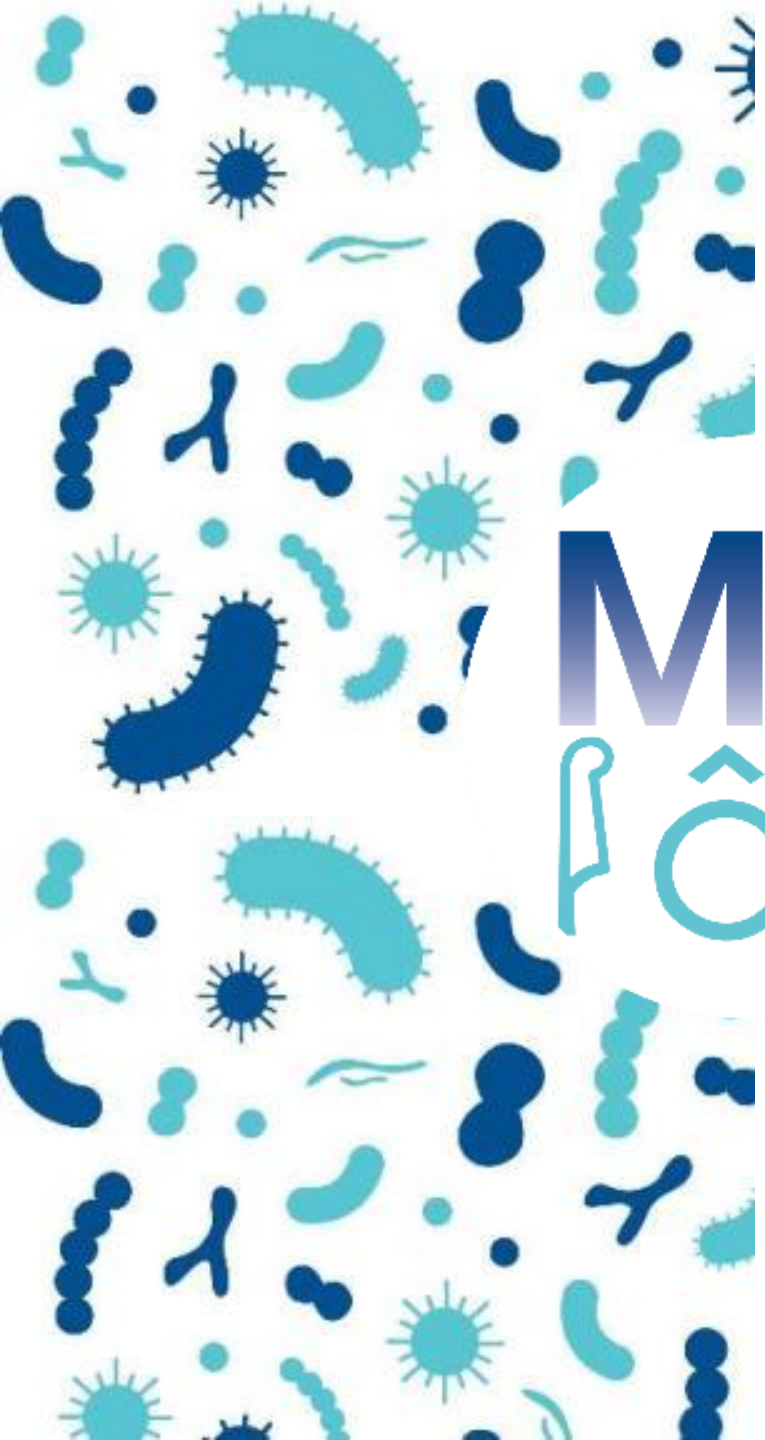
- FDA Clinical hold (CH) as of Aug 2022: Multiple CMC and clinical questions have been resolved, but CH maintained.

→ MaaT Pharma is in active discussion wit the FDA and may submit a new Type A meeting request, aiming to address remaining questions.

Targeted Timelines ARES Phase III Trial



ORR: overall response rate ; OS: overall survival ; MAA: Market approval authorization



MaîâT

Hemato-Oncology

Allogeneic-HSCT Complication Prevention

MaaT033: An optimized oral capsule to restore and maintain a healthy gut microbiome in patients with severe dysbiosis

Characteristics

Pooled microbiota: high-richness, high-diversity, full ecosystem, Microbiome Ecosystem Therapy containing Butycore™

Administration

Oral (a lyophilized capsule)

Clinical program

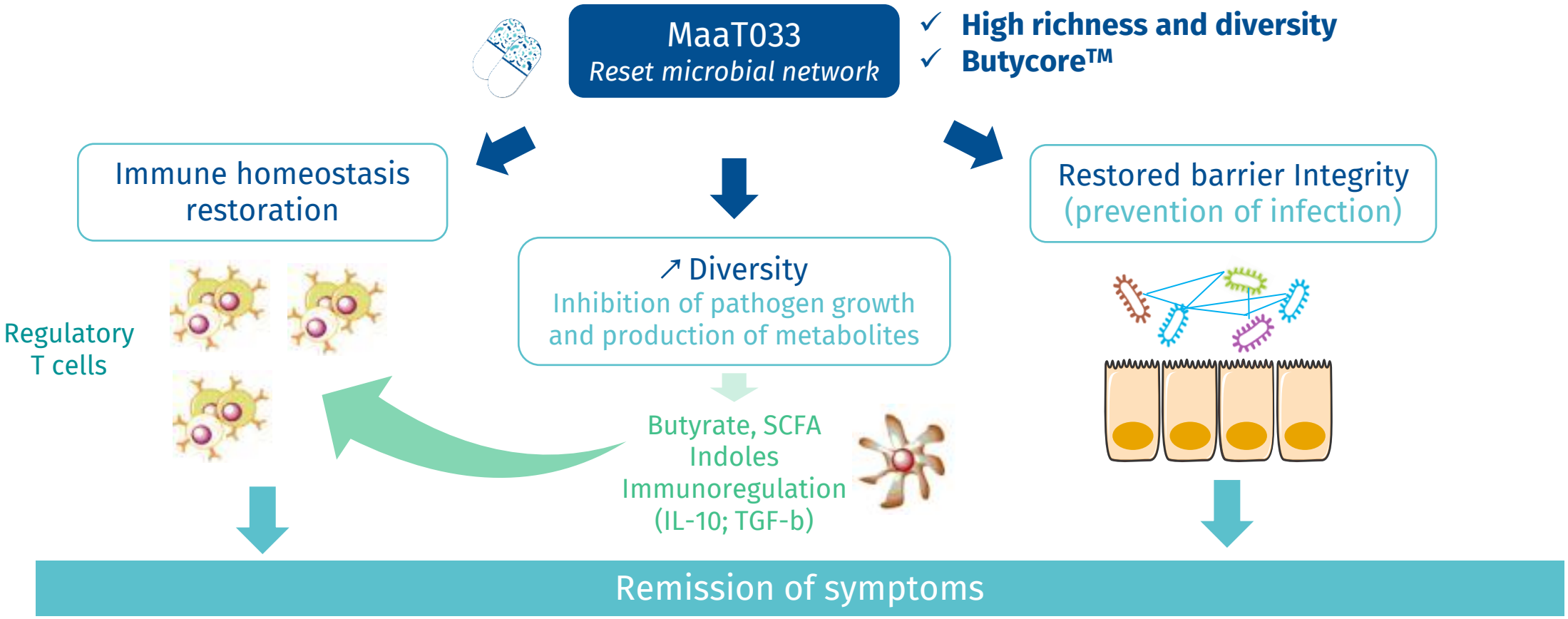
✓ CIMON Ph1b: Dose-finding study (completed)

→ Planning **PHOEBUS Phase 2b trial**: Improvement of overall survival for patients eligible to allo-HSCT

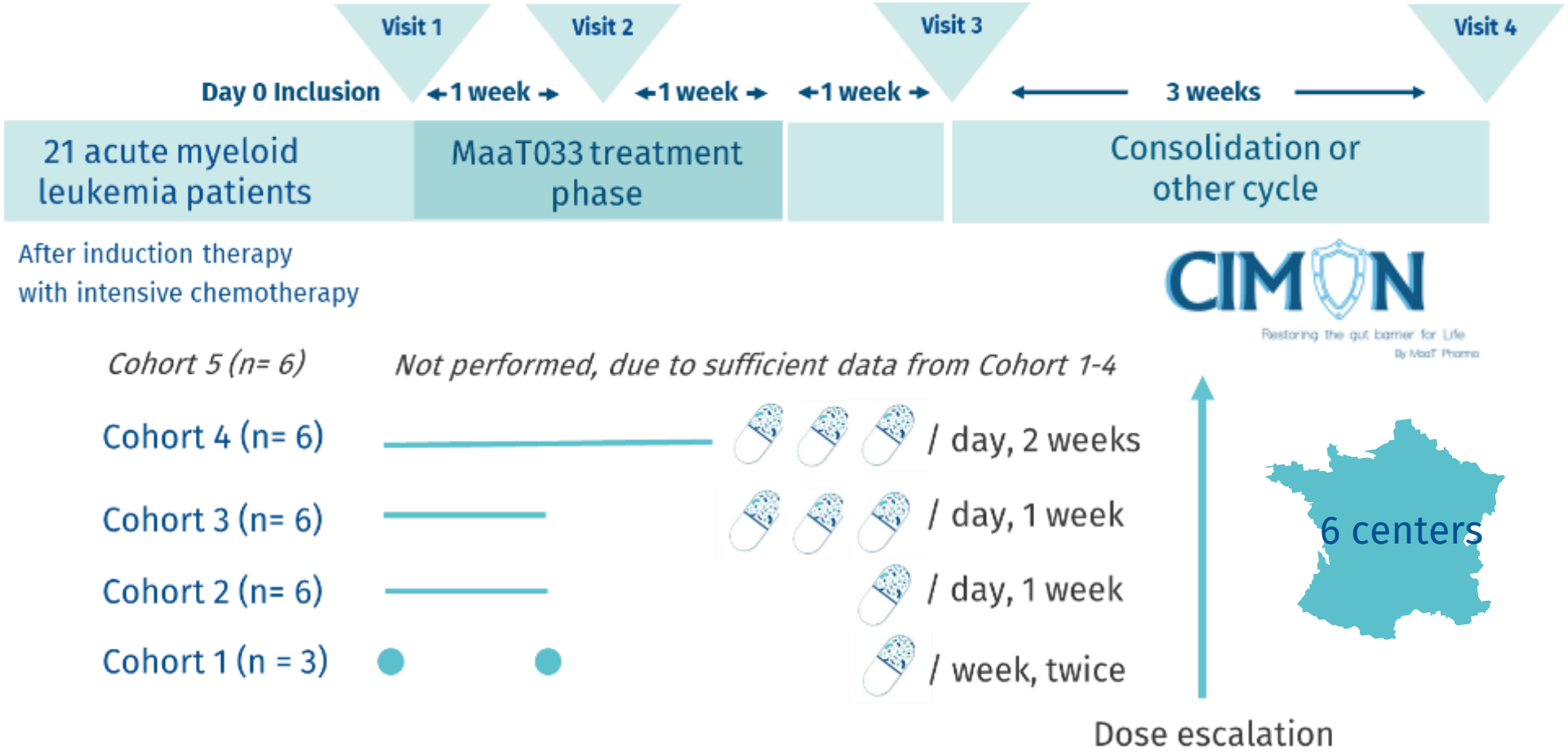
Indication

OS improvement of patients with liquid tumors undergoing allo-HSCT

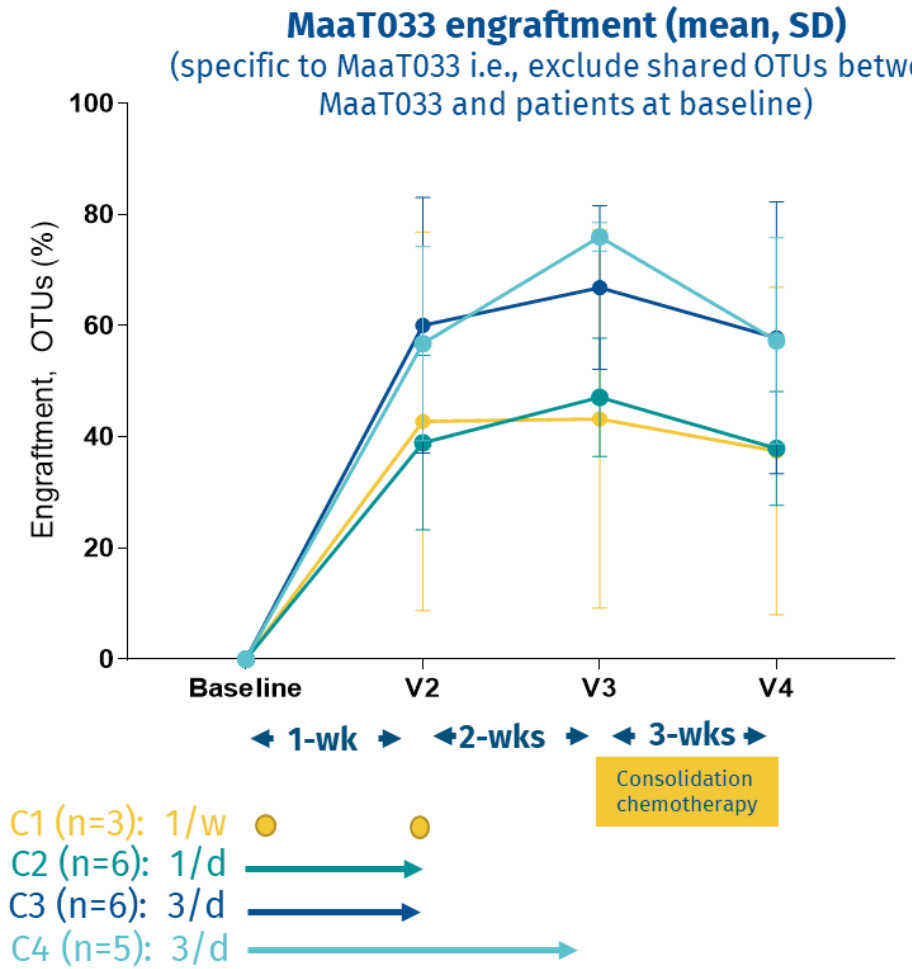
MaaT033's MOA aims to to restore and protect the gut microbiota, to improve allo-HSCT outcome and avoid complications (infections, aGvHD, etc.)



Phase Ib CIMON study aimed to determine MaaT033 dose for further clinical development



Phase Ib CIMON study : Positive topline engraftment and safety data



- First clinical POC of MaaT033 oral formulation
  - ✓ Robust and persistent engraftment
  - ✓ Good safety profile:
    - 21 patients exposed, 20 completed.
    - 100% drug compliance.
    - 4/4 positive DSMB meetings

→ Dose selected for planned Phase 2b pivotal PHOEBUS study
→ Study expected to initiate Q4 2022
(342 patients, RCT, double-blind, placebo-controlled, evaluating overall survival after allo-HSCT)

CIMON results open an attractive market opportunity: Improving survival in patients receiving allo-HSCT

United States

c. 7,800 primary procedures

EU 5

c. 9,600 primary procedures

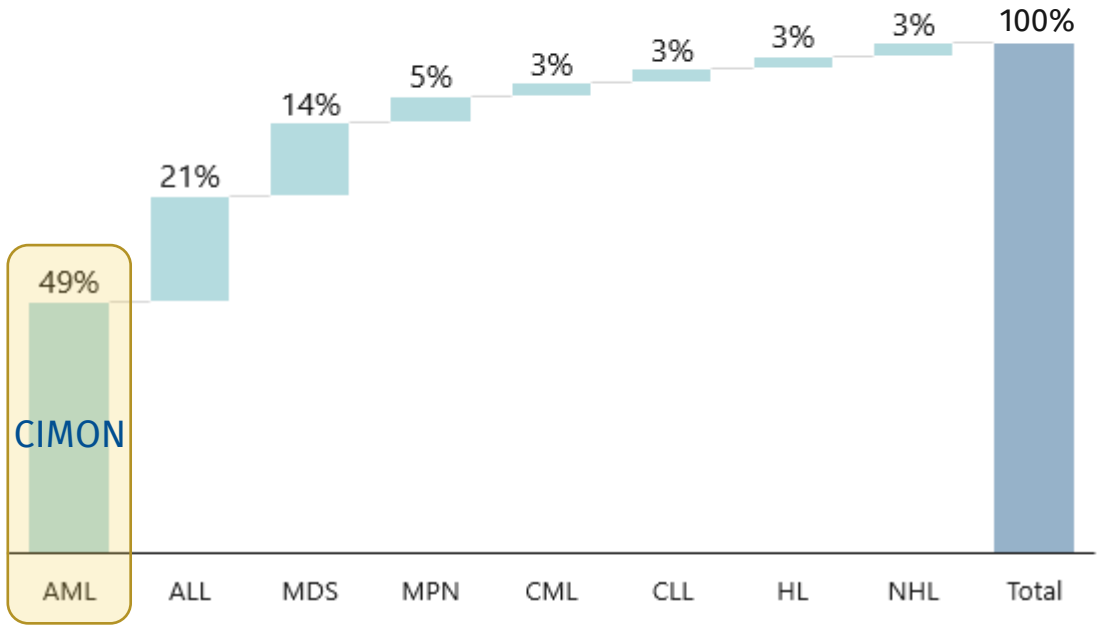
Japan

c. 3,000 primary procedures

Additional 7%-10% recurrent procedures

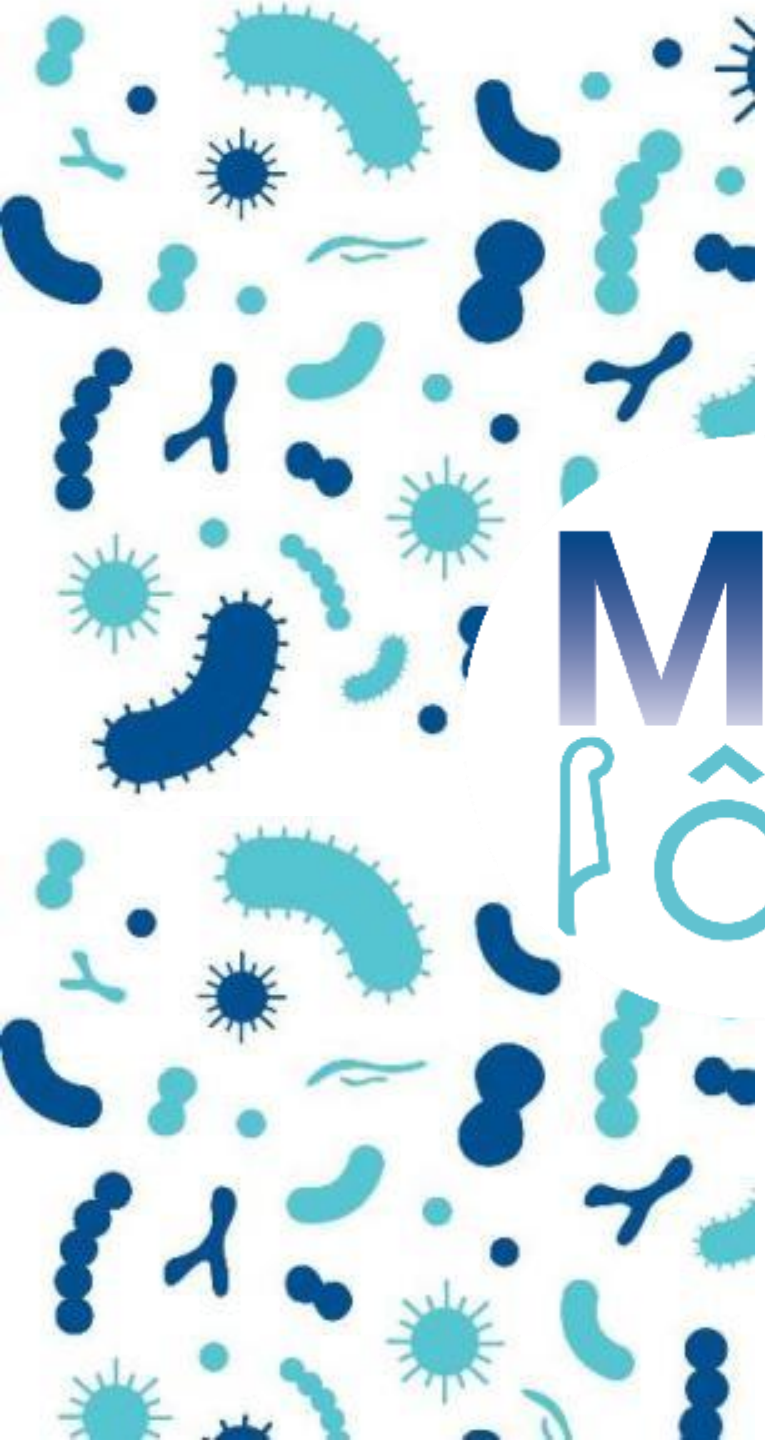
Approximately 22,500 procedures/year

Hematological Malignancy Patients Receiving Allo-HSCT[1]



AML : acute myeloid leukemia; ALL : acute lymphoblastic leukemia ; MDS : myelodysplastic syndrome; MPN : myeloproliferative neoplasms ; CML: chronic myeloid leukemia ; CLL : chronic lymphocytic leukemia ; HL: Hodgkin's Lymphoma ; NHL: Non Hodgkin Lymphoma

[1]EBMT aHSCT Survey, 2017 (published in Bone Marrow Transplantation (2019) 54:1575–1585), Global Data 2020



MaÎâT

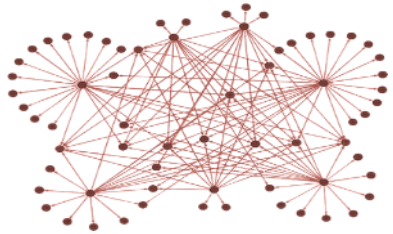
Immuno-Oncology
Solid Tumors

A diverse gut microbiome increases survival in patients receiving immune checkpoint inhibitors (ICI)

FMT from ICI responders to ICI non-responding patients with metastatic melanoma

✓ **6/15**
Non-responders → Responders
(Davar et al, 2021)

✓ **3/10**
Non-responders → Responders
(Baruch et al, 2021)



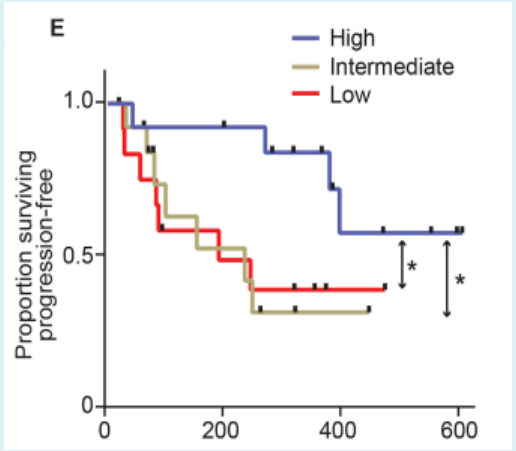
- Immune check-point inhibitors (ICI) therapies have established themselves as key therapeutic options in solid tumors, but ORR may be as low as 20% in some indications.
- Richness, Diversity and composition of gut microbiome drive survival and ICI toxicity in patients receiving ICI[1,2,3,4]
- FMT from ICI responders (R) could induce response in metastatic melanoma non-responders (NR)[5,6]

→ Leveraging the gut microbiome richness, diversity and its key functional networks may be a game-changer in immuno-oncology in the coming years

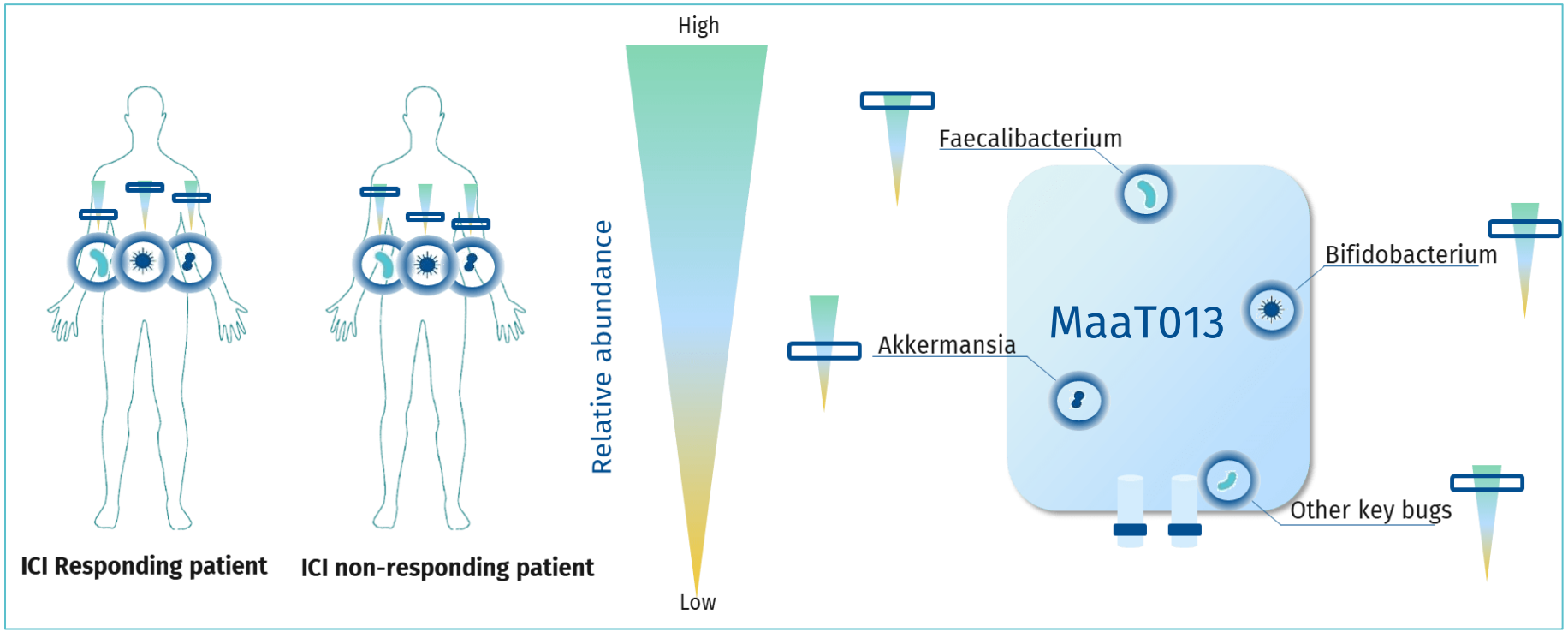
[1.] Gopalakrishnan et al, Science 2018, [2.] Matson, et al Science 2018; [3.] Routy et al, Science 2017;
[4.] Mc Culloch et al, Nat Med 2022; [5.] Baruch et al, Science 2021; [6.] Davar et al, Science 2021

MaaT013 ensures high diversity and contains specific bacterial strains that have been identified to improve ICI response

Higher microbiome richness → better response rate to ICI in patients with metastatic melanoma



Gopalakrishnan et al, Science 2018



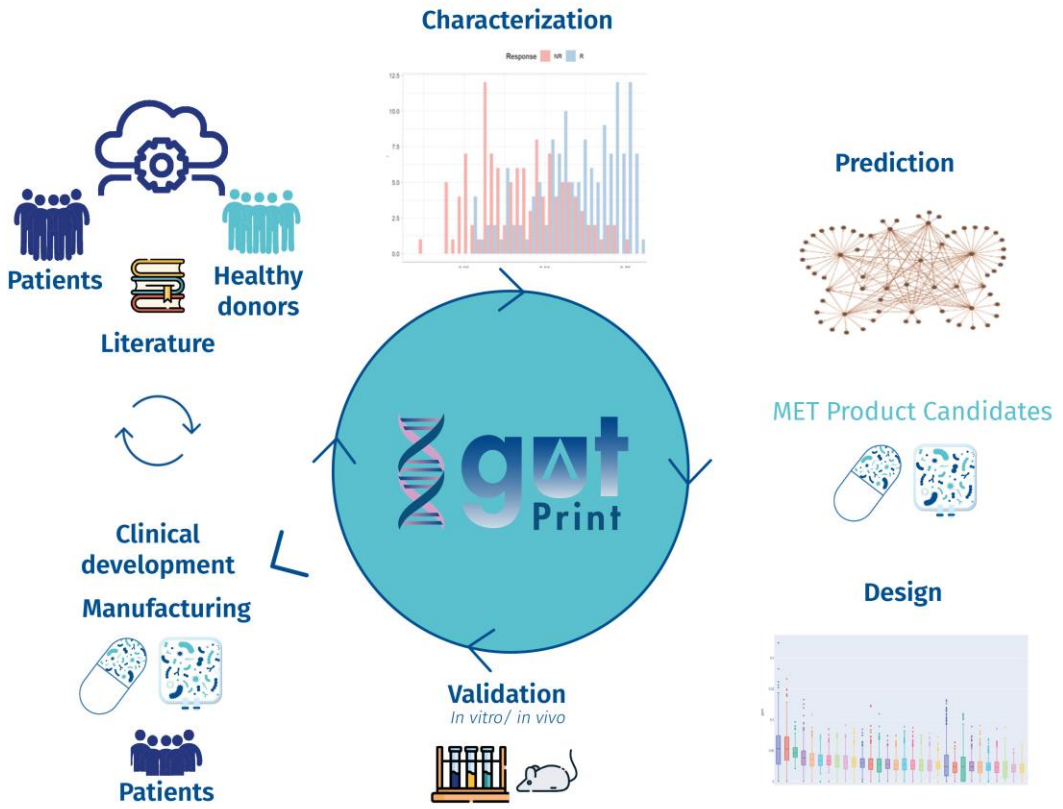
Ongoing Phase IIa PICASSO trial[1], in collaboration with **Assistance Publique - Hôpitaux de Paris** (sponsor).

✓ **RCT** [MaaT013 + ICI] vs. [Placebo + ICI] in **60** metastatic melanoma patients

✓ Assessing **Safety** and **Efficacy** (iRECIST) of MaaT013 vs. placebo after 23 weeks of treatment

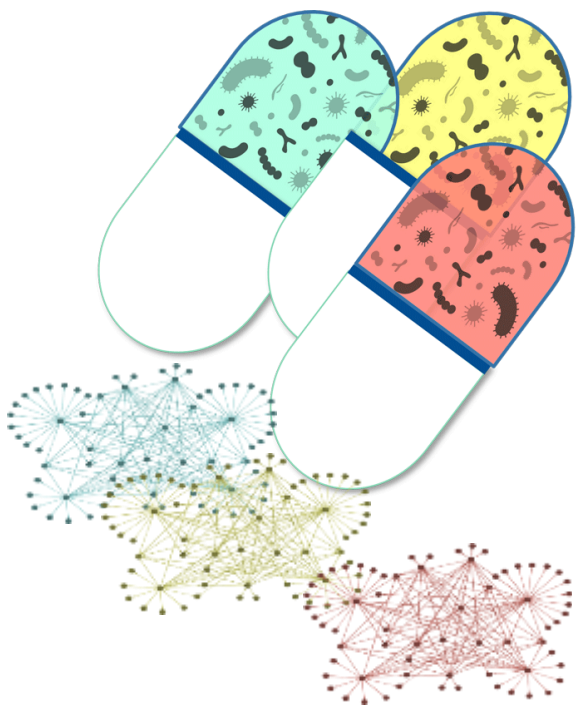
[1] Registered trial #**NCT04988841**

Proprietary gutPrint® platform synergizes multi-source data to generate innovative and indication-specific microbiome ecosystem therapies



gutPrint® is the engine that drives MaaT Pharma's MET product candidate generation capabilities to broaden and strengthen the pipeline

MaaT03X: Modulate the gut microbiome to improve response to Immune Checkpoint Inhibitors treatment in solid tumors



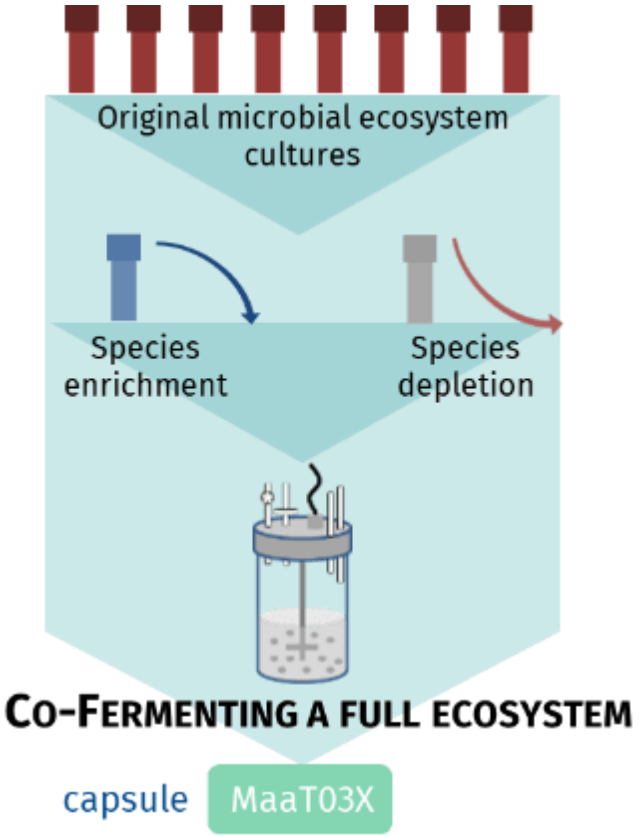
Characteristics
High richness, co-cultured, designed ecosystem

Administration
Oral (proprietary lyophilized capsule)

Development program
- ✓ First candidate in preclinical development
- → Targeting FIH H2 2023

Indication
Improvement of response to ICI
Potential to be declined to multiple indications

Customizable, donor-independent, scalable co-culture process

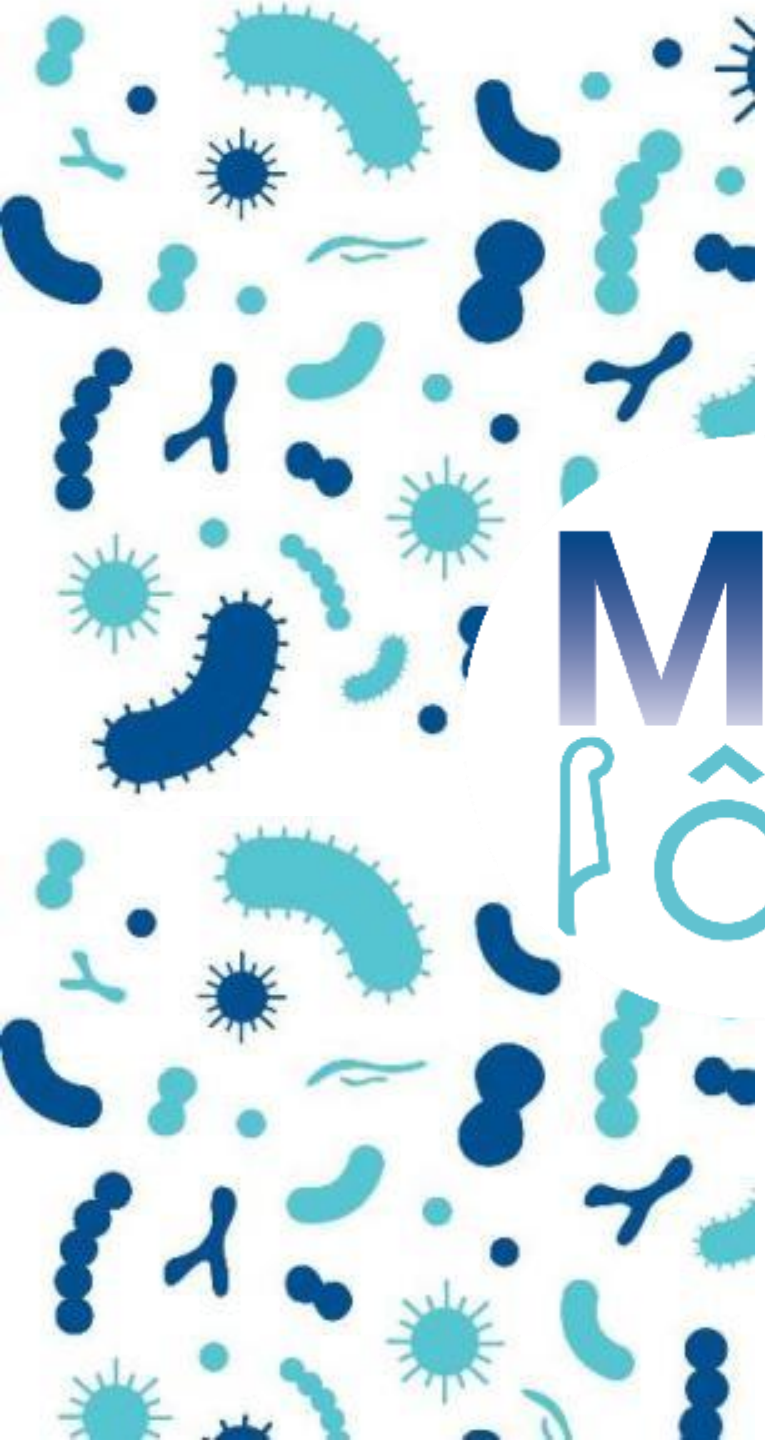


Building Europe's largest specialized cGMP manufacturing facility for Microbiome Ecosystem Therapies

Partnership with Skyepharma

- Building a dedicated 1,500 square meter site (which could be doubled).
- Designed to support commercial manufacturing of MaaT013 and MaaT033 and clinical manufacturing of MaaT03X products
- Skyepharma already manufactures approved drugs for the USA and Europe
- Building will host manufacturing and R&D activities

Artist's representation of future plant



Key Upcoming Milestones

Delivering on our objectives

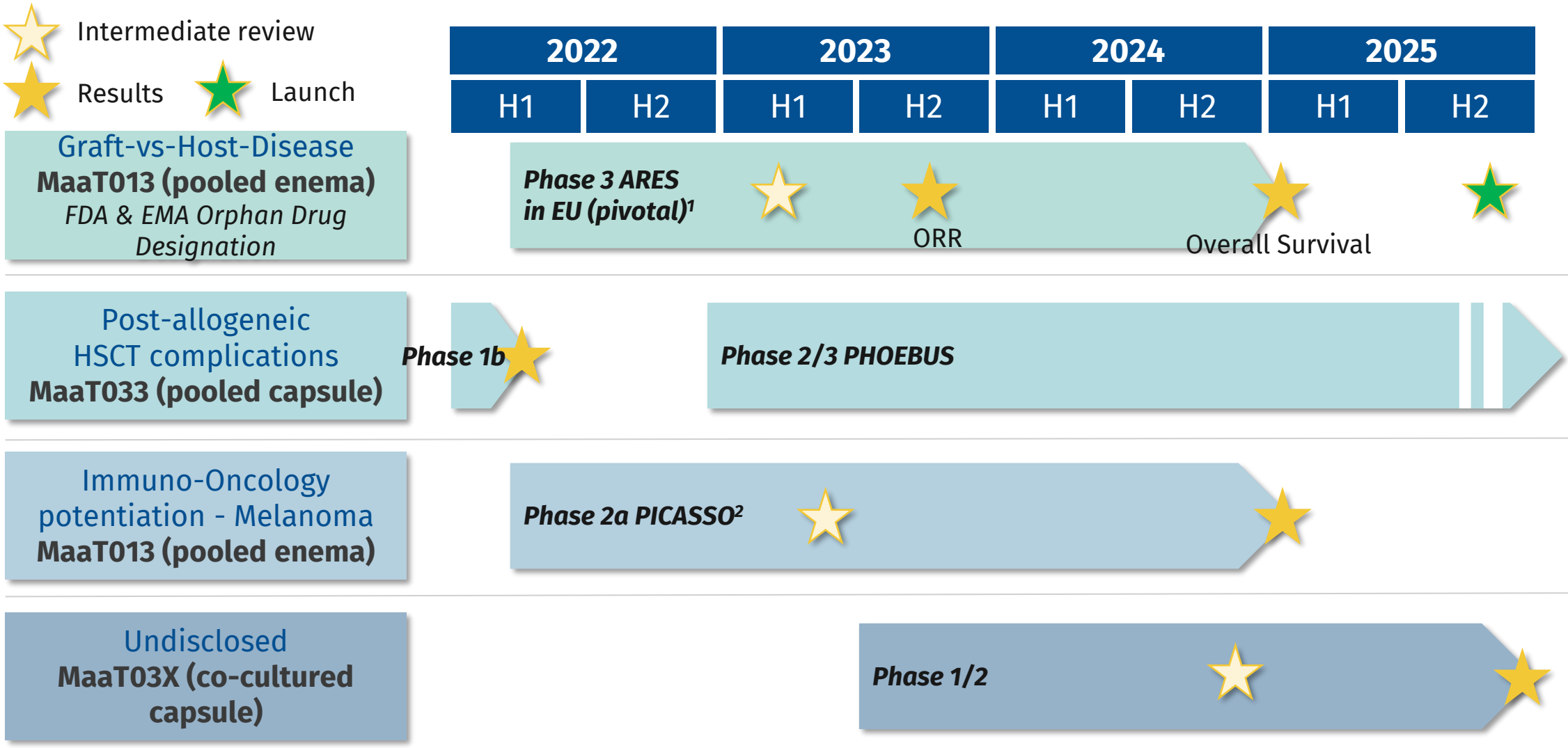
	Clinical program	Milestones announced at IPO *(Nov 2021)*	Status
Onco-hematology	 **MaaT013 (pooled enema)** *Acute Graft vs Host Disease* *FDA & EMA Orphan Drug Designation*	*Launch of the first Phase 3 trial in oncology in the world*	✓
	 **MaaT033 (pooled capsule)** *Survival improvement post allo-HSCT*	*Completion of Phase 1b trial and positive preliminary safety and engraftment data*	✓
Immuno-oncology	 **MaaT013 (pooled enema)** *Improving ICI responses in metastatic melanoma*	*Launch of Phase 2 trial* - POC* ** Sponsored by AP-HP*	✓
	 **MaaT03X (co-cultured capsule)** *Undisclosed indications*	*Preclinical activities to enter clinical development in H2 2023*	✓
cGMP production	 **Increasing cGMP production capacities**	*Partnership with Skyepharma to build the first and largest exclusive Microbiome Ecosystem Therapies facility in Europe*	✓

Looking ahead

	Clinical program	Next Step	Expected timeline
Onco-hematology	 **MaaT013 (pooled enema)** *Acute Graft vs Host Disease* *FDA & EMA Orphan Drug Designation*	Intermediate review ORR	*H1 2023* *H2 2023*
	 **MaaT033 (pooled capsule)** *Survival improvement post allo-HSCT*	Initiation of Phase 2/3 PHOEBUS (pivotal)	*Q4 2022*
Immuno-oncology	 **MaaT013 (pooled enema)*** *Improving ICI responses in metastatic melanoma*	Interim partial data review	*H1 2023*
	 **MaaT03X (co-cultured capsule)** *Undisclosed indications*	Start of Phase 1/2	*H2 2023*
cGMP production	 **Increasing cGMP production capacities**	Opening of the first and largest exclusive Microbiome Ecosystem Therapies facility in Europe	*2023*

** Phase 2 trial - POC sponsored by AP-HP*

Meaningful milestones in both the near and long term



[1]Expansion to US sites subject to IND approval in the US;
[2]Investigator sponsored trial (AP-HP) where MaaT Pharma supplies the drugs and performs the microbiome profiling using its gutPrint® platform

Key differentiators of MaaT Pharma from other microbiome competitors

Leveraging the complexity of the microbiome

Pioneering a **full ecosystem approach** to restore host/microbiome **immune symbiosis**, based on proprietary **AI** and manufacturing capacities

Manufacturing versatility

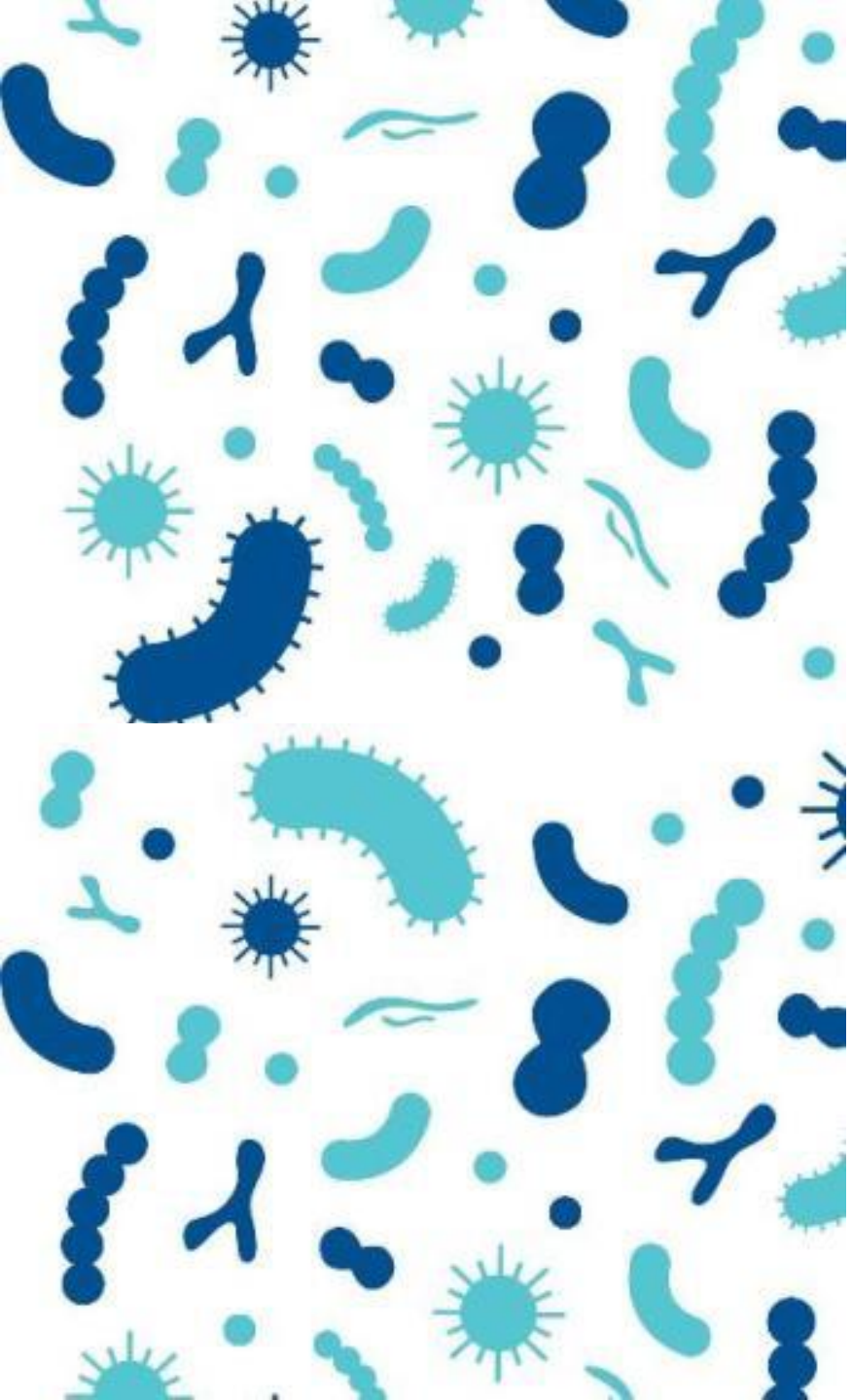
cGMP manufacturing scalability for both native and co-cultured products and building of a new plant

Oncology focus

Addressing **high unmet needs** in the hemato-oncology and immuno-oncology therapeutic areas

Established proof of concept

First company to reach Phase 3 testing for a microbiome product in oncology globally



THANK YOU