MaaT Pharma

Microbiota as a Therapy

Company Presentation
June 2022

Disclaimer

This document has been prepared by MaaT Pharma (the "**Company**") and is for information and background purposes only.

While the information contained herein has been prepared in good faith, neither the Company, nor its shareholders, directors, officers, agents, employees, or advisors give, have given or have authority to give, any representations or warranties (express or implied) as to, or in relation to, the fairness, accuracy, reliability or completeness of the information in this document, or any revision thereof, or of any other written or oral information made or to be made available to any interested party or its advisers, including financial information (all such information being referred to as "**Information**"), and liability therefor is expressly disclaimed. Accordingly, neither the Company nor any of its shareholders, directors, officers, agents, employees, affiliates, representatives or advisers take any responsibility for, or will accept any liability whether direct or indirect express or implied, contractual, tortuous, statutory or otherwise, in respect of the accuracy or completeness of the Information or for any of the opinions contained herein or for any errors, omissions or misstatements or for any loss, howsoever arising from this document.

The information and opinions contained in this document are provided as of the date of this document only and may be updated, supplemented, revised, verified or amended, and thus such information may be subject to significant changes. The Company is not under any obligation to update the information or opinions contained herein which are subject to change without prior notice.

The information contained in this document has not been subject to independent verification and are qualified in their entirety by the business, financial and other information that the Company is required to publish in accordance with the rules, regulations and practices applicable to companies listed on the regulated market of Euronext in Paris, including in particular the risk factors and other information in the Company's Document d'enregistrement (Registration Document) registered by the French *Autorité des marches financiers* (Financial Markets Authority) (the "**AMF**") on October 1st, 2021 under no. I.21-0057 and its supplement on October 14, 2021 under no. I.21-0061 and in any other periodic report, which are available free of charge on the websites of the Company (https://www.maatpharma.com/) and the AMF (www.amf-france.org).

No representation, warranty or undertaking, express or implied, is made as to the accuracy, completeness or appropriateness of the information and opinions contained in this document. The Company, its subsidiaries, its advisors and representatives accept no responsibility for and shall not be held liable for any loss or damage that may arise from the use of this document or the information or opinions contained herein.

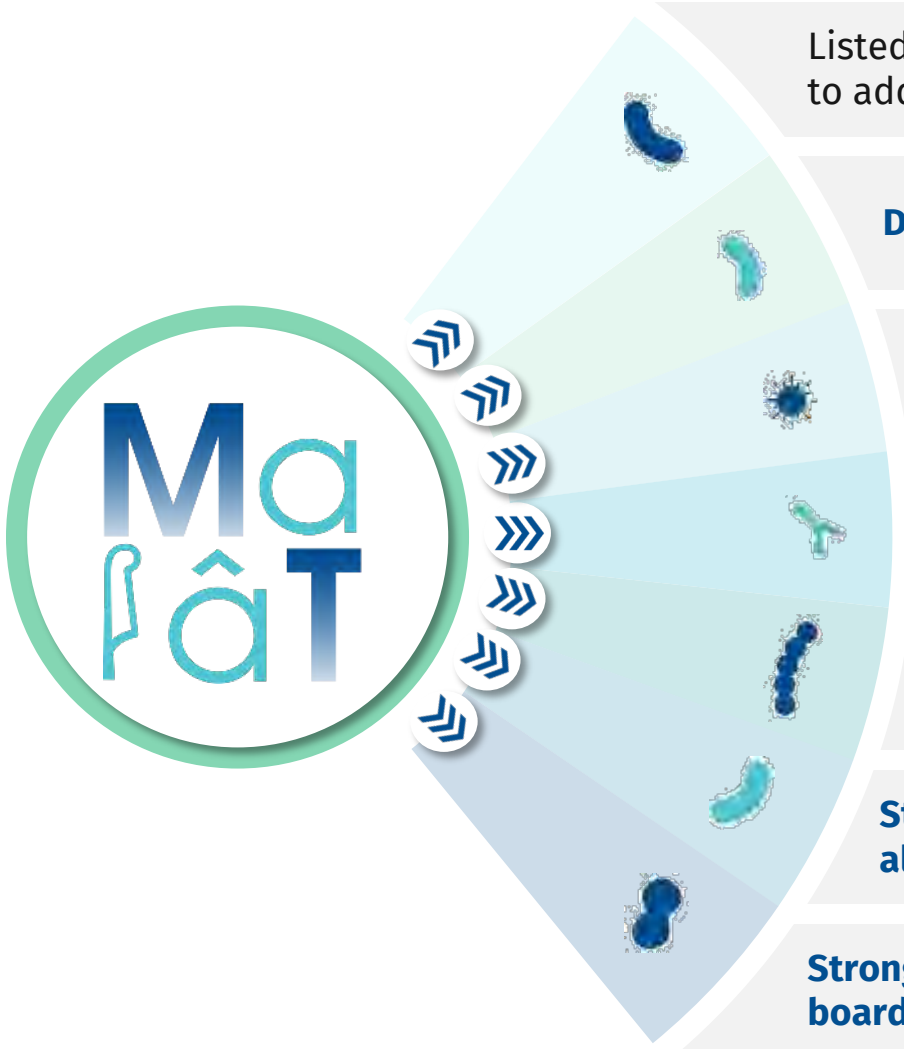
This document contains information on the Company's markets and competitive position, and more specifically, on the size of its markets. This information has been drawn from various sources or from the Company's own estimates which may not be accurate and thus no reliance should be placed on such information. Any prospective investors must make their own investigation and assessments and consult with their own advisers concerning any evaluation of the Company and its prospects, and this document, or any part of it, may not form the basis of or be relied on in connection with any investment decision.

This document contains certain forward-looking statements. These statements are not guarantees of the Company's future performance. These forward-looking statements relate to the Company's future prospects, developments and marketing strategy and are based on analyses of earnings forecasts and estimates of amounts not yet determinable.

Forward-looking statements are subject to a variety of risks and uncertainties as they relate to future events and are dependent on circumstances that may or may not materialize in the future. Forward-looking statements cannot, under any circumstance, be construed as a guarantee of the Company's future performance and the Company's actual financial position, results and cash flow, as well as the trends in the sector in which the Company operates, may differ materially from those proposed or reflected in the forward-looking statements contained in this document. Even if the Company's financial position, results, cash-flows and developments in the sector in which the Company operates were to conform to the forward-looking statements contained in this document, such results or developments cannot be construed as a reliable indication of the Company's future results or developments. The Company does not undertake any obligation to update or to confirm projections or estimates made by analysts or to make public any correction to any prospective information in order to reflect an event or circumstance that may occur after the date of this document.

All persons accessing this document are deemed to agree to all the limitations and restrictions set out above.

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**

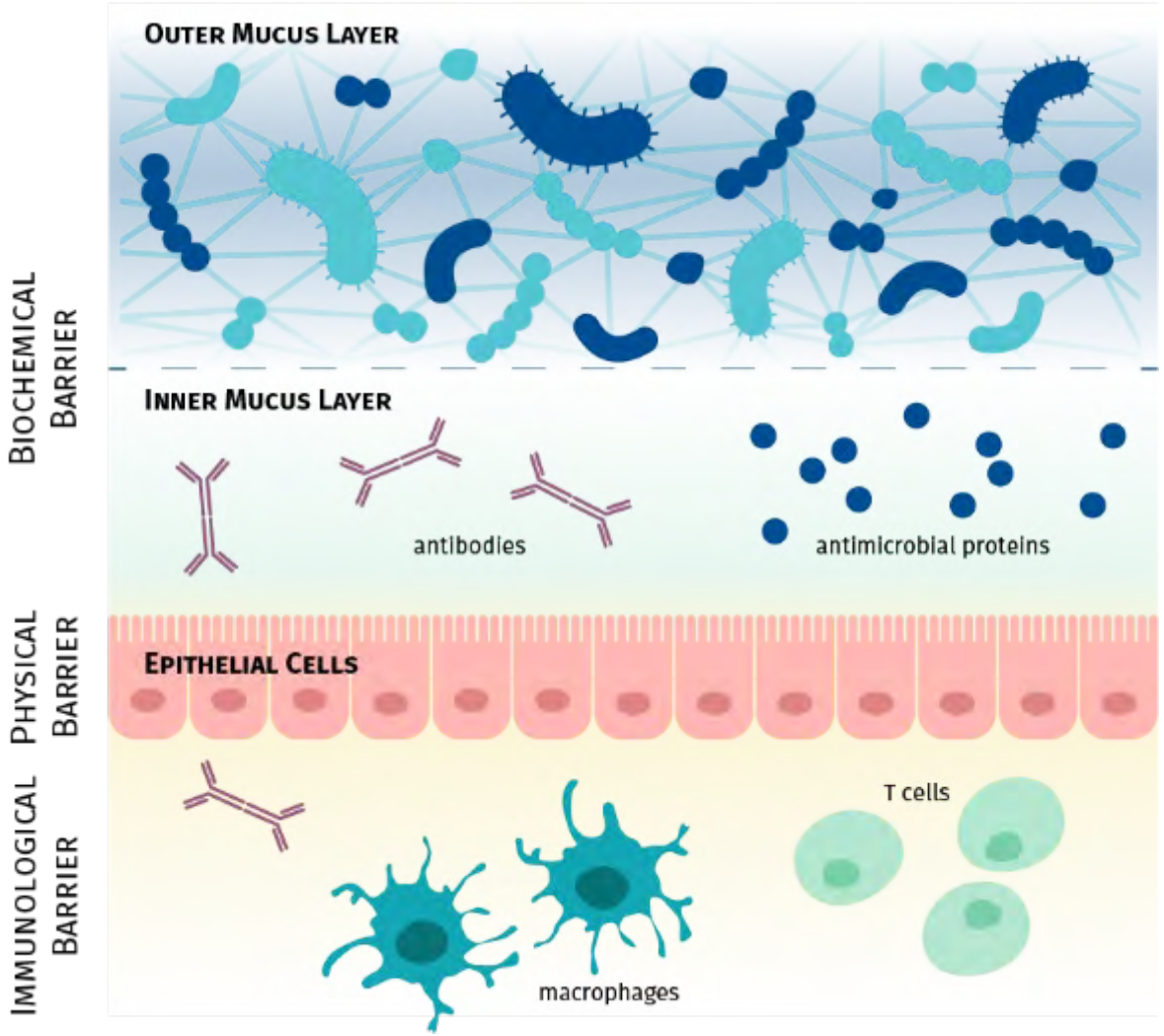
Proprietary gutPrint® metagenomics technology platform driving product candidate generation

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

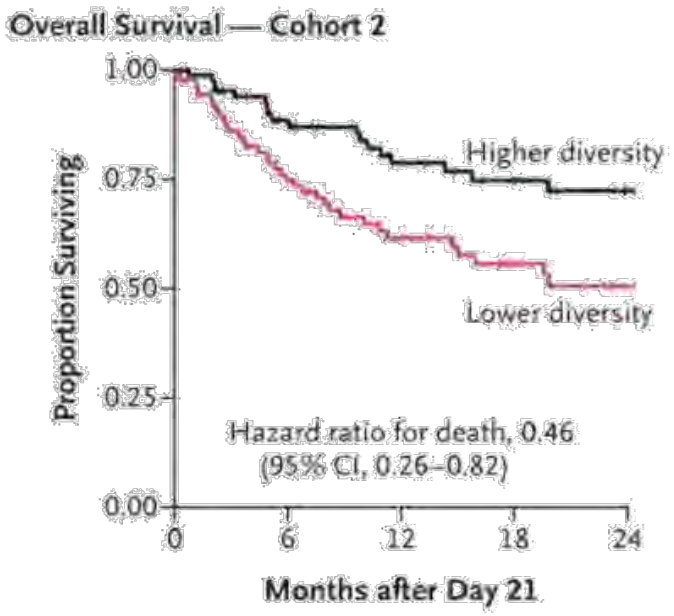
A rich and diversified gut ecosystem actively modulates the immune system functionality

- 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)

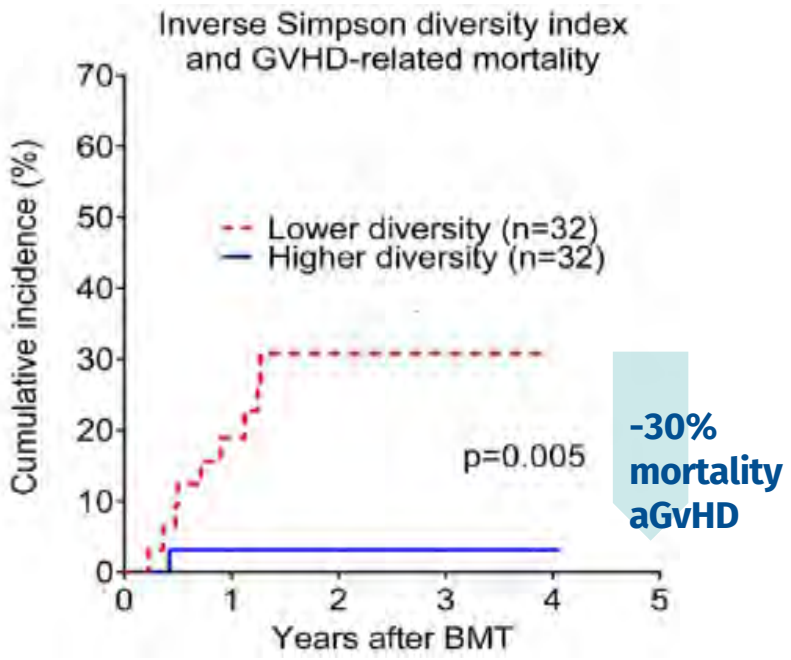
Diversity matters!
Higher gut microbiome diversity is associated with …

Liquid Tumors

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



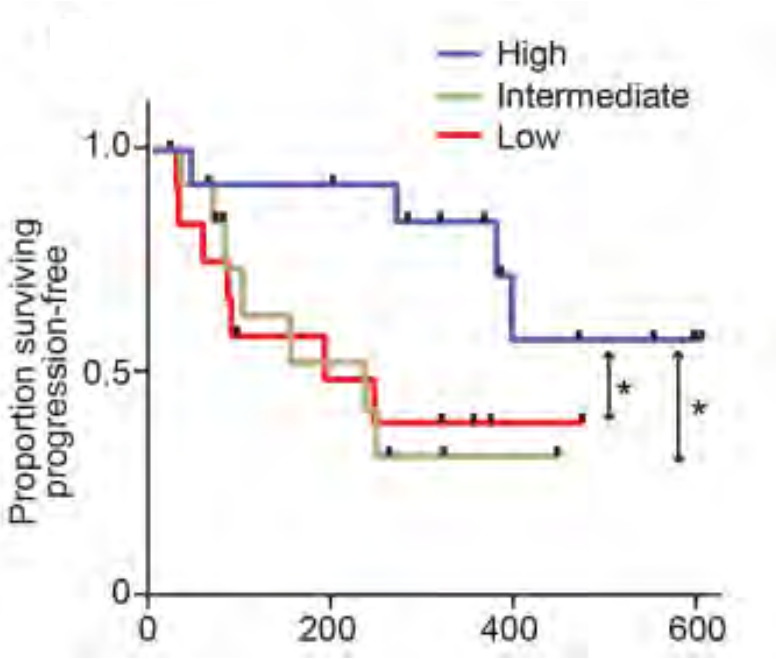
Lower incidence and lower mortality from aGvHD*,2



-30% mortality aGvHD

Solid Tumors

Higher response rate to ICI* in patients with metastatic melanoma3



1

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

*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 ; [2]Jenq RR. et al, Biol Blood Marrow Transplant 21 (2015) 1373e1383; Pamer, Blood, 2014 ; Gopalakrishnan et al., Science, 2017, 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

gut Print

Microbiome Ecosystem Therapies (MET)

cGMP Platform

Native

MaaT013

- ✓ **High diversity**
- ✓ Full ecosystem
- ✓ **Butycore™** (anti-inflammatory)

Ongoing Phase 3 aGvHD

Ongoing Phase 2 I/O

MaaT033

Completed Phase 1b Allo-HCT

Co-fermented

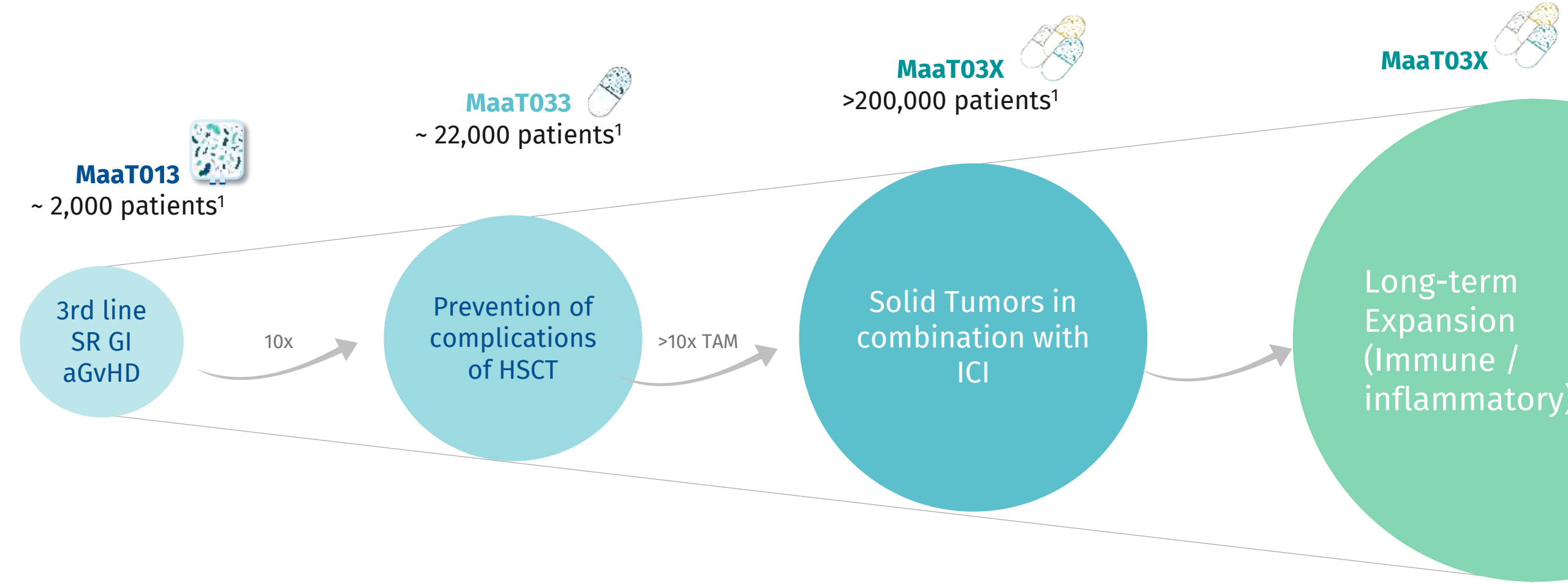
MaaT03X

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



[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)

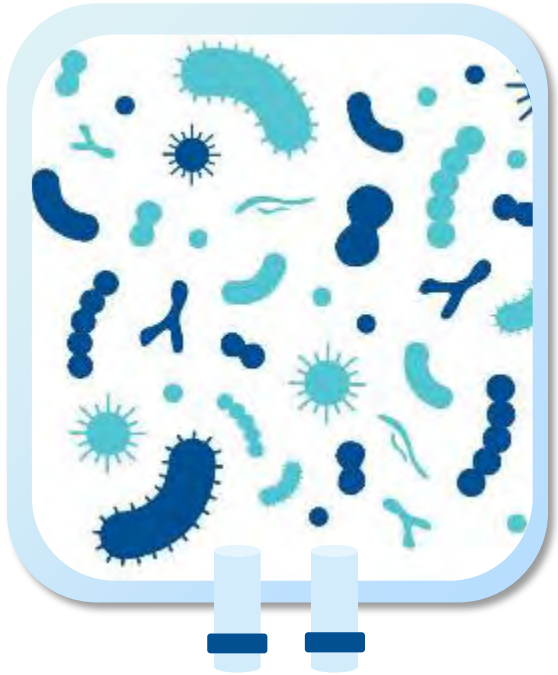
~ 10 000 patients/yr[2]
~ 50% steroid-resistant[3]
~ **70-90%**[3] 1-yr mortality
~ >70%[3] with GI symptoms in 3rd line

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

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

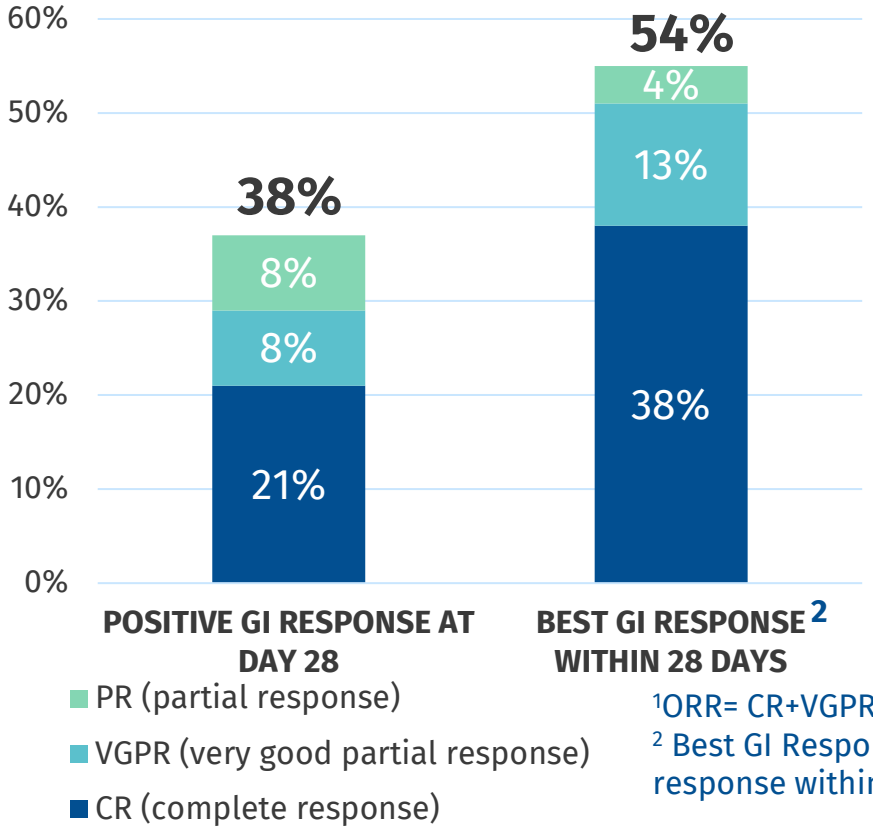
Gastrointestinal acute Graft-versus-Host Disease

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

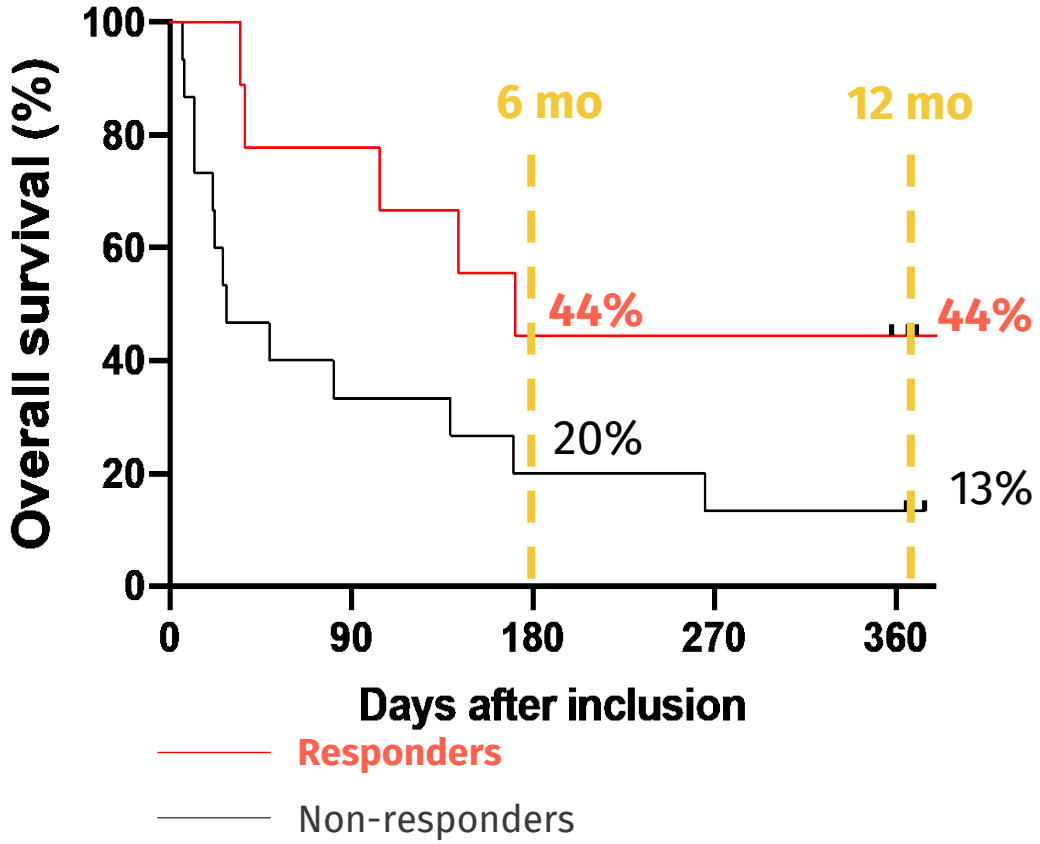
- N=24 patients, 96% grade III (4% grade IV), 2nd line (Steroid-resistant)
- Very good safety and tolerability profile

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

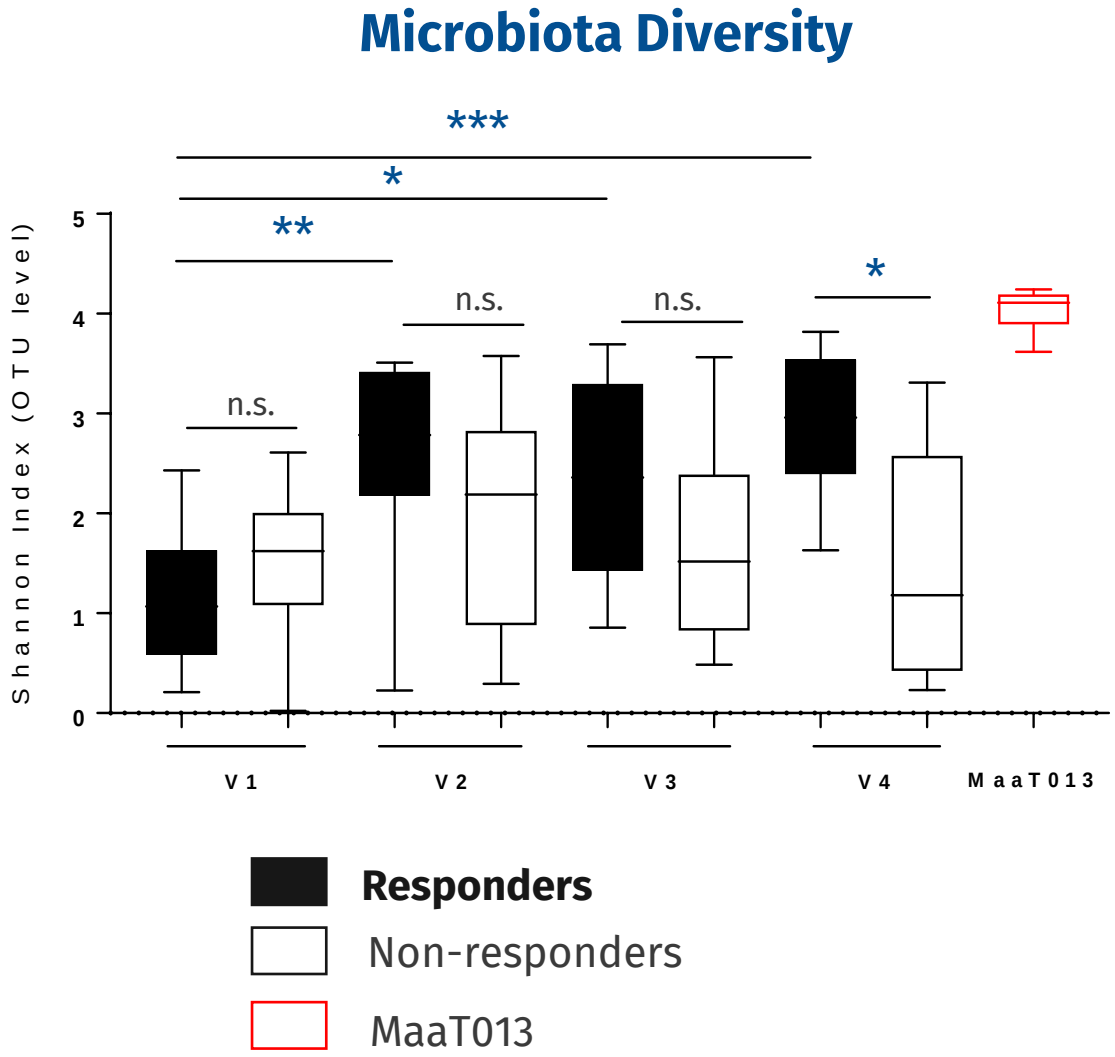


[1]ORR= CR+VGPR+PR
[2] Best GI Response: Any response within 28 days

Overall Survival (OS)



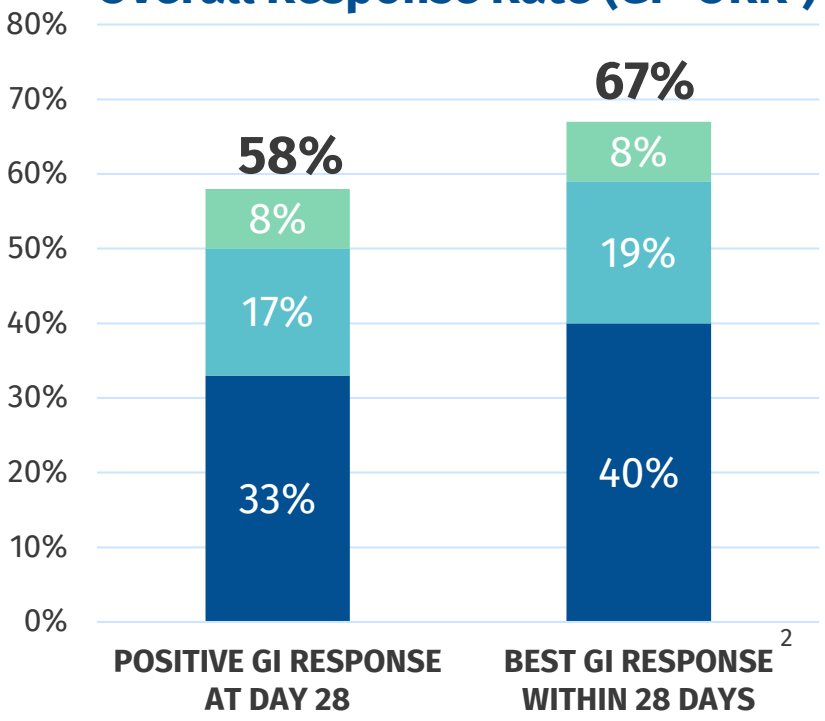
HERACLES: MaaT013 increases Responders' gut microbiome diversity



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

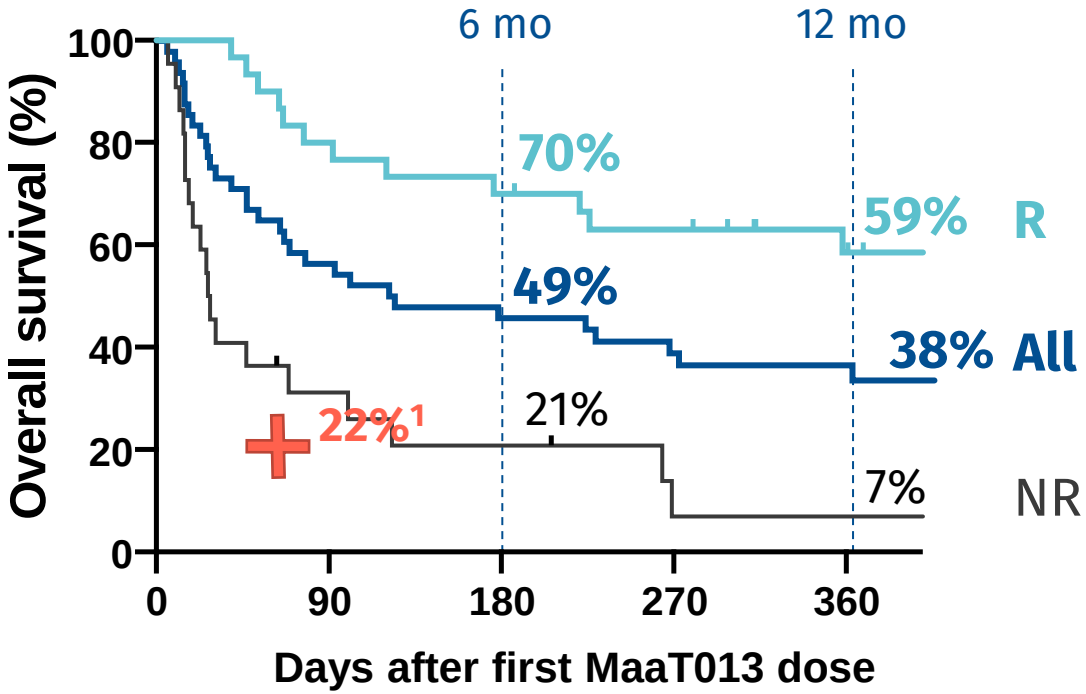
- N=52 83% SR; 94% grade III, Up to 6 lines of prior treatment (median: 3 ; 77% received ruxolitinib)
- Good tolerability and safety profile in a fragile population

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 3 European countries. Expected to expand to additional EU countries

USA:

- FDA requested further information – on clinical hold.

→ Submitted a request for a "Type A" meeting to the FDA by the end of 2021, with the support of well-respected regulatory consultants, aiming to resolve the clinical hold and expand ARES to US sites. Exchanges ongoing.

Targeted Timelines ARES Phase III Trial

[1] subject to the lifting of the FDA clinical hold ; ORR: overall response rate ; OS: overall survival ; MAA: Market approval application; BLA: Biological License Application

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

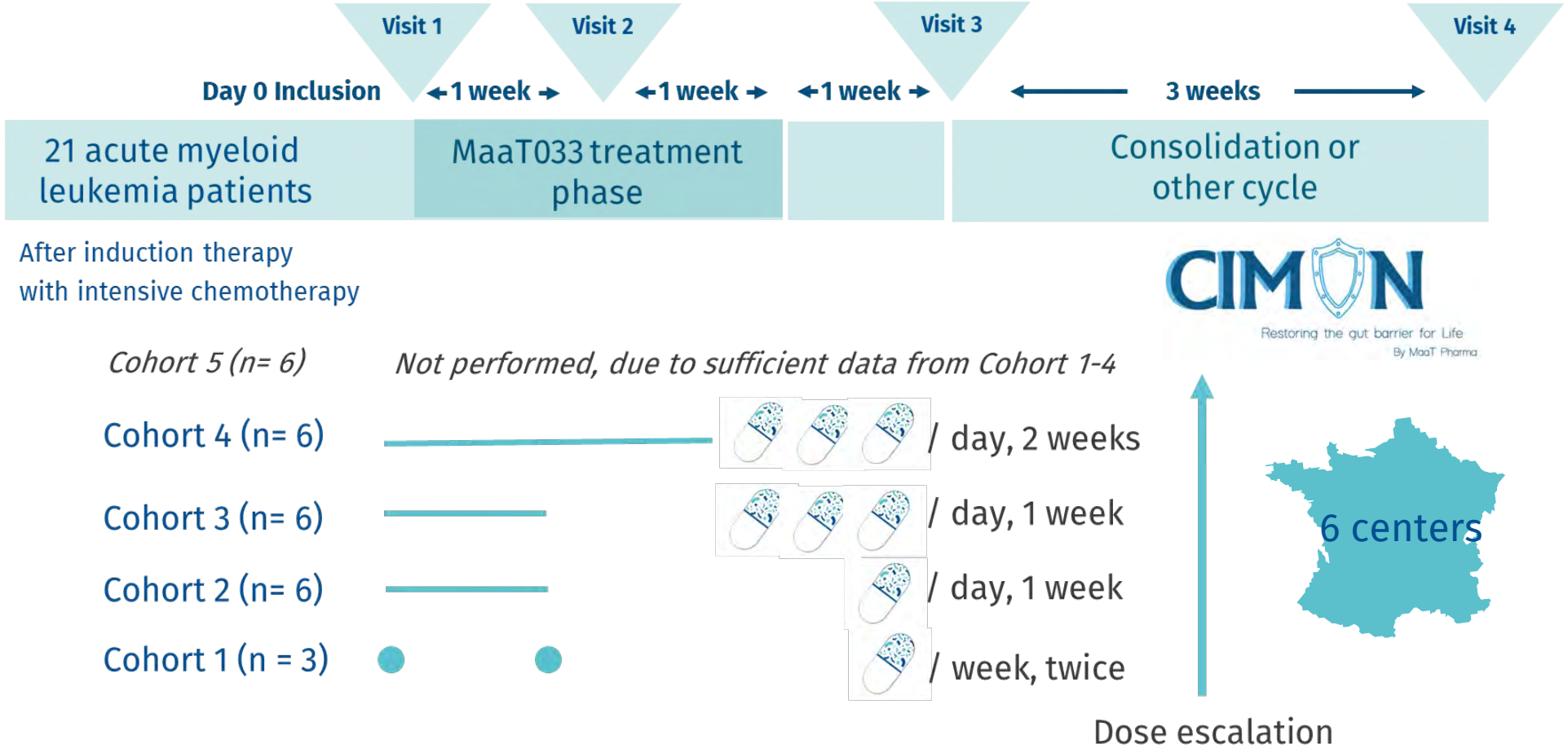
✓ CIMON Ph1b: Dose-finding study (completed)

→ Planning OR-ALLO Phase 2/3 trial: Prevention of allo-HSCT complications

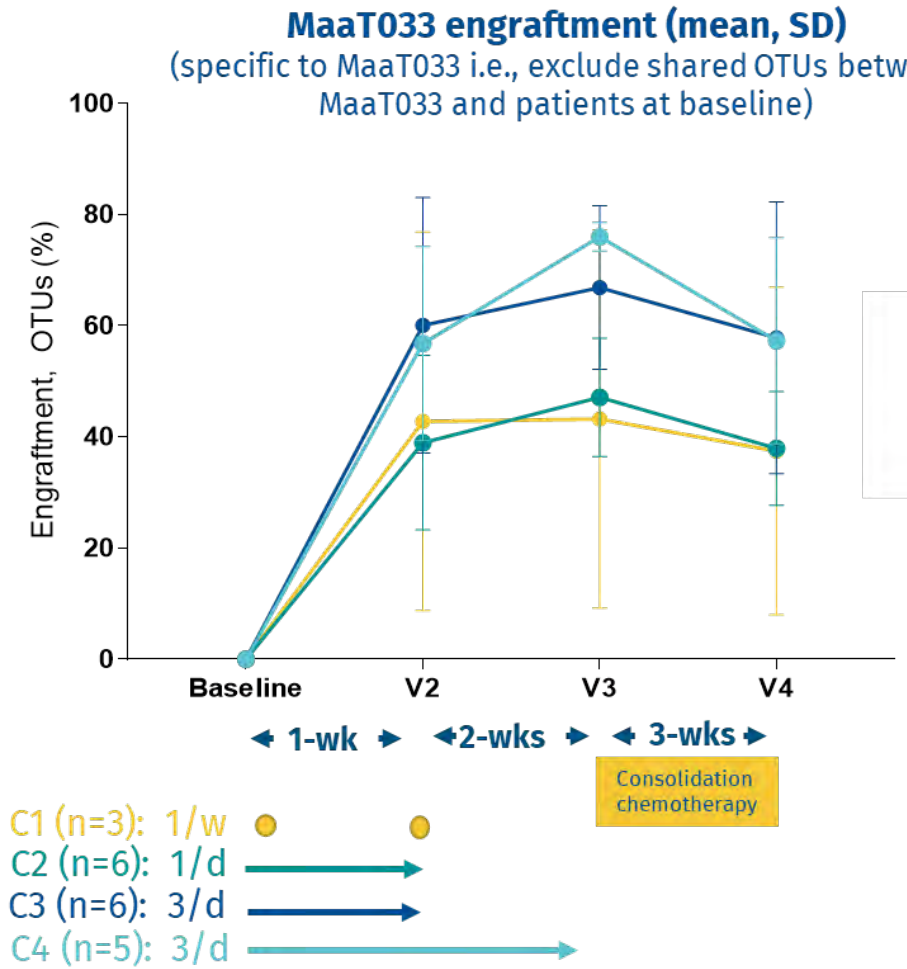
Indication

OS improvement through prevention of allo-HSCT complications

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 II-III pivotal OR-ALLO study**
(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

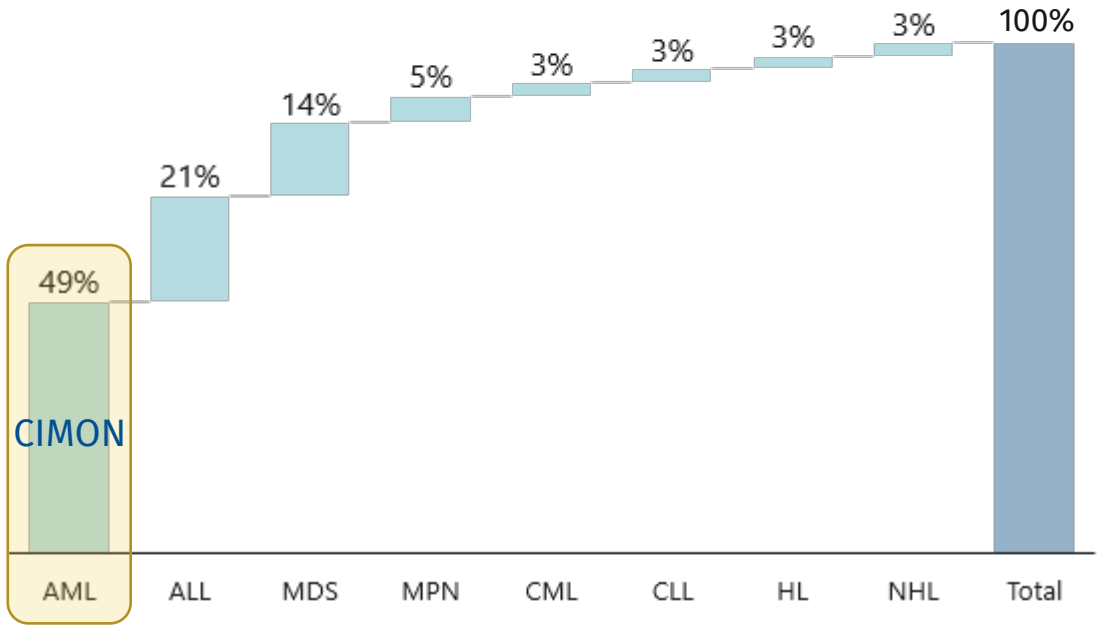
Japan

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 aHCT Survey, 2017 (published in Bone Marrow Transplantation (2019) 54:1575–1585), Global Data 2020

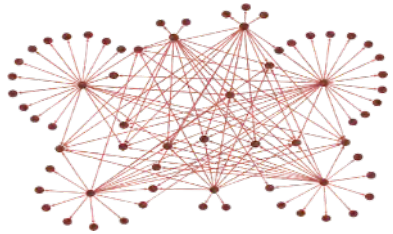
Immuno-Oncology
Solid Tumors

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]

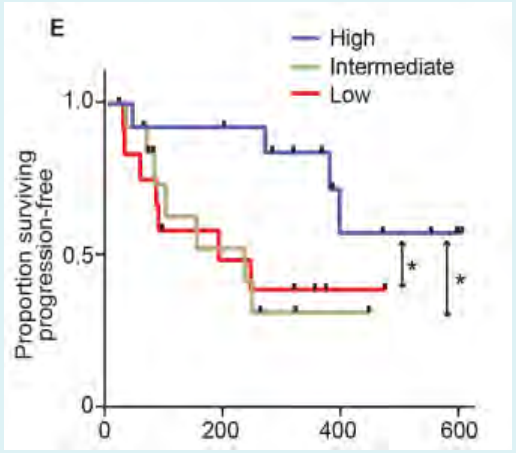
→ Leveraging the gut microbiome richness, diversity and its key functional networks may be a game-changer in immuno-oncology in the coming years

[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

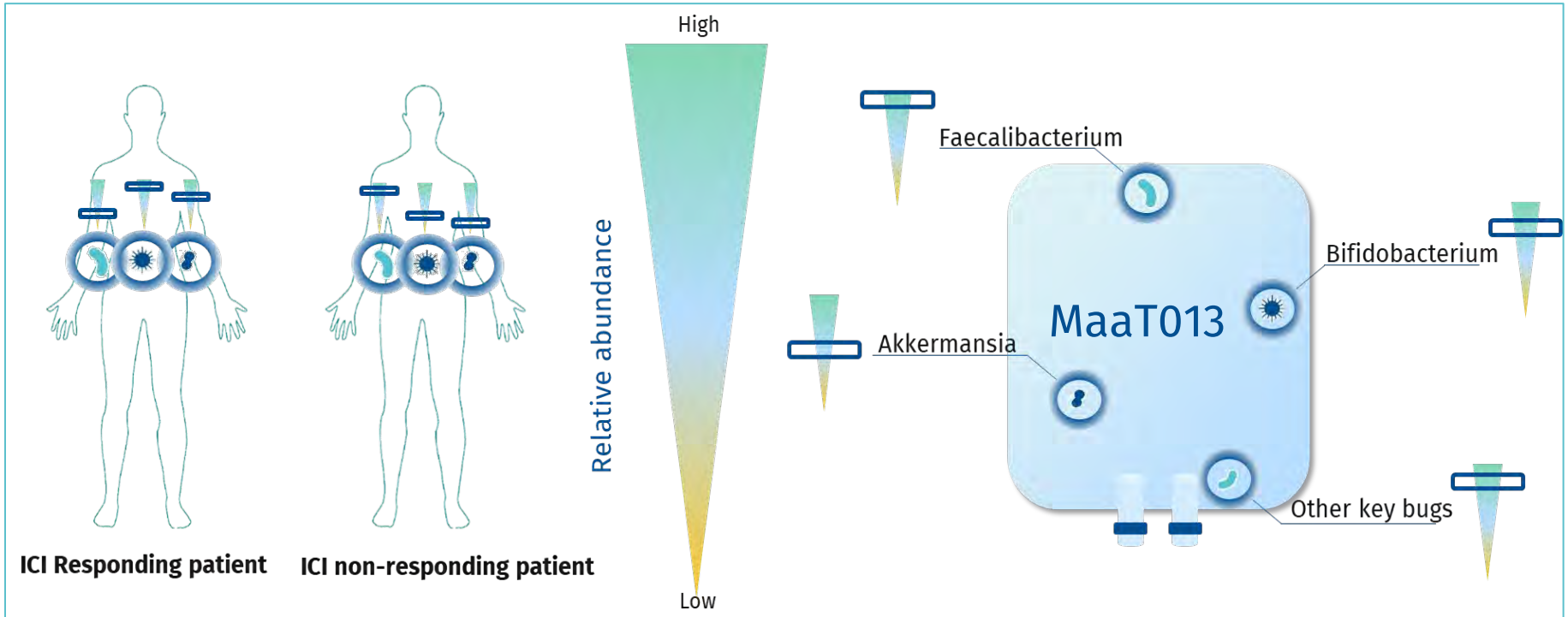
MaaT013 ensures high diversity and contains specific bacterial strains that have been identified to improve ICI response

Sponsored by ASSISTANCE PUBLIQUE HÔPITAUX DE PARIS

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



Gopalakrishnan et al, Science 2018



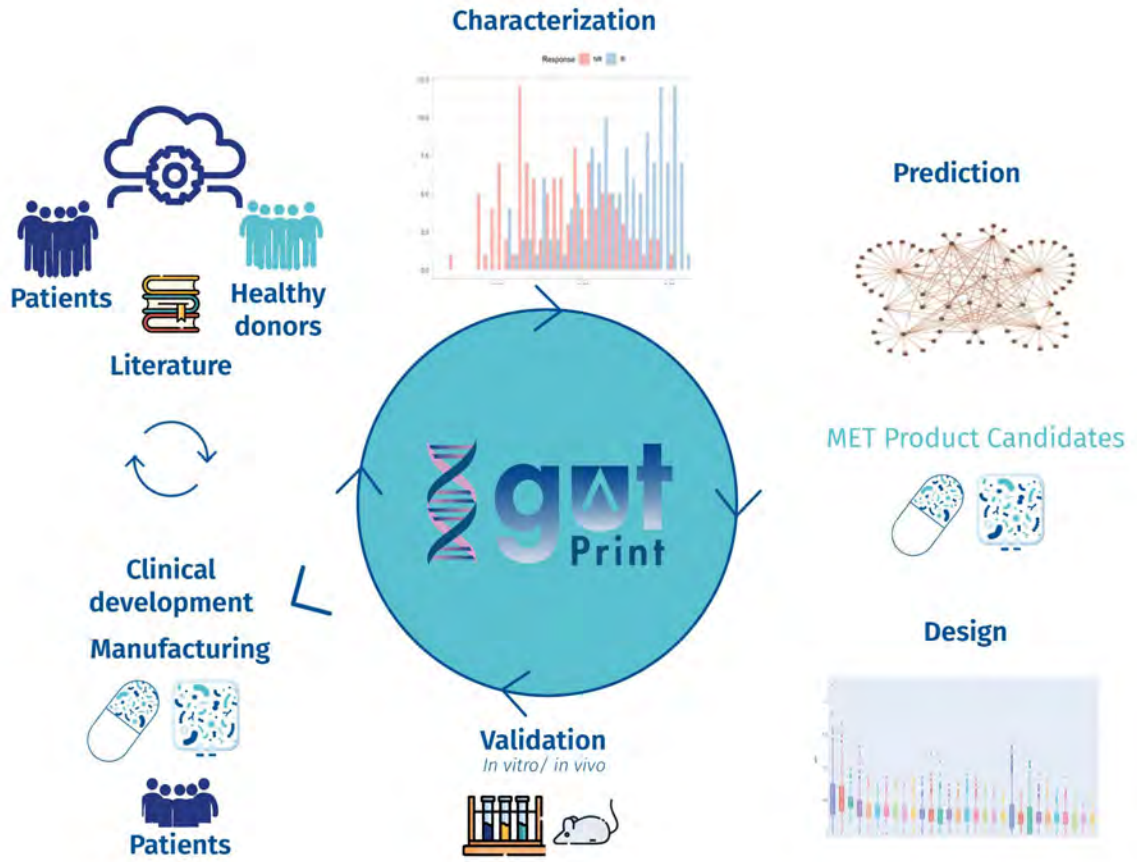
Ongoing Phase IIa PICASSO trial[1], in collaboration with **Assistance Publique - Hôpitaux de Paris** (sponsor).

✓ **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

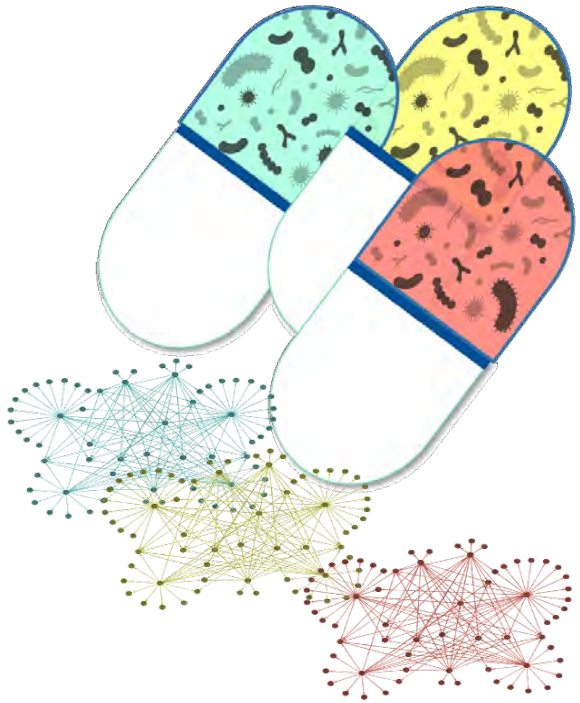
[1] Registered trial #**NCT04988841**

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



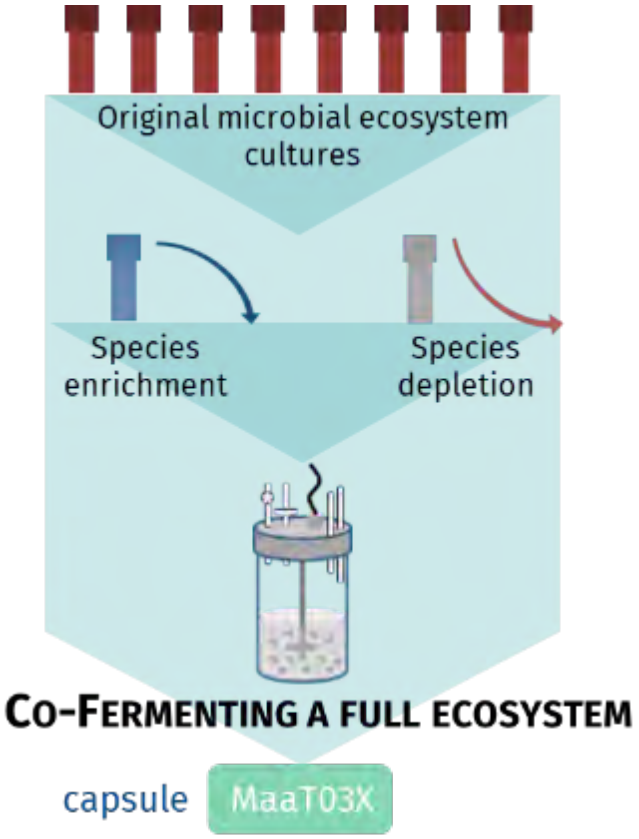
Characteristics
High richness, Co-fermented, Designed Ecosystem

Administration
Oral (proprietary lyophilized capsule)

Development program
- ✓ First candidate in preclinical development
- → Targeting FIH H1 2023

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

Customizable, donor-independent, scalable 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)** *FDA & EMA Orphan Drug Designation*	*Launch of the first Phase 3 trial in oncology in the world*	✓
	 **MaaT033 (pooled capsule)** *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 (fermented capsule)** *Undisclosed indications*	*Preclinical activities to enter clinical development in H1 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)** *FDA & EMA Orphan Drug Designation*	Intermediate review ORR	*H1 2023* *H2 2023*
	MaaT033 (pooled capsule) *Post allo HSCT*	Launch of Phase 2/3 OR-ALLO (pivotal)	*Q4 2022*
Immuno-oncology	**MaaT013 (pooled enema)** *Improving ICI responses in metastatic melanoma*	Interim partial data review	*H1 2023*
	MaaT03X (fermented capsule) *Undisclosed indications*	Start of Phase 1/2	*H1 2023*
cGMP production	**Increasing cGMP production capacities**	Opening of the first and largest exclusive Microbiome Ecosystem Therapies facility in Europe	*2023*

** Sponsored by AP-HP*

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

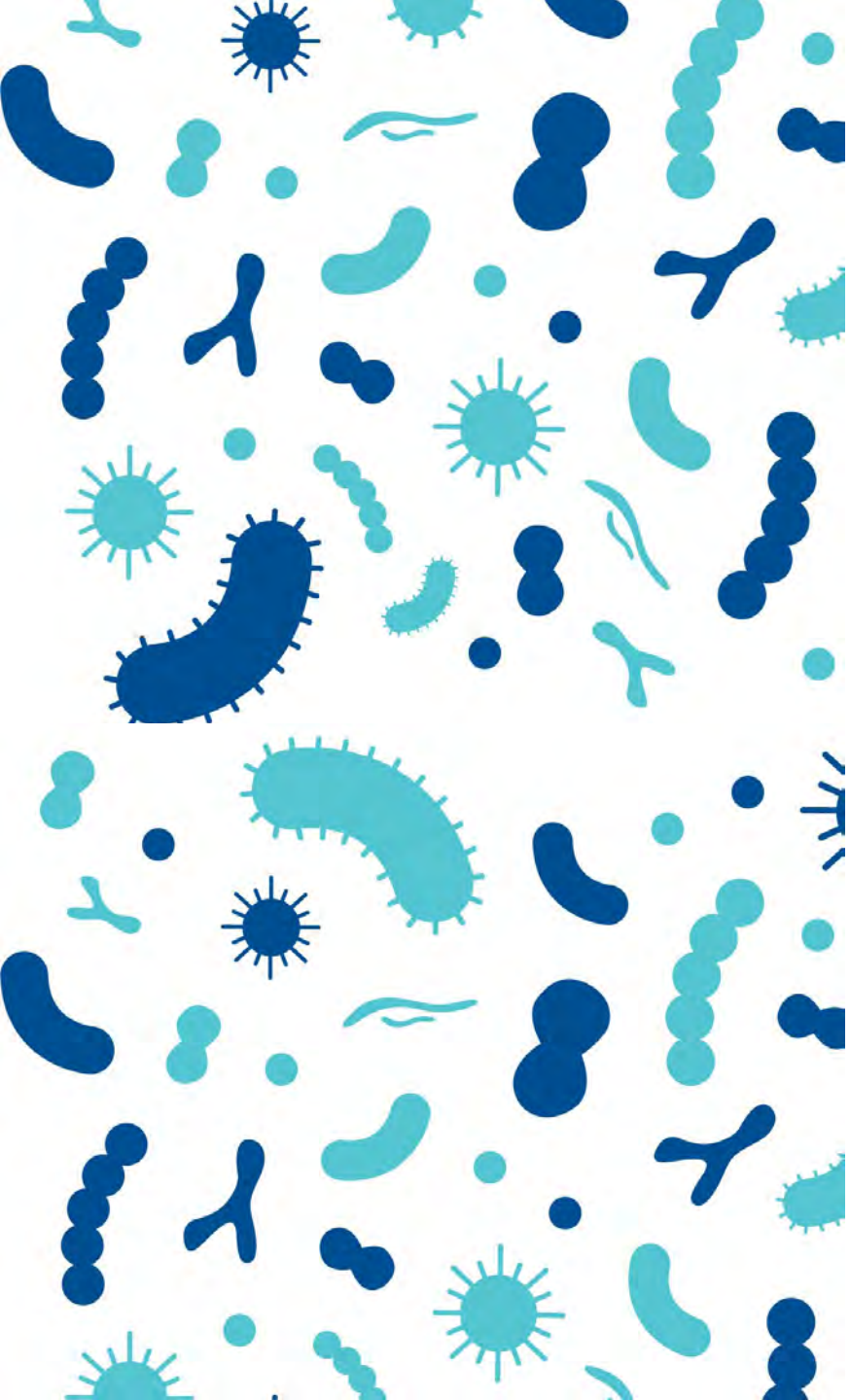
cGMP manufacturing scalability for both native and co-fermented products and building of a new plant

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