

# **Editorial**

#### The ant people

Ants, those tiny, tireless working insects that you only see once they've set up in numbers to clear a territory and start climbing up your legs. Small in size, immeasurable in the number of species and individuals, they represent 20% of the human biomass on our planet. Their organization is entirely focused on the survival of their colonies. Each ant plays its role from beginning to end, dedicating itself to collective intelligence. The parallel is easy to draw with human society throughout its history. Even if the way of life of ants has never thrilled most humans, who tend to be cicadas and are certainly higher up the evolutionary ladder in terms of ... idleness.

In the same way that we forgot how vulnerable we were to epidemics when COVID came along, European countries also forgot over the decades that peace on our soil was an exception to be preserved at all costs, rather than something to be taken for granted. So here we are, back in a pre-war period, something that makes you shudder when you think back to the periods before the last two world wars. The transition from cicada to ant is hard to accept, but winter seems to be back for Europeans.

We have forgotten the old Roman adage "Si vis pacem, para bellum", even though it has been used by republics that were the crucibles of democracy, while totalitarian warmongers of all stripes, from Russia to North Korea, China and Iran, have never lost sight of the power of arms. Peace is something too important to be left to fate, but rather to be kept under control. Helicopters don't fall from the sky every day. Especially when the dictators themselves operate on another principle that is closer to "Si vis bellum para pacem", which could be translated as: "I'll start by breaking both your legs and then we'll sign the peace".

Before you can be a cicada, you have to be an ant, that's the order of things.

The nuance is crucial at a time when the emerging world and some Europeans seem to despise democracy, a fragile area of freedom that should be a vital priority for the whole of the West. Europe's survival depends on the absolute necessity of rapidly demonstrating our ability to be strong, convinced and determined together. Welcome to the world of the ants, reread Boris Vian's "Ants", which made the link in its own offbeat and ironic way about the absurdity of war and how a simple tingling in the legs can overcome your will and kill you.

With all these crises piling up one on top of the other, the stock market is constantly correcting the value of technology stocks, starting with ours, despite the good news that is accumulating. At this stage of our development, after a year and a half of hard work worthy of the ants, here is some news from the front.

In the first half of this year, the focus has been on the public funding of the COMETE project, the creation of the Promethe regional industrial cluster and our strategic partnership with German company Navigo Proteins GmbH, which has placed us at the forefront of the international scene of relevant players in the field of Targeted RadioTherapy (TRT) (see explanation on page 2).

TRT has seen a recent resurgence in interest with several billion-dollar-plus mergers and acquisitions by big pharma in 2023 and 2024 and venture capital investments of more than \$1.5 billion in currently private companies. This therapeutic area offers promising commercial prospects in oncology, with market opportunities estimated at around \$25 billion, supported by sales of Novartis' Pluvicto, which is approaching blockbuster level (\$1 billion plus) less than two years after approval. The innovation emerging across the entire TRT value chain (radioactive elements, vectors, manufacturing, production, logistics, therapeutic efficacy, new targets, etc.) highlights this rapidly evolving field as a relevant investment framework for its complex commercialization model, in search of longer-term value creation. So the work of ants can sometimes wrongly seem long and laborious to those with ants in their legs.

Of course, there is our star product, OPM-101, which has successfully completed its phase 1 with excellent results, to the last healthy volunteer. Long before DÉMOCRITE, the ants were working on the ideal design for the next phase 2, on its strategic positioning between inflammation and oncology. It would seem that OPM-102 has opened up a decisive path in this field. DÉMOCRITE provides us with the financial leverage we need to move into practice on schedule. Thank you, Ants.

A quick word on the development of OPM-201: Servier is continuing with phase 1 of the product, and milestone prospects are beginning to appear more clearly. Once again, the ants had done their upstream work.

For the record, despite the general apathy of the stock market and because the ants have to keep on working, we have continued and expanded our fund-raising without faltering. From the start of OPM (September 2022) to now, our cumulative revenues and borrowings represent €36.6 M (Stock market: €10 M / Banks: €6 M / Public grants: €8.5 M / Sales: €8.8 M / CIR: €3.3 M).

The ants would also like to thank their loyal and patient shareholders, as well as the regional, national and European public authorities. With your confidence, there will always be time for the impatient, when the time comes, to sleep to the song of the cicadas.

Philippe GENNE

CEO

#### **CONTENTS**

MRT: a strategic development focus for OPM	I P.2-3
OPM-101: promising preliminary Phase 1 results	I P.4
Our news	I P.5
OPM on the stock market and financing since its creation	I P.6

## **Project checklist**

#### **DÉMOCRITE**

Demonstrating the efficiency of OPM-101 by targeting RIPK2 in Inflammatory Bowel Disease

#### **COMETE**

moleCular radiOtherapy for METastatic colorectal and gastric cancErs: Development of a radiotheranostic molecules portfolio of for the treatment of advanced digestive cancers

#### **PROMETHE**

As part of the France 2030 call for projects, PROMETHE is a non-profit association whose aim is to rapidly bring effective treatments to patients in the nuclear medicine sector, and more specifically in radiotheranostics. It is also the name of OPM's MRT development program.



Karine Lignel – Chief Operating Officer, Philippe Genne – Chairman and CEO, Jan Hoflack – Chief Scientific Officer

# Molecular radiotherapy (MRT): a strategic development focus for OPM

#### At the heart of a therapeutic revolution: targeted radiopharmaceutical therapies

#### **Definition**

MRT is a **radiotherapy technic** used in nuclear medicine within the oncology field. **Unlike external beam radiotherapy, the irradiation is vectorized by molecules able to bind specifically to tumor cells**. Those molecules are radiolabeled and administered intravenously, like a chemotherapy or a targeted therapy. External beam radiotherapy is currently used in more than 50% of clinical protocols in oncology, however, it can only be used to treat a single tumor or a limited number of tumors (oligometastases). MRT is, from its side, well suited to treat disseminated metastases.

#### Vocabulary

Molcular radiotherapy (MRT) is the technology that uses Target Radiotherapies (TRT).

#### **Technology**

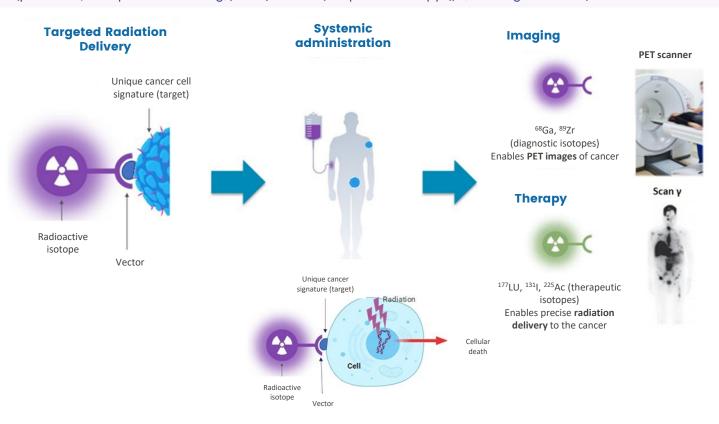
At a technological level, MRT is based on the administration of a labeled drug with a radioactive isotope (radiopharmaceutical) to destroy, specifically, tumor cells. Its efficiency comes from the emitted radioactivity which causes low dose rate irradiation leading to cell death. These particle-emitting radioisotopes are directed towards targets over-expressed by tumor cells, using very specific vectors, capable of recognizing and attaching to them.

The specificity of the vector for a tumor target thus makes it possible to spare healthy tissues and guarantee better effectiveness while limiting side effects, a strategy particularly well suited to disseminate diseases.



#### **Benefits**

One of the advantages of MRT is the **potential to create a theranostic agent**, i.e. a radiopharmaceutical which, depending on the nature of the radiation from the chosen isotope, enables diagnostic imaging (prediction/therapeutic monitoring,  $\beta$ + or  $\gamma$  emitters) or patient therapy ( $\beta$ -,  $\alpha$  or auger emitters).



Principle of MRT and the theranostic approach

#### The market for MRT

The nuclear medicine market is growing fast, driven by the development of MRT, mainly in oncology (80%). This market is expected to reach \$35 billion<sup>1</sup> by 2031, leading to a new wave of investment in nuclear medicine. MRT is an even more promising and attractive approach for the treatment of metastatic cancer since the recent successes of Lutathera® (177Lu-DOTATATE approved in Europe and the USA for the treatment of neuroendocrine tumors (acquired in 2018 by Novartis from AAA for \$3.9 bn) and Pluvicto® <sup>177</sup>Lu-PSMA-617), which has been shown to increase survival in patients with metastatic prostate cancer (acquired in 2018 by Novartis from Endocyte in phase 3 for \$2.1 bn). The concept of theranostics, which enables a reduction in molecule development costs and healthcare expenditure by providing a targeted solution, changes in healthcare spending policies and technological advances (e.g. availability of Lutetium 177 on an industrial scale) have also increased the interest of major pharmaceutical companies (11 of the top 20 pharmaceutical companies are present) and investors in this market. In recent years, there has been a clear trend towards strategic alliances and acquisitions, as well as financing operations for biotechs positioned in the MRT market. Financing operations have been particularly dynamic in North America, with large fund-raising operations: 18 operations >€100 M, whereas over the same period only 2 operations >€100 M were carried out in Europe (including ITM, Germany). In addition, the North American territory has seen the creation of new companies dedicated to MRT very well financed (RayzeBio, Alpha9, Aktis, Point Biopharma, Evergreen Theragnostics...). Currently a minority segment of the nuclear medicine market (20% in 2021), MRT is expected to reach 70% of this market by 2031. The last three acquisitions in the field between February and May 2024 were: acquisition of RayzeBio for €4.1 bn by BMS, acquisition of Fusion for €2.4 bn by AstraZeneca and acquisition of Mariana Oncology for €1.75 bn by Novartis.

\$35 bn

Estimated market in 2031

18

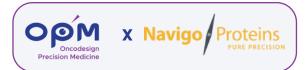
Fundraising
> €100 M in the US

3

Acquisitions between February and May 2024

<sup>1</sup>MEDrayintell Nuclear Medicine Report and Directory 2022

# OPM and Navigo Proteins GmbH collaborate on research and development of new systemic radiotherapy agents



On May 15, 2024, OPM and Navigo Proteins GmbH signed a strategic collaboration agreement for the discovery and development of new systemic radiotheranostic agents.

OPM has chosen Affilins®, a proprietary technology from Navigo Proteins GmbH, as biological targeting molecules to support its Promethe® platform.

Affilins® are small proteins derived from human ubiquitin, a protein naturally present in all cells. A huge number of ubiquitin variants are available in large libraries where each variant is modified in a slightly different way on its surface and has lost its natural biological functions but potentially binds to a given target structure. Phage display selection and screening is applied to identify Affilins® that bind selectively and with high affinity to the targeted surface antigen, like antibodies. The molecular weight of Affilins® is 1/15th of an antibody improving the pharmacokinetics, particularly the distribution and route of elimination which is predominantly through the kidney. Unlike antibodies, Affilins® are resistant to proteases, acids and bases and are highly thermostable facilitating their radiolabeling. Because they are human derived, Affilins® have a low immunogenicity risk (unwanted immune reaction after injection). The molecules have no post-translational modification like antibodies which allows their production in simple bacterial systems. Affilins® are highly engineerable and can be combined with other functional elements, enabling a modular design of molecules, adapted to clinical needs. For all these reasons, Affilin® molecules are ideal for use as radiotheranostic targeting molecules.

Navigo Proteins GmbH, a protein engineering company based in Halle, Germany, is headed by a strong and experienced team committed to leveraging Affilin® technology in multiple areas. This collaboration will enable OPM and Navigo to build a first-class entity in the field of radioligand therapy based on the complementary strengths of the two companies. Navigo's Board is composed of leading professors and scientists in the field of radioligand therapy.

Under the terms of the agreement, research will initially focus on two different targets in the field of oncology, particularly in resistant and metastatic digestive tract tumors, and molecules will be developed to the stage of drug candidates. Oncodesign Precision Medicine will fund this program over the next 3 years. This agreement is a first step towards a strong strategic alliance between OPM and Navigo Proteins GmbH with the vision to expand the partnership to additional targets.

# **OPM-101: promising preliminary Phase 1 results**

#### Key milestones reached in 2024 for phase 1 study of healthy volunteers

## February 2024

End of MAD2 cohort, decision to start female volunteer cohort (MAD4) and move to higher dose for male volunteers (MAD3)

#### April 2024

End of clinical phase 1 study (last volunteer visit on April 29, 2024)

#### May 2024

Final Data Review Committee (DRC) and Blinded Data Review Meeting (BDRM)

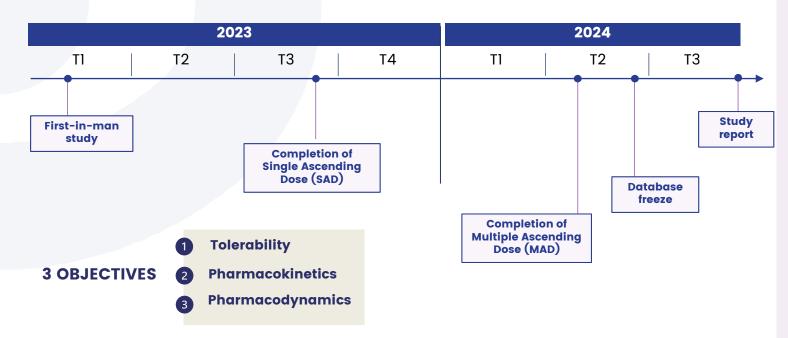
#### June 2024

Freezing the study database and lifting the blind

#### **About OPM-101**

NANOCYCLIX®

OPM-101 is a macrocyclic molecule from OPM's proprietary Nanocyclix® platform. It is a highly potent Type 1 inhibitor (inhibitor in the active kinase cavity), selective of other kinases and orally bioavailable. In pharmacology, OPM-101 has demonstrated good efficacy in several preclinical models of colitis. Its safety profile, characterized in preclinical studies, meets a quality standard recognized by the pharmaceutical industry, and is compatible with chronic administration to treat pathologies such as IBD, one of the world's largest pharmaceutical markets with significant unmet patient needs, and oncology. OPM's intellectual property strategy effectively protects the value of this asset and its use in a wide range of therapeutic indications.



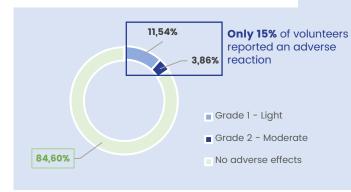
The tolerability profile observed in the study was very good in healthy volunteers, with a majority of light effects

In this study, 104 healthy volunteers participated: 78 received OPM-101, 26 received placebo. Of the volunteers who received OPM-101, only 15% reported at least one adverse event considered related to the study treatment.

Preliminary results from the MAD part show **very interesting pharmacokinetics**, with rapid oral absorption, a steady state reached in 3 to 4 days, and an elimination half-life of around 12h. With repeated doses over 14 days, target engagement is very fast within a few hours, and maintained at very high levels (80-95%) throughout the duration of OPM-101 administration.

Full results of the study are expected in summer 2024.

Light to moderate adverse events in 12 volunteers who received OPM-101



# **Our news since December 2023**



#### December 2023

TP ICAP Midcap initiates coverage of Oncodesign Precision Medicine with a buy recommendation and a target price of €2.75 per share.



January 2024



ERDF grants awarded to OPM for a total of €2.1m for its COMETE program, out of a maximum total of €7.8m for the program as a whole and its partners over a 5-year period, to develop a portfolio of radiotheranostic molecules for the treatment of advanced digestive cancers.



#### February 2024

Result of OPM's capital increase of around €2m, the use of which will cover the additional financing requirements relating to the Company's clinical and preclinical programs over the next 12 months (from February 2024), namely:

- OPM-101 in inflammatory bowel disease, integrating the development plan to launch phase 2
- OPM-102 in oncology, and its STarT program in pancreatic cancer, developed in partnership with Servier



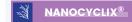
#### February 2024 NANOCYCLIX®



€0.75 million in Deep Tech development funding for the ANIMUS program, in the form of a combination of grants and a repayable advance to finance R&D expenditure.



## **April 2024**



Public funding of €5.6m for its DEMOCRITE program, dedicated to the clinical development of OPM-101, to demonstrate the efficacy of OPM-101 by targeting RIPK2 in inflammatory bowel diseases.



#### **April 2024**

Degroof Petercam initiates coverage of Oncodesign Precision Medicine. In its initial study entitled "Targeted therapies for inflammation & oncology", Degroof Petercam writes its first financial analysis of the company, with a target price range of €1.90 to €2.70.



#### **May 2024**



**NANOCYCLIX®** 



PROMETHE ®

OPM and Navigo Proteins GmbH sign strategic collaboration agreement for the research and development of new systemic radiotherapy agents

# Alexis MIELLET and OPM, a 24-month odyssey



In May 2022, Oncodesign Precision Medicine and Alexis Miellet signed a sponsorship agreement to support the latter in his preparations for the Paris 2024 Olympic Games.

This 2-year odyssey will come to an end in a few days time, as after achieving the Olympic minimum, Alexis still has to finish on the podium of the French Elite Championship to take part in the event of a lifetime: the Olympic Games in his home country.

At the last French championship in 2023, Alexis decided to be daring for the 2024 Olympics, by changing category from the 1,500m - which he has run at a very high level for 8 years - to the 3,000m steeplechase. Since then, Alexis has been preparing in particular for the specificity of crossing barriers. His winter season went off without a hitch, and spring marked his return to high performance!

In May 2024, during his first 2 races in his new discipline, Alexis achieved the Olympic minima (under 815) for the Paris 2024 Olympic Games. On June 10, he won gold in the 3,000 m steeplechase (8.14) at the European Championships!

Being a top-level sportsman does not exclude other commitments. Indeed, Alexis Miellet has joined forces with OPM to support breast cancer research by joining the team of OPM employees taking part in the Odyssea race in Dijon in June 2023 and June 2024.





# OPM on the stock market Base 100 from 05/10/2023 to 07/08/2024 Oncodesign PM Indice Next biotech Address of the stock market PEA PME Oncodesign PM Indice Next biotech Address of the stock market Address of the

+55%
OPM share price since IPO

+82%

OPM share price/ Next Biotech index comparison

# **Stock market information**

ISIN Code FR001400CM63

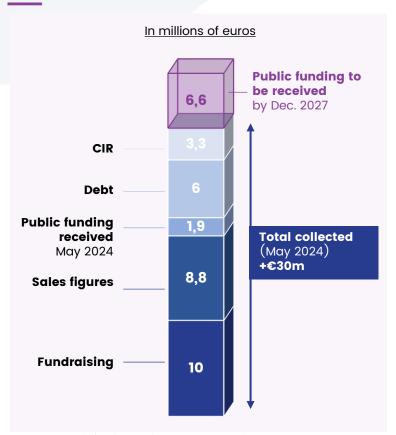
Number of shares 18,190,878

Market capitalization\* €22m

Share price €1,22

\*data at 07/06/2024 post-closing

# +€30m in financing received since the creation of OPM



Total public funding received and to be received: €8.5m



#### To receive all the latest news

from Oncodesign Precision
Medicine in real time, and to
subscribe to our newsletter, send
us your e-mail address at
oncodesign@newcap.eu.



#### Contact

#### ОРМ

Karine LIGNEL
Executive Vice-President
+33 (0)3 10 45 18 20
investisseurs@oncodesign.com

#### NewCap

#### **Shareholder Relations**

Mathilde BOHIN / Alban DUFUMIER +33 (0)1 44 71 94 95 oncodesign@newcap.eu