

## LAUNCH OF MIMABS, PRE-INDUSTRIAL DEMONSTRATOR ACCELERATING DEVELOPMENT OF IMMUNOTHERAPY ANTIBODIES

- **Signature of the consortium agreement between key players in science, translational research and industry of cancer and inflammation immunology.**
  - **MI-mAbs immunotechnology center gives researchers and industrials a unique collaborative tool to accelerate research and development of new immunotherapy antibodies.**

**Marseille, March 9, 2015**, MI-mAbs, a new immunotechnology center designed to accelerate the development of new immunotherapy antibodies against cancer and inflammatory disease, today announced the signature of the consortium agreement sealing the commitment of its founders: Aix-Marseille Université (AMU) and its private subsidiary Protisvalor, CNRS, Inserm, the Institute Paoli-Calmettes (IPC), 3 of their research centers (the Centre d'Immunologie de Marseille-Luminy, the Cancer Research Center of Marseille and the Centre for Immunophenomics), the European leader in immuno-oncology, Innate Pharma and Sanofi, one of the world leaders in health.

Prize-Winner of the program « Investments for the Future » 2011 in the "preindustrial demonstrators" category, for an amount of 19 million euros, MI-mAbs intends to help strengthen France's position in the field of immunotherapy antibodies, drugs that are revolutionizing the treatment of cancer. MI-mAbs ("MI" for Marseille Immunopôle and "mAbs" for monoclonal antibody) is the key technological tool of Marseille Immunopôle, a new cluster aiming to make the Marseille metropolis a world leader in research and development of immune-based therapies.

In practice, MI-mAbs generates antibodies against candidate therapeutic targets discovered by researchers (molecules likely to help our immune system to fight cancer or inflammatory diseases) and validates their efficacy and safety on *in vivo* models of human disease and human biological samples. In this way, MI-mAbs enables researchers to validate the therapeutic potential of their scientific hypotheses and allows biopharmaceutical companies to focus their development efforts on the most promising antibody candidates.

*"Aix-Marseille Université (AMU) is especially proud of carrying out this project. Following the philosophy that drove the creation of AMU, MI-mAbs is truly the fruit of*

*a collective goal: to unite academy and industry around the idea of a "one-stop shop" exclusively dedicated to research and development for immunotherapy antibodies," explained Pr. Yvon Berland, President of AMU. "By participating in the immunotechnology education of our students, MI-mAbs will also further one of the strategic priorities of the Marseille Immunopôle cluster (MI) which aims to make our metropolis one of the best immunology schools in the world."*

*"The consortium agreement reflects the founders' shared desire to create an immunotechnology center to directly accelerate and secure the key turning point of target validation and antibody candidate selection," pointed out Pr. François Romagné, Scientific Director at MI-mAbs. "With MI-mAbs, from now on academic and industrial researchers working in the immunotherapy field will benefit from a unique collaborative space based on a continuum of expertise, competence, technologies and seasoned managers well-versed in industry standards."*

*"At times our research leads to the discovery of new therapeutic targets. Even if it's not in our power to convert them into drugs, we must still ensure that their therapeutic potential is assessed as quickly as possible," underscored Pr. Eric Vivier, Coordinator of MI-mAbs and Director of the Centre d'Immunologie de Marseille-Luminy (CIML). "MI-mAbs will be a strategic technological tool for researchers since they can expand their knowledge of the biology of their target while validating its therapeutic potential and accelerating delivery to the patient." concluded Pr. Jean Paul Borg, Director of the Cancer Research Center of Marseille (CRCM) and Scientific Director of IPC.*

*Kurt Stoeckli, Vice President Global BioThérapeutiques at Sanofi, notes, "Through the MI-mAbs project, Sanofi is confirming its commitment to bring innovative biotherapies to patients suffering from cancer and inflammatory diseases with significant unmet medical needs. To accelerate innovation and respond to patients' needs in these fields we have chosen to combine once again our expertise and our resources with partners of excellence in immunology."*

*"Immunotherapy antibodies are fundamentally changing cancer treatment. In this context, and as is evidenced by the support of the General Investment Commission, MI-mAbs is helping strengthen the French monoclonal antibody industry " declared Hervé Brailly, co-founder and CEO of Innate Pharma. "In this sense, MI-mAbs is at the heart of an ambitious territorial strategy that aims to make the Marseille metropolis the world leader in the upstream of this industry. Moreover, this project is supported by the local government authorities and the State, as MI is one of 12 biotech projects retained among the 34 industrial plans of the French government."*

## About MI-mAbs

Founding member of the Marseille Immunopôle (MI) cluster, MI-mAbs is a new immunotechnology center designed to accelerate development of new immunotherapy antibodies against cancer and inflammatory disease.

Open to therapeutic targets of academic and industrial research, MI-mAbs determines their expression profile in humans and mice, generates antibodies to manipulate them, characterizes their mechanisms of action and validates their efficacy and safety on *in vivo* models of human disease and biological samples. By establishing the first proof-of-concept for these new immunotherapies, MI-mAbs thus helps biopharmaceutical companies responsible for converting them into drugs to immediately focus their efforts on the most promising antibody candidates.

Prize-Winner of the program « Investments for the Future » 2011, in the "preindustrial demonstrators" category, MI-mAbs was founded by Aix-Marseille Université (AMU) and its private subsidiary Protisvalor, CNRS, Inserm, the Institute Paoli-Calmettes (IPC), 3 of their research centers (the Centre d'Immunologie de Marseille-Luminy, the Cancer Research Center of Marseille and the Centre for Immunophenomics), the European leader in immuno-oncology, Innate Pharma and one of the world leaders in health, Sanofi. It is supported by DRRT PACA, the Provence-Alpes-Côte d'Azur region, the Conseil Général 13, Marseille Provence Métropole and the The French National Research League Against Cancer.

Located at the heart of the Marseille-Luminy Scientific and Technological Park, MI-mAbs is headed by Prof. François Romagné, and already has a staff of 15 people.

**More information at [www.mimabs.org](http://www.mimabs.org)**

## Founders

### Aix-Marseille University

First francophone university (72,000 students, 8,000 faculty and staff members) and widely open to international, Aix-Marseille University (AMU) offers multidisciplinary teaching and research excellence (5 disciplinary areas supported by 130 research facilities).

As part of the French Grand Loan, AMU got an IDEX (A \* MIDEX) with 750 million € in capital. As part of Operation Campus, the University is currently modernizing its public facilities on the 54 sites of its territory.

**More information at: [www.univ-amu.fr](http://www.univ-amu.fr)**

### CNRS

Founded in 1939, the Centre National de la Recherche Scientifique (National Center for Scientific Research) is a public organization under the responsibility of the French Ministry of Education and Research. It produces knowledge and makes it available to serve society. With nearly 33,000 employees, distribution throughout France, CNRS produces science in all fields of knowledge, relying on more than 1100 research and service units. With 20 Nobel laureates and 12 Fields prize winners, CNRS has a long tradition of excellence.

**For further information, click on: [www.cnrs.fr/index.php](http://www.cnrs.fr/index.php)**

### Inserm

Founded in 1964, the French National Health and Medical Research Institute (Inserm,) is a public science and technology institute, jointly supervised by the French Ministry of Higher Education and Research and the Ministry of Health. The mission of its scientists is to study all diseases, from the most common to the rarest, through their work in biological, medical and public health research. With a budget of 953 million euros in 2012, Inserm supports more than 300 laboratories across France. In total, the teams include nearly 13,000 researchers, engineers, technicians and administrative staff, etc.

Inserm is a member of the National Alliance for Life and Health Sciences, founded in

April 2009 with CNRS, Inserm, the CEA, INRA, INRIA, the IRD, the Pasteur Institute, the Conference of University Presidents - Conférence des Présidents d'Université (CPU) and the Conference of Chairmen of The Regional and University Hospital Centres - Conférence des directeurs généraux de centres hospitaliers régionaux and universitaires. This alliance forms part of the policy to reform the research system by better coordinating the parts played by those involved and by strengthening the position of French research in this field through a concerted plan.

In 2014 Inserm is celebrating its 50th anniversary. To mark its 50th anniversary Inserm has decided to deliver its key messages at around a hundred events which will take place all over France and involve all its staff, partners and supervisory bodies throughout the year.

For more information, visit [www.inserm.fr](http://www.inserm.fr)

## Institut Paoli-Calmettes

Certified by the French National Health Authority (HAS) with no recommendations or reservations, and member of the UNICANCER group, the IPC is composed of 1,350 researchers, medical and non-medical personnel, working on global treatment of cancer pathology: research, medical care and support, education and training.

The IPC conducted more than 78,200 consultations and saw more than 25,172 patients in 2012. 936 patients were included in biomedical research trials in 2012. Treatment at IPC is provided exclusively at socialized health care rates, and there is never a charge beyond the standard fees.

IPC is one of the founding members of the Marseille Immunopôle cluster.

More information at [www.institutpaolicalmettes.fr](http://www.institutpaolicalmettes.fr)

## Protisvalor

Created in 2002, Protisvalor SAS is the technology transfer subsidiary of Aix-Marseille University. Its mission is to provide support to researchers to strengthen and develop their research projects (academic and industrial partnerships as well as European projects). Within this framework, Protisvalor draws on its multi-expertise in support functions: engineering and financial management, human resources, administrative and account management, legal and communication.

The structure manages more than 1,000 research contracts and 12 technology platforms, and brings together almost 200 employees from Aix-Marseille University.

[More information at www.prostisvalor.com](http://www.prostisvalor.com)

## CIML

Founded in 1976, the Centre d'Immunologie de Marseille-Luminy is a research institute internationally renowned in its discipline which has developed an organization and practices designed to foster the creativity and risk-taking of its researchers.

From worm to man, from molecule to the whole organism, from the physiological to the pathological, the CIML addresses, over numerous models and scales, all fields of contemporary immunology: the genesis of different cell populations, their patterns of differentiation and activation, their implication in cancer, infectious and inflammatory diseases and the mechanisms of cell death.

Founding member of the Marseille Immunopôle cluster, the CIML is a joint research unit of the CNRS, Inserm and Aix-Marseille Université. Directed by Professor Eric Vivier, it has 15 laboratories and a staff of 240 people.

[More information at www.ciml.univ-mrs.fr](http://www.ciml.univ-mrs.fr)

## CRCM

Established in 2008, the Cancer Research Center of Marseille (CRCM) is affiliated to the four major stakeholders in research in the Provence-Alpes-Côte d'Azur region: Inserm, CNRS, Aix-Marseille University and Institut Paoli-Calmettes. With 250 colleagues working out of 17 research teams, the CRCM implements innovative research programs in the cancer field, from the most fundamental aspects to human clinical research.

Priority scientific and medical activities are, on one hand, decoding the molecular basis of oncogenesis and tumor dissemination, and on the other hand, the discovery and implementation of therapeutic innovation to treat breast cancer, pancreatic cancer and hematological malignancies.

CRCM is one of the founding members of the Marseille Immunopôle cluster.

[More information at www.crcm.marseille.inserm.fr](http://www.crcm.marseille.inserm.fr)

## CIPHE

Founding member of Marseille Immunopôle (MI), the Centre for Immunophenomics (CIPHE) is contributing to the development of the first functional encyclopedia of genes of the immune system of the mouse. Its mission is at the heart of a global project of the International Mouse Phenotyping Consortium (IMPC): understand the implication of our genes in human diseases.

To accelerate generation of animal models, follow the development of their biological and clinical parameters and assess the functioning of their immune system, in both a normal situation and pathological, CIPHE relies on a very high-speed synthetic biology unit, a center for biologic and clinical research and a high-security BSL3 laboratory, unique in Europe. Data and models from CIPHE are made freely available to academic laboratories and can be accessed by industrials under contract.

With Mouse Clinical Institute in Strasbourg-Illkirch and the Center for Transgenesis and Archiving in Orléans-Villejuif, CIPHE has also created PHENOMIN, a unique national interface that facilitates the creation, archiving and distribution of these new models of human pathologies. Backed by the « Investments for the Future » program and member of the European Infrafrontier network, CIPHE is a services unit from Inserm (US012), CNRS (UMS3367) and Aix-Marseille University (AMU). Its 40 members are primarily researchers, engineers and technicians.

[More information at www.ciphe.inserm.com](http://www.ciphe.inserm.com)

## Innate Pharma

Innate Pharma S.A. is a biopharmaceutical company discovering and developing first-in-class therapeutic antibodies for the treatment of cancer and inflammatory diseases. Its innovative approach has translated into major alliances with leaders in the biopharmaceutical industry such as Bristol-Myers Squibb and Novo Nordisk A/S.

The Company has two clinical-stage programs in immuno-oncology, a new therapeutic field that is changing cancer treatment by enhancing the capability of the body's own immune cells to recognize and kill cancer cells. Innate Pharma science also has potential in chronic inflammatory diseases.

Listed on Euronext-Paris, Innate Pharma is based in Marseille, France, and had 97 employees as at September 30, 2014.

[Learn more about Innate Pharma at www.innate-pharma.com](http://www.innate-pharma.com)

## Sanofi

Sanofi, a global healthcare leader, discovers, develops and distributes therapeutic solutions focused on patients' needs. Sanofi has core strengths in the field of healthcare with seven growth platforms: diabetes solutions, human vaccines, innovative drugs, consumer healthcare, emerging markets, animal health and the new Genzyme. Sanofi is listed in Paris (EURONEXT: [SAN](#)) and in New York (NYSE: [SNY](#)).

Learn more about Sanofi at [www.sanofi.com](http://www.sanofi.com).

## Funders & Support



DÉLÉGATION RÉGIONALE  
À LA RECHERCHE  
ET À LA TECHNOLOGIE  
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