

Press release

ADVANCED BIODESIGN, WINNER OF THE FRANCE 2030 PLAN'S CALL FOR "i-DEMO" PROJECTS TO FINANCE ITS "ODYSSEY" CLINICAL TRIAL WITH UP TO €3M

Advanced BioDesign's winning project is its first-in-human clinical trial of its drug candidate ABD-3001 for patients with acute myeloid leukaemia (AML) who are resistant to standard treatments.

As part of the France 2030 plan, the "i-Demo" scheme supports the development of highly innovative, high added-value products and services to strengthen France's scientific and technological capabilities.

Lyon, 24th July 2023 - Advanced BioDesign, a French biotechnology company specialising in the development of a new range of targeted oncology therapies, has announced that its "ODYSSEY"¹ project has won the "i-Demo" call for projects operated by Bpifrance. Bpifrance supports innovative companies and project leaders who, either individually or as part of collaborative programmes, need access to funding to cover the risks involved with their R&D and innovation projects.

The ODYSSEY project selected aims to develop a new treatment for acute myeloid leukaemia (AML), which could help meet the needs of 45,000 patients a year who have reached a plateau in their treatment. The aim of this multicentre Phase I/II (first-in-human) clinical trial is to assess the safety, pharmacokinetics and pharmacodynamics of ABD-3001 ([NCT05601726](#)) as a stand-alone treatment in patients who are unresponsive to or have relapsed on standard therapies, and for whom therapeutic options are limited and prognosis unfavourable.

The compound of interest, DIMATE, is an aldehyde dehydrogenase 1 inhibitor considered to be an important marker of cancer stem cells and functional regulators of tumour growth, immune evasion and drug resistance.

Aligning with the government's priorities, particularly as part of the France 2030 plan, the maturity of the 'ODYSSEY' project and its innovative nature have enabled it to stand out from the crowd. The project has also been approved by the technical group of LyonBiopôle, a competitiveness hub based in Lyon.

Ismail Ceylan, CEO of Advanced BioDesign, comments: *"I would like to thank the Government and Bpifrance for this recognition and invaluable support. It is partly thanks to public investment and the calls for projects that pharmaceutical research and development programmes such as ours can come to fruition. I'm proud to see our ODYSSEY project continuing its development and making progress with trials for patients with AML."*

This financial aid, of more than 3 million, will be paid in several instalments, and will enable us to accelerate our expansion, which has so far been financed by Xerys Funds, Advanced BioDesign's long-standing shareholders. Firstly, it will enable Advanced BioDesign to continue its multicentre clinical

¹ *ODYSSEY : First-In-Human, Open label, Dose Escalation Study to Evaluate Safety, Pharmacokinetic and Pharmacodynamic of ABD-3001 as Monotherapy in Relapsed/Refractory Acute Myeloid Leukemia or High/Very-high Risk Myelodysplastic Syndromes Patients, Ineligible for Intensive or New Generation Targeted Therapy*

trial, for which recruitment for the phase I study began last November in 3 research centres: Hôpital St-Louis - APHP in Paris, Hôpital Lyon Sud - HCL and Hôpital La Conception - APHM located in Marseille.

This funding will specifically support the development of the SAD (Single Ascending Dose) and MAD (Multiple Ascending Dose) phases, the cohort extension phase to confirm the RP2D (Recommended Phase 2 Dose) and preparation for phase II.

Running from February 2023 to February 2026 (i.e. over a period of 36 months), the project is currently at the stage 3 of dosage out of six and has already been given to 9 patients. The ODYSSEY study is organised around a design incorporating an initial 12-month rising single-dose phase in 6 patient cohorts, followed by a second phase of the same length, in which 3 patient cohorts will receive a full four-week treatment cycle. This design will provide initial efficacy results and determine the best treatment procedure.

Virginie Fontaine, Head of Bpifrance's Healthcare innovation sector, says: *"We are delighted to support Advanced BioDesign's ODYSSEY project. This high-quality clinical programme brings together recognised national players and meets a major medical need. This innovation in the field of oncology treatments, and in particular AML, is fully in line with the French government's priorities in the field of healthcare."*

About Advanced BioDesign

Advanced BioDesign is a French biotechnology company developing an innovative therapeutic approach to treat resistant cancers, with a first indication in acute myeloid leukaemia (AML). Its lead anti-cancer compound, DIMATE (ABD-3001), is a first-in-class suicide inhibitor of aldehydes dehydrogenases 1&3 (ALDH1&3). Advanced BioDesign has completed the preclinical stages of ABD-3001 and obtained authorisation in January 2022 from the French National Agency for Drug Safety (ANSM – Agence Nationale de Sécurité du Médicament) for its first human trial which started in November 2022. Based in Lyon, Advanced BioDesign is supported and accompanied by Xerys funds which have been financing its research and development programs since 2013.

For more information: <https://www.a-biodesign.com>; LinkedIn [@Advanced BioDesign](#)

About ABD-3001 and DIMATE

ABD-3001 is the pharmaceutical form of DIMATE which targets and inhibits a detoxification system present in cancer cells. This detoxification system is highly active in most tumour and leukaemia cells, allowing them to survive the inevitable metabolic disturbances that occur during the cancer process. By inhibiting this cell protection system, DIMATE poisons and kills cancer cells, without harming healthy cells. In most cancers, there is also a population of cells, called "cancer stem cells", which are usually highly resistant to the cytotoxic effects of current anti-cancer drugs. This resistance to treatment appears to be the main cause for regular cancer relapses. In the studies conducted by the Advanced BioDesign team, DIMATE also destroys these cancer stem cells. Because of this specific property, which results from its molecular mechanism of action, DIMATE could be a particularly important drug in preventing cancer recurrence. DIMATE's mechanism of action should enhance the anti-tumour action of all redox-activating drugs and therapies, such as platinum salts and gamma rays, overcoming primary resistance to these treatments.

About Xerys Invest

Xerys Invest is a French investment company which primarily invests in the healthcare & Life Sciences, renewable energy and GreenTech sectors. As such, Xerys Invest supports companies in industries undergoing major transformations to address economic, environmental and societal challenges and which have great ambitions for their growth and international expansion. In its market, Xerys Invest stands out as much for its modus operandi and the strategic and operational support it provides to portfolio companies, as for the range

of à la carte investment opportunities offered to investors and for its close relations with them, or its sector-based approach. Also, Xerys Invest has considerable sector expertise, bolstered by a strategic committee made up of recognized specialists and experts in key sectors.

For more information visit www.xerys.com or find us on LinkedIn [@Xerys](https://www.linkedin.com/company/xerys).

About France 2030

Presented on 12 October 2021 by the President of the French Republic, **France 2030**:

- ✓ **Embodies a dual ambition: to transform key sectors of our economy** (energy, automotive, health, aeronautics and space) over the long term through technological and industrial innovation, and to **position France not just as a player, but as a leader in the future global economy**. From fundamental research, to the emergence of an idea, through to the production of a new product or service, France 2030 supports the entire life cycle of innovation, right through to its industrialisation.
- ✓ **Is unprecedented in terms of its scale: €54 billion** will be invested to ensure that our businesses, universities and research bodies are able to successfully make the transition in these strategic sectors. The aim is to enable them to **respond competitively to the ecological challenges** and the necessity to appeal to a new world, and to create the future champions in our fields of excellence in order to strengthen France's sovereignty and independence in these key sectors. To this end, 50% of spending will be devoted to decarbonising the economy, and 50% will be earmarked for emerging players, bringing innovation that has no adverse impact on the environment (in line with the Do No Significant Harm principle).
- ✓ **Will be implemented collectively**: the plan is designed and deployed **in consultation with local and European economic and academic players**, who have helped to determine its strategic orientations and key actions. Project leaders are invited to submit their applications via open, demanding and selective procedures in order to benefit from government support.
- ✓ **Is teered by the General Secretariat for Investment** on behalf of the Prime Minister and implemented by the Ecological Transition Agency ("Agence de la transition écologique" - **ADEME**), the National Research Agency ("Agence nationale de la recherche" - **ANR**), Bpifrance and the Deposit and Consignment Office ("Caisse des Dépôts et Consignations" - **CDC**). For more information: france2030.gouv.fr

About Bpifrance

Bpifrance finances businesses - at every stage of their development - through loans, guarantees and equity. Bpifrance supports them in their innovation and international projects. Bpifrance also supports their exports through a wide range of products. Advice, universities, networking and acceleration programmes for start-ups, SMEs and ETIs are also part of the services offered to entrepreneurs.

Thanks to Bpifrance and its 50 regional offices, entrepreneurs benefit from a close, single and effective contact to help them meet their challenges.

For more information: www.Bpifrance.fr - <https://presse.bpifrance.fr/> - Follow us on Twitter : [@Bpifrance](https://twitter.com/Bpifrance) - [@BpifrancePresse](https://twitter.com/BpifrancePresse)

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