ErVaccine Technologies

Next Generation Cancer Immunotherapies

ErVaccine closes a €4.5 million financing round and prepares to start clinical trial with its first therapeutic cancer vaccine in 2023

- **ErVaccine is developing a therapeutic vaccine and cell therapy technology potentially applicable to many types of cancers**
- **First vaccine candidate planned to start clinical trials in 2023 in triple-negative breast cancer**
- **Ervaccine has completed a €4.5 million seed round with Seventure and Bpifrance, and is preparing a second round of financing**

Lyon, 5th of january 2023 - ErVaccine Technologies, a biotech company and spin-off from the Centre Léon Bérard-Centre de Recherche en Cancérologie de Lyon, which develops next-generation therapeutic vaccines and cellular immunotherapies targeting "unconventional" tumor antigens, such as those derived from human endogenous retroviruses (HERVs), announces the closing of a €4.5 million seed round, including dilutive and non-dilutive funds, with Seventure and Bpifrance as part of the Aide au Développement de l'Innovation (ADI) program.

These funds are dedicated to financing Ervaccine's work with its development portfolio, which currently includes nine projects, two of which are in late pre-clinical development.

To prepare for the next stages of development, including the start of a clinical trial with a first vaccine candidate in 2023, Ervaccine is currently preparing a A-round of financing.

Nathalie Donne, CEO of Ervaccine, declares: "The work of Ervaccine's teams, led by Prof. Stéphane Depil, and the support of our strategic investors, Seventure and Bpifrance, have enabled us to decisively advance our preclinical programs and bring us to the doorstep of the first clinical trials. Meanwhile, throughout the year, we published numerous non-clinical data of high scientific quality, confirming the immense potential of our technology. These publications have enabled us to make progress in our discussions with several international investors specialized in life sciences, with a view to our next stage of financing, as well as with potential industrial partners."

During the year 2022, Ervaccine obtained the publication of 3 major scientific articles in high impact factor journals.

The first article, published in January 2022 in the journal Science Advances and entitled "Identification of shared tumor epitopes from endogenous retroviruses inducing high avidity cytotoxic T cells for cancer immunotherapy", demonstrates the value of using antigens derived from endogenous human retroviruses (HERV) specifically overexpressed by tumor cells as therapeutic targets for developing new immunotherapies in cancer.

The second article was published in June 2022 in the European Journal of Cancer and entitled: "Tumor burden and antigen-specific T cell magnitude represent major parameters for clinical response to cancer vaccine and TCR-engineered T cell therapy". It shows the interest of TCR-T cell therapy approaches (T lymphocytes modified to express a T cell receptor specific to a tumour antigen) in cancers with a large

tumour mass. This cell therapy could be combined with a vaccine approach to provide long-term tumour control, which would be a major advance in cancer treatment.

The third paper, published in June 2022 in the American Journal of Hematology and entitled "HERVs characterise normal and leukemia stem cells and represent a source of shared epitopes for cancer immunotherapy", shows that HERVs represent an important source of genetic information that can help improve cancer stratification and the identification of new targets and biomarkers.

Prof. Stéphane Depil, MD, PhD, founder and Executive Chairman of ErVaccine, declares: "Human endogenous retroviruses (HERVs) are fossils of viruses that were integrated into the genome of our ancestors millions of years ago and represent about 8% of our genetic make-up. These genes are silent in normal cells but become active when cells become tumorous. ErVaccine has demonstrated that cancer cells present antigens from HERV to the immune system and has built on this discovery to develop a unique, potentially universal therapeutic vaccine technology platform. Our most advanced preclinical assets are targeting triple-negative breast cancer as the first indication. We are also considering other low mutational burden tumours such as ovarian cancer, sarcoma, glioblastoma and acute myeloid leukemia. In these indications, current checkpoint inhibitor immunotherapies are proving to be of little or no benefit, and there remains a major unmet medical need. We are putting everything in place to enter the clinic next year."

About ErVaccine Technologies

ErVaccine Technologies is a preclinical stage biotechnology company, founded in October 2019 by Prof. Stéphane Depil, an onco-haematologist and researcher at the Centre Léon Bérard (CLB) and Centre de Recherche en Cancérologie de Lyon (CRCL), with more than 15 years of experience in pharmaceutical development in oncology. ErVaccine is a spin-off of CLB / CRCL, specialising in the development of next generation therapeutic vaccines and modified T-cell immunotherapies, targeting new families of so-called "unconventional" tumour antigens such as those derived from endogenous retroviruses. ErVaccine Technologies determines tumour epitopes commonly shared by patients through novel bioinformatics algorithms that identify candidate epitopes which are then validated by proteomic approaches and immunological assays. The first targeted indication is triple negative breast cancer, with results obtained in ovarian cancer, sarcoma and acute myeloid leukaemia. The company is embedded in a leading cancer centre @ CRCL/CLB, with a team of high level experts.
www.ervaccinetechnologies.com

About HERVs

Approximately 8% of the human genome consists of sequences of retroviral origin, namely HERVs. HERVs are remnants of ancient retroviral infections that affected the germ line of primates and their ancestors over the last 100 million years. HERVs remain silent in normal cells but can be aberrantly expressed by tumour cells. Because of their similarity to viral protein fragments recognized as foreign by the immune system, HERV-derived antigens are prime targets, shared by different tumours, for the development of new cancer vaccines or T-cell based therapies, particularly in tumours that respond poorly to current checkpoint inhibitor (anti-PD1/-PD-L1) immunotherapy approaches.

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