

Novimmune relies on the CeVi collection to demonstrate the efficacy of its bispecific antibody

To assess the efficacy and the mode of action of NI-1701, Novimmune collaborated with CALYM by relying on the richness and quality of its bank of viable cells, ISO 9001 certified.

Supporting Innovation

Lymphomas, first blood cancer, have a large variety of types and sub-types. For B-cell lymphoma, 30 to 60% of patients are resistant to standard treatment with chemotherapy combined with anti-CD20 Rituximab antibody. Novimmune developed a bispecific antibody, as an alternative treatment, by targeting other proteins involved in this lymphoma: CD19 and CD47. NI-1701 thwarts messages sent by CD47 and binds to CD19 in order to specifically trigger phagocytosis of tumor B lymphocytes. The innovation lies in the ability to target two proteins while displaying low toxicity towards healthy cells. It is essential to increase efficacy of standard treatments and to provide a solution for relapsed or refractory patients.

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The client needs

In the long process of getting a drug to market, preclinical tests are a primordial step before the setting up of clinical trials. To achieve this, a maximum of scientific data is necessary to confirm the therapeutic interest and efficacy and the benefit/risk ratio for patients. Novimmune wished to use the CeVi viable cell collection, set up by CALYM, to have not only a big quantity of patient « cases », but also skills of teams specialized in the lymphoma field. Novimmune found in CALYM, the resources to test the in vitro efficacy of the antibody and to bring to light its mechanism of action. Anti-tumor activity was confirmed on various cells including those of patients with follicular and diffuse large B-cell lymphoma. The support provided by CALYM contributed to Novimmune's announcement from June 2018 of the planning of clinical trials end of 2018 or beginning of 2019.

Partnership

The CALYM Carnot aims at accelerating innovation and its transfer in the lymphoma field. At the heart of its strategy of research and partnership with industry, unique databases and biological collections, including CeVi. Human cells are cryopreserved, isolated from lymphomas and reactive lymphoid tissues. This bank covers all lymphoma sub-types, from the most common to the most rare forms of the pathology, including biological and clinical data. After the progress made thanks to the support of the team of Rennes, "Microenvironment Cell differentiation, iMmunology And Cancer", Novimmune researchers could illustrate safety of NI-1701 on blood cells or T lymphocytes and confirmed its efficacy in vivo in mouse. This partnership was decisive in Novimmune's progress towards further development of a new treatment expected by many patients.