



[Pierre Cordelier](#) équipe ImPact : Therapeutic innovation in pancreatic cancer and two members of Neovirtech, [Franck Gallardo](#) (CEO) and [Elie marcheteau](#)

NEOVIRTECH SAS OPENS A NEW LABORATORY AT THE CANCEROLOGY RESEARCH CENTER OF TOULOUSE (CRCT)

NeoVirTech SAS opens a new laboratory at the Cancerology Research Center of Toulouse (CRCT) to structure its anticancer programs towards the creation of a patient-driven theragnostic platform and to foster drug development.

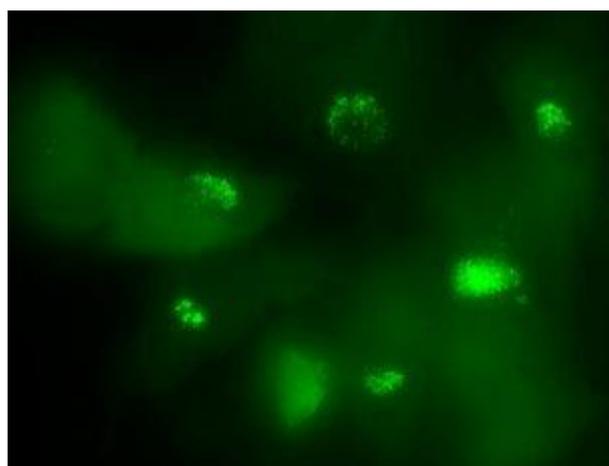
- NeoVirTech gives access to its ANCHORTM technology platform to develop disruptive models, with a focus on the investigation of cancer associated mechanisms and the preclinical development of oncolytic virotherapies
- NeoVirTech and CRCT aim to develop fast and reliable theragnostic platform to ensure efficacy of oncolytic virotherapies in cancer patients
- Long-term collaboration will ensure patient benefits and reduce time-to-decision for individualized cancer therapies.

NeoVirTech, a biotechnology company developing autofluorescent viruses for the discovery of antiviral molecules and the conception of oncolytic virotherapies, joins one of the most advanced clinical research center in France to accelerate its development in the oncolytic field. Oncolytic viruses are viruses that are specifically modified and armed to attack cancer cells and trigger a dual response by first inducing direct cancer cell killing and second by stimulating the patient immune system.

Being located at the CRCT will allow NeoVirTech to combine its expertise in the tagging and visualization of DNA related mechanisms to advanced pilot preclinical research programs of the CRCT. NeoVirTech will share its expertise in high throughput phenotypic screening with CRCT researchers to validate candidate drugs or therapeutic targets. NeoVirTech will also develop new collaborative projects based on its ANCHOR™ technology for real-time imaging of single genes in live cells.

The first iconic research program will be to develop novel oncolytic viruses with the Team 10 from CRCT led by Dr Pierre Cordelier. The goal is to provide a collection of ANCHOR™ tagged oncolytic viruses to investigate their infection and replication capacities, in vitro and in vivo, and soon directly on patient derived samples. This will allow the measurement of oncolytic potential and help decision-making in terms of individualized cancer treatment by providing quantitative data on treatment efficiency and reduce time-to-decision.

Speeding oncolytic virotherapies development, from bench to bed



NeoVirTech SAS is a French biotechnology company focusing its activity on the development of autofluorescent viruses for the discovery of antiviral molecules, the development of oncolytic virotherapies and the measurement of virus disinfection processes. The company provides services to investigate the behavior of oncolytic viruses according to cell type, dose or the combination with pre-existing treatment. Combined with its ANCHOR™ technology, that allows the visualization of the infection and replication of

viruses in living cells using high content microscopy approaches, NeoVirTech oncolytic platform provides ultra-fast quantitative and qualitative results on the infection capacity of an oncolytic vector. The company already collaborates with major actors in the oncolytic field such as Transgene SA (Gallardo F et al. Fluorescent Tagged Vaccinia Virus Genome Allows Rapid and Efficient Measurement of Oncolytic Potential and Discovery of Oncolytic Modulators, *Biomedicines*. 2020 doi:10.3390/biomedicines8120543). The company also develops bespoke programs aiming at the visualization of other class of oncolytic viruses such as parvoviruses.

The Cancer Research Center of Toulouse is a center of excellence developing innovation for the understanding of cancer and the development of anticancer therapies. By combining more than 400 people in a multidisciplinary environment, the CRCT is one of the most advanced cancerology research center in France. Eighteen research teams are located in this center. Among them, Dr Pierre Cordelier's team ImPact (therapeutic innovation for pancreatic cancer) investigates innovative strategies for

patient diagnosed with pancreatic cancer. The team uses NeoVirTech's proprietary technology to visualize new generation of oncolytic treatment, especially looking at the intrinsic resistance of pancreatic cancer cells to oncolytic viruses. The team also looks for means to sensitize resistant cells to oncolytic virotherapies. This long term collaboration already led to the publication of a scientific article (Quillien, L. et al. A Novel Imaging Approach for Single-Cell Real-Time Analysis of Oncolytic Virus Replication and Efficacy in Cancer Cells. Hum Gene Ther 32, 166-177 (2021). By combining their expertise, NeoVirTech and the Impact team within CRCT aim to develop a theragnostic platform for not only to interrogate the antitumoral efficacy of oncolytic virus in preclinical models, but also to identify combination to increase virotherapy therapeutic index.

NeoVirTech brings to the alliance its know-how in high throughput imaging techniques and innovative models of virus visualization in living cells. NeoVirTech is equipped with high content screening microscope combined with pipetting robots in BSL2, BSL2+ environment. CRCT gives access to its technology platforms and to its scientific expertise in cancer biology and therapy, in close collaboration with clinicians from the University Institute of Cancer of Toulouse, Oncopole.

"By joining the CRCT, we are structuring our anticancer activities in a place at the forefront of cancer innovation. By being close to teams dedicated to cancer therapies, we will make our best effort to develop innovative virotherapies and optimized screening platform to ensure efficacy of oncolytics and other drugs in development. Our technology combined with state-of the art imaging platform gives a unique, robust and rapid way to measure how a specific tumor cell line, patient derived cell line or in the future patient biopsies respond to specific treatment. We aim at speeding up time-to-decision, maximizing the chance of patients to receive the correct and therefore efficient oncolytic vector, the sooner the better. "

Franck Gallardo, CEO NeoVirTech SAS

"While oncolytic viruses are quickly moving toward the forefront of modern medicines, much remains to be elucidated for creating highly effective treatments based on these biologics. This alliance represents a unique occasion to rationalize the use of oncolytic virus for cancer therapy. With NeoVirTech technology, we will not only have the opportunity to better understand the dialog between oncolytic virus and tumor cells, but also to accelerate personalized therapeutic profiling programs based on oncolytic virotherapy, especially for the management of patient with diseases with no cure such as pancreatic cancer."

Pierre Cordelier PI, ImPact, CRCT

“One of the CRCT priorities is to foster public-private collaborations with highly dynamic start-ups such as NVT. This gives members of the center privileged access to innovation and supports very promising therapeutic strategies such as the use of oncolytic viruses for cancer therapy”

Gilles Favre, CRCT director

About NeoVirTech

NeoVirTech SAS develops autofluorescent viruses and viral vectors for imaging and discovery of novel antiviral drug candidates in the fields of human health, animal health and biodefense. The company has a catalog of viruses and fluorescent vectors in constant extension and offers access to its proprietary ANCHOR™ technology, the only non-invasive technique to detect DNA dynamics inside living cells. Since the Covid19 pandemic, the company is actively involved in SARS-CoV-2 screening campaign and measurement of disinfection procedures.

For more information: www.neovirtech.com – Press contact: contact@neovirtech.com

About CRCT

At the heart of the Toulouse Oncopole, the CRCT, under the supervision of Inserm, CNRS and Paul Sabatier University, stimulates innovation in terms of research and teaching in the fight against cancer and leads an integrated approach between research, care and teaching, in a transversal and multidisciplinary logic.

The CRCT remains the only centre in Toulouse entirely dedicated to cancer research. The close collaboration with the clinicians of the IUCT-Oncopole allows the transfer of research results to clinical applications and the development of innovative approaches in the field of diagnosis and treatment.

The Centre's strategy is based on its four research areas:

- Oncogenic signalling, DNA damage and genetic instability;
- RNA and cancer;
- Tumour microenvironment and metabolism;
- Onco-immunology;

In accordance with the recommendations of its Scientific Council, the CRCT is pursuing its actions to consolidate its strong axes, launch new initiatives, recruit new talent, develop its partnership strategy and improve its visibility and attractiveness.