



PRESS RELEASE

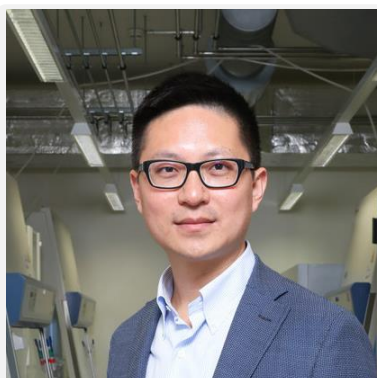
Cancer: EPFL and Novochizol SA to collaborate on designing more efficient immunotherapies, with the support of Innosuisse, the Swiss Innovation Agency.

Lausanne and Monthey, Switzerland, November 1, 2023:

The EPFL Laboratory of Biomaterials for Immunoengineering, headed by Prof. Li Tang, and the Bioark-hosted startup company Novochizol SA possessing a unique chitosan transformation technology, today announced that Innosuisse will co-fund their collaborative research aimed at improving the safety and efficacy of immune therapies against solid cancers. The three-year project, budgeted at CHF 1.1 Mio, of which CHF 498,000 are covered by the Innosuisse Grant, will focus on the capacity of Novochizol™ nanoparticles to safely deliver high doses of cancer-fighting cytokines and immune checkpoint inhibitors inside tumors.

Enhanced protection of active ingredients and efficient intratumoral delivery

Cytokines, such as Interleukin-2, have the capacity to activate strong cancer-fighting immunity, but effective doses within tumor tissues cannot be reached with injections of free cytokines because of their very short half-life in the blood and systemic, life-threatening toxicities. Novochizol™ - formulated cytokines address both limitations: the active ingredient is protected from degradation and the formulations strongly adhere to tissues at the site of administration, without any systemic diffusion.



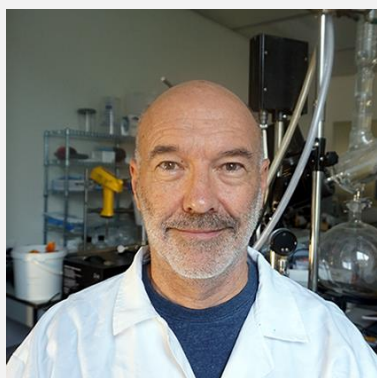
“Effective local delivery of cytokines and other immunotherapies is an important challenge in the field of immunooncology, Novochizol™ with its unique tissue penetration and adhesion properties, versatility and ease of formulation appears to be an ideal candidate to meet this challenge.”

Li Tang, PhD, Associate Professor, Institute of Bioengineering / Institute of Materials. EPFL

In addition to their therapeutic potential in monotherapies, cytokines may also prime immunologically-deficient tumors to become responsive to immune checkpoint inhibitors, which may eventually help render immunotherapy effective for non-responding patients, which are still a majority.

Novochizol™-mediated drug delivery to find applications in oncology and other therapeutic domains

By participating in this project, Novochizol SA will be in the position to qualify its nanoparticles as the first chitosan excipient approved for pharmaceutical use not only in oncology, but for all medical conditions where a drug needs to be delivered locally to the diseased tissue, without systemic distribution. A Novochizol™-based drug delivery system may thus support a number of third-party drug development projects, benefitting the entire pharma ecosystem as a whole and millions of patients worldwide.



“Even the best drug is useless if it cannot reach its destination and be released at the right dose and at the right rate. Poor drug formulation and delivery are major causes of drug development failure across all disease areas, but we cannot think of a more important area than oncology and a more qualified partner than the Tang Lab at EPFL to address this challenge with our technology.”

Vanya Loroach, PhD, CEO Novochizol SA

About Tang Laboratory of Biomaterials for Immunoengineering, EPFL

The overarching goal of Tang laboratory is to develop novel strategies to engineer the multi-dimensional immunity-disease interactions, an emerging field called 'immunoengineering', to create safe and effective therapies against cancer and other diseases. We leverage the power of metabolic and cellular bioengineering, synthetic chemistry and material engineering, and mechanical engineering to achieve controllable modulation of immune responses.

More information : www.epfl.ch/labs/tang-lab/ – Press contact: li.tang@epfl.ch

About Novochizol SA

Novochizol SA researches and develops applications of Novochizol™, a unique technology that significantly improves the characteristics of ordinary chitosans, yielding materials with new properties for applications in pharma, medtech, biotech, agriculture, and other industries.

As a biocompatible biopolymer, Novochizol™ improves the interfacing of different materials with living tissues. In in vitro diagnostics, Novochizol™ enables better nucleic acid purification and improves the specificity and sensitivity of PCR and immunological tests. As an excipient, Novochizol™ can be used to formulate small molecules, nucleic acids, peptides, proteins, viruses and cells. Novochizol™ formulations are strongly bioadherent, enabling sustained release of active ingredients, deep tissue penetration and intracellular targeting.

More information : www.novochizol.ch – Press contact: info@novochizol.ch