

ENPICOM and Erasmus University Medical Centre Partner to Discover Cancer Nanobodies



ENPICOM, an innovative bioinformatics software solutions provider, has announced a collaboration with Erasmus Medical Center, Rotterdam, a distinguished leader in cancer research. The aim of this partnership is to identify and develop nanobodies against cancer by utilizing ENPICOM's immune repertoire data analysis services and software solutions.

"We selected ENPICOM to support our project because of their unique software that is specifically designed for antibody discovery workflows and their ability to operate as an extension of our team," said project lead Dr. Guido Jenster, professor of Experimental Urological Oncology at Erasmus MC. "By combining the strengths of our team and ENPICOM's expertise, we are well-positioned to make significant progress in our pursuit of discovering novel cancer therapeutics." The collaboration is funded by the Ministry of Economic Affairs by means of the PPP allowance made available by the Top Sector Life Sciences & Health to stimulate public-private partnerships.

"We are excited that Erasmus MC, a distinguished leader in cancer research, has chosen ENPICOM to advance the frontier of nanobody-based treatments." stated Paul van der Velde, CEO at ENPICOM. "Nanobodies hold immense potential as a transformative tool in cancer therapy."

Compared to traditional antibodies, nanobodies are much smaller, enhancing tissue penetration and tumor infiltration. Moreover, nanobodies tend to have longer CDR3 regions, enabling them to better recognize hidden epitopes. Their simple single-chain structure also grants nanobodies greater stability and ease of production and engineering.

ENPICOM's IGX Platform is specifically designed to analyze antibody sequencing data and discover a diverse set of developable candidates. The software seamlessly integrates sequence and experimental assay data, allowing for efficient cluster, phylogenetic, and display enrichment analyses in a secure and scalable environment. Moreover, to ensure the best antibody candidates are selected for follow-up studies the platform enables high-throughput structural modeling of antibodies to accurately identify and annotate exposed liabilities. This makes it a powerful solution to streamline any antibody discovery workflow and easily identify the best antibody candidates for further development.

In addition to the IGX Platform, ENPICOM offers full-service immune repertoire sequencing and analysis in collaboration with Cerba Research. Furthermore, ENPICOM offers on-demand repertoire analysis and custom development to support non-standard R&D – a solid combination of immunology, bioinformatics and software engineering to take on anything touching adaptive immune repertoires.

Source & Image Credit: ENPICOM

Published on : Tue, 20 Feb 2024