ProBioGen and TEVA team up for Human Artificial Lymph Node Technology

07 February 2018 | News

Research License Agreement is done in ProBioGen and TEVA on unique human Artificial Lymph Node model for analyzing substance effects on the human immune system in vitro

ProBioGen, a leading specialist for contract development and manufacturing of complex glycoproteins announced the signature of a non-exclusive license agreement on its proprietary human Artificial Lymph Node (HuALN) platform technology with TEVA.

The unique human Artificial Lymph Node model was developed by ProBioGen as superior 3D-micro-organoid model for analyzing substance effects on the human immune system in vitro.

It is based on a patented, miniaturized and perfused bioreactor for long-term cultivation of immune cells.

Human blood-derived dendritic cells, T & B lymphocytes and Mesenchymal Stem Cells (MSC)-derived stromal cells are inoculated into the bioreactors' 3-dimensional hydrogel matrix which is perfused with cell culture medium and aerated, just as in a real human lymph node.

Upon antigen-stimulation the cells' self-organize into immune-competent micro-organoid structures within the 3D matrix. The perfused bioreactor is typically operated for 4 weeks and thus allows multiple and repeated expositions of the immune cells to the test compounds.

Under the terms of the agreement the technology platform will be transferred to TEVA as a predictive tool to assist in the assessment of TEVA's biopharmaceutical drug candidates.