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Anocca closes $47M series B round to move TCR-T cell therapies toward the clinic

By Cormac Sheridan, Staff Writer

DUBLIN – Anocca AB raised $47 million in a series B round to advance its T-cell-based immunotherapies expressing recombinant T-cell receptors (TCRs) toward clinical trials in cancer and to build out its manufacturing capacity at its base in Södertälje, Sweden.

Reagan Jarvis, CEO and co-founder, Anocca

The company is by no means a newcomer to the immunotherapy space, but it has consciously adopted a low profile since its formation in 2014. "We've been working on our technology for nearly eight years now," co-founder and CEO Reagan Jarvis told *BioWorld*.

Its ability to do so was a function of its investors. Jarvis, a New Zealander who had been working as a post-doctoral researcher at the Heidelberg-based German Cancer Research Center (DKFZ), sketched out the company's technology from what he calls "ideas on paper." This was enough to get the backing of seed investor and co-founder Mikael Blomqvist, a serial entrepreneur, who put $30 million into the fledgling company. Another early investor – and current chairman – is Hans Stråberg, one of Sweden's most high-profile business leaders, who spent almost a decade as CEO of the Stockholm-based appliance maker Electrolux AB.

In all, Anocca has now raised more than $100 million in equity finance, and it is developing "dozens of assets" based on its industrialized approach to generating TCR-T cell therapies. "What we've disclosed publicly in our pipeline is just a fraction of what we're working on," Jarvis said. Many firms have limited their TCR-based therapies to a fraction of the dominant human leukocyte antigen (HLA) haplotypes, whereas Anocca plans to achieve broad HLA coverage, in order to address a majority of the world's population.

Disclosed projects include therapies targeting shared tumor antigens, including New York esophageal squamous cell carcinoma 1 (NY-ESO-1), L antigen family member 1A (LAGE1A) and melanoma-associated antigen 4 (MAGE-A4), among others. It has several projects that target prominent oncogenic cancer drivers, including the KRAS mutations G12D and G12V, neither of which is targeted by Amgen Inc.'s recently approved small-molecule KRAS G12C inhibitor, Lumakras (sotorasib), as well as RAC1P29S and BRAFV600E. It is developing multiple therapies directed at antigens associated with Epstein-Barr virus-transformed cancers. It is also engaged in discovering TCRs that target tumor neoantigens that occur in individual patients.

Its technology platform has been consciously designed to address indication areas outside of cancer, including vaccines against infectious disease and the inducing tolerance in patients with autoimmune disease. The company has active projects in these areas and in the development of immunosurveillance toolsets for patient monitoring and stratification.

Key to its approach has been the development of libraries of engineered human T cells and antigen presenting cells, which enable it to screen and validate T-cell targets and TCRs at scale. The reproducibility of its cell-based assays avoids the variability that can arise from approaches based on material from patients and healthy donors. "It's just very low signal, very high noise," Jarvis said. Anocca's approach is informed by empirical cell biology work, rather than genomics. "We barely touch next-generation sequencing," he said. "This is real biological data – there's no AI."

The company's long-term vision is to develop allogeneic cell therapies, but it will start with autologous therapies initially. The privately held firm already has 65 staff on the payroll, a large majority of whom are scientists, and it is operating from a former Astrazeneca plc research site for central nervous system disorders, which is about 20 miles southwest of Stockholm. It has 3,000 square meters of lab space and another 5,000 square meters for manufacturing. "We're built for scale," Jarvis said.

It aims to be ready to move its first projects into clinical trials by the end of 2022. The big push to produce COVID-19 vaccines has had a knock-on effect on timelines, because of the manufacturing supply chain constraints it has introduced.

Anocca has yet to enter any licensing deals. "That's a matter of opportunity and timing," Jarvis said. The company is engaged in a research collaboration with the Johnson & Johnson subsidiary Janssen Research and Development LLC, which is exploring its technology. It is also part of a European Commission-backed project in rheumatoid arthritis, RTCure, which is funded by the Innovative Medicines Initiative. And it is engaged in project with Solna-based Scilifelab on the biophysical and structural characterization of the interactions between TCRs and the major histocompatibility complex.

The present round was limited to Nordic investors – it could have been bigger had the company wanted to take on more capital at this time. "We've not been greedy," Jarvis said. The process was led by advisers Danske Bank and brought in new investors Swedbank Robur Ny Teknik, a managed equity fund, investment managers Ramsbury Invest AB, and several family offices, including those of veteran venture capital investors Harald Mix and Robert Andreen. Existing investors, including Mellby Gård, Nidoco and Blomqvist's investment vehicle, Michano, also participated.