

CASE STUDY



Nkarta Collaboration Achieves Cost-Effective Manufacturing in Tight Timelines

Nkarta is a clinical-stage cell therapy company focused on engineered natural killer, or NK, cells for the treatment of cancer. Their proprietary technology platform is designed to harness the power of these important immune cells by enhancing their ability to identify and destroy tumour cells.



CHALLENGE

In their early days as an emerging biotechnology company, Nkarta did not have the infrastructure to support in-house manufacturing. Nkarta had an early-stage clinical program, requiring a high degree of flexibility. They sought a contract manufacturing development and manufacturing organization (CDMO) that could accommodate the program's process and analytical development, and manufacturing needs. The CDMO would have to manage tight timelines and support the goal of advancing their programs into clinical trials, while being experienced in cell culture and compliant with North American regulations.



SOLUTION

After careful review, Nkarta chose to partner with CCRM in 2019. "Nkarta found that CCRM's facilities met its regulatory and compliance requirements, and were well-equipped to accommodate modern workflows," says Dr. Ralph Brandenberger, Nkarta's Senior Vice President of Technical Operations. Despite tight project deadlines and supply chain disruptions, CCRM's staff was "responsive, inspired confidence and was eager to collaborate."

Partnering with CCRM included access to unique, cell therapy-specific technologies, which enabled Nkarta to transition from development into Good Manufacturing

Practices (GMP) manufacturing quickly. CCRM's in-house Gammacell® irradiator (Best™ Theratronics), in particular, was essential for Nkarta's processes, and having this GMP equipment is rare for a CDMO.

"The staff's broad technical expertise at CCRM was great," says Dr. Nadir Mahmood, Nkarta's Chief Financial and Business Officer. "Furthermore, it was beneficial to have our own subject matter experts embedded with CCRM directly and to leverage their expertise as well."

Dr. Mahmood emphasizes the importance of reliable cost estimates and forecasting, especially given the novelty of Nkarta's programs. He notes that CCRM provided flexibility on cost management, timely information and open communication throughout the entire process.



RESULTS

CCRM and Nkarta have built a robust and respectful relationship. "Our timelines are demanding, and our expectations are high," says Dr. Mahmood. "We've sat down with CCRM over weekend calls to outline what we're trying to achieve. [CCRM's] response is fast and collaborative, and it really helped instill confidence in CCRM's ability to drive and execute these projects in the long-term."

"It's high-quality work," says Dr. Brandenberger. "I have to say that [the work that CCRM did] was technologically challenging, and CCRM performed very well and developed very high-quality assets for our purposes."

Nkarta and CCRM continue to manufacture together, which Dr. Brandenberger says is "progressing very well"

"We've found an ongoing partner," he says.