

CV

I currently work as a Medical Science Liaison at Sanofi specializing in Immunology/Respiratory therapeutic area since March 2024. I began my journey at Sanofi as an intern in Medical Affairs in July 2022, then became an MSL in the Immunology/Dermatology team in June 2023.

I obtained my Master's degree in Biotechnology and Medical Biology from Vita-Salute San Raffaele University in Milan in 2022, after completing my Bachelor's degree in Medical and Pharmaceutical Biotechnology. Before joining Sanofi, I conducted research at the San Raffaele Institute focusing on innovative CAR-T cell therapies.

My main competencies include generating scientific evidence, organizing events, supporting medical strategy, training commercial teams, and managing clinical studies. I possess excellent organizational, problem-solving, and communication skills, along with technical expertise in laboratory research and scientific data analysis.

Lab expertise

During my research at San Raffaele Institute, I worked on overcoming CAR-T cell therapy limitations in solid tumors, focusing on how abnormal tumor glycosylation creates resistance mechanisms that reduce T cell effectiveness. I analyzed genomic databases (TCGA and GTEx) and identified key glycosylation enzymes overexpressed in carcinomas. Using CRISPR-Cas9 technology, I knocked out specific enzymes (MGAT5 and b4GalT1) from pancreatic tumor cells, demonstrating significantly improved CAR-T cell targeting and killing capacity.

I then engineered innovative "armored" CAR-T cells by incorporating a secreted de-glycosylating enzyme (PNGase) into the CAR construct. These engineered cells successfully removed the glycan shield from tumor surfaces.

In my in vitro experiments with pancreatic and lung tumor models, the armored CAR-T cells showed superior tumor elimination, expansion, and cytokine production compared to conventional CAR-T cells.

My work provided new insights into tumor recognition and established a promising approach for developing more effective CAR-T therapies for solid tumors.