DKMS Stiftung Leben Spenden

Project Summary

John Hansen Research Grant 2023

Precision targeting of Diffuse Large B Cell Lymphoma using Chimeric Antigen Receptor T cells

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My project focuses on developing an improved version of the existing CAR T cell therapy. CAR T cell therapy targeting CD19, first approved in 2017, is limited by its toxicity towards healthy B-cells, a frequent adverse event that leads to increased risk of infections and reduced responses to vaccines (including COVID-19). The goal of my project is to develop a novel CAR T cell immunotherapy that is able to specifically target lymphoma cells while sparing normal B-cells, thereby avoiding severe immunosuppression. We will achieve this goal by developing and testing a novel CAR T cell product targeting a specific B-cell receptor that is only expressed in malignant cells. We will test our novel CAR T cell product and ensure it can target malignant cells that carry this specific receptor, while also ensuring our CAR T cells will spare healthy B cells that do not carry this receptor. This project will pave the way to a new wave of clinical trials that target the malignant cells while sparing healthy cells.