A virus-free platform technology for next-generation CAR therapeutics


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SUMMARY

One of the most promising immunotherapies against cancer is the adoptive cell transfer of genetically modified T cells. Herein, patient-derived Chimeric Antigen Receptor (CAR) expressing T cells have been one of the most successful therapy to date. However, routine clinical implementation of CAR T cells is stalled by high prices, certain severe adverse events and the complexity of generating an autologous cell product from chemo-pretreated patients.
Therefore, this project aims to develop a virus-free platform technology for generation of novel improved and cost-effective next-generation CAR therapeutics suitable for autologous and/or allogeneic use.

PROJECT GOALS

- Development of a virus-free platform technology for generation of next-generation CARs
- Preclinical characterization of a novel CAR T cell therapy
- Prepare phase I/IIa clinical trial

LONG-TERM GOALS

- Perform phase I/IIa clinical trial
- License to Biotech/Pharma or startup company