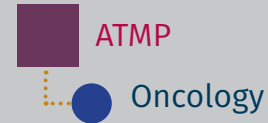


TCR gene therapy of CD22-positive B cell malignancies



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SUMMARY

In recent years, chimeric antigen receptor (CAR) T cell therapies have become a novel effective option for treatment of B cell malignancies. The clinical success however is hampered by down-modulation of surface antigen expression upon CAR treatment. Since TCRs do not depend on antigen surface expression, they represent a good alternative to CAR cell therapies.

The project aims to generate a novel TCR therapy for treatment of B cell malignancies by targeting the B cell antigen CD22. A new TCR candidate is being tested for off-target toxicity and will be compared to CD22 CAR T cells. Patients with B cell malignancies that are naïve or resistant to CD19-targeted CAR immunotherapy could strongly benefit from this novel CD22-directed TCR T cell therapy.

PROJECT ACHIEVEMENTS DURING & AFTER SPARK

- Novel CD22-specific TCR identified
- Preclinical proof-of-concept and in vitro safety testing
- Follow-on funding acquired of Deutsche Krebshilfe

LONG-TERM GOALS

- Perform phase I clinical trial
- License to Pharma or clinical co-developmen