A novel gene therapy for treatment of aggressive B cell Lymphoma


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ATMP
Oncology

2019

Track 2

SUMMARY

A specific point mutation of the protein MyD88 is known to be a key oncogenic driver event in around 20% of patients with an aggressive variant of Diffuse Large B cell Lymphoma, and in around 50% of patients with Primary CNS Lymphoma. Both patient populations have a poor prognosis, and only limited therapies are available especially for the elderly and patients with severe comorbidities. The project seeks to complete the preclinical characterization of a human-derived T cell receptor that selectively recognizes this specific mutation of MyD88. Adoptive T cell therapy with MyD88-specific T cells would represent a truly tumor-specific therapy, being much more selective than CAR T cells or immune checkpoint inhibitors.

PROJECT ACHIEVEMENTS DURING SPARK

- Preclinical development of novel TCR T cell candidate accomplished
- Successful publication of preclinical data in *Journal for ImmunoTherapy of Cancer*
- PEI scientific advice meeting
- Planning of FiH study
- Follow-on funding acquired of Else Kröner-Fresenius Foundation
- Pitch contribution at BIO Partnering at JP Morgan 2022

LONG-TERM GOALS

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