Introduction

- AFP is an abundant protein present in the liver, but is also Secretly expressed in a variety of solid tumors. It has been shown to have a role in the immune system, including immune checkpoint receptor expression and shedding into circulation.

Objective

- Evaluate safety and anti-tumor activity in patients with HCC who are candidates for ADP-A2AFP SPEAR T-cells. ADP-A2AFP SPEAR T-cells are CD8+ T-cells designed to kill liver cancer cells that express the AFP antigen.

Methods

- Patients were treated in up to 14 days for the next 3 patients treated with adequate organ function (bilirubin ≤2 mg/dL or AST/ALT ≤400 ng/mL or by IHC at ≥1+ staining in ≥20% of HCC tumor cells).

Findings

- In Cohort 1, 1 out of 3 patients experienced a DLT requiring expansion of an additional 5 × 10^9 transfused T-cells.

Conclusions

- ADP-A2AFP in the 130 million transfused cell dose was safe and well-tolerated in patients with HCC. Spear cell counts were ≥100 cells/mL and no SAEs were documented. Most AEs were consistent with those typically experienced in cancer patients on active treatment.

References