**INTRODUCTION**

FXR is a nuclear receptor that is highly expressed in the liver and small intestine. FXR agonism has demonstrated improvement over placebo in regression of histological liver fibrosis without progression of NASH in a late-stage study, demonstrating the potential for FXR agonists to be a new treatment modality for nonalcoholic steatohepatitis (NASH). TERN-101 is a potent, non-steroidal FXR agonist, with enhanced liver distribution being developed for the treatment of NASH. TERN-101 induced significant reductions in steatosis, inflammation, and fibrosis in a NASH rodent model and induced robust FXR agonism in the liver. TERN-101 has been granted Fast Track Designation by the U.S. Food and Drug Administration (FDA) for the treatment of NASH. Here we present the pharmacokinetic (PK) and pharmacodynamic (PD) responses of TERN-101 capsules administered for 7 days to healthy human participants.

**METHODS**

- **Table 2: TERN-101 plasma PK parameters**
  - **Dose (mg)**
  - **Day 1**
  - **Day 7**
  - **Table 2: TERN-101 capsule PK parameters**
  - **Table 3: Single dose TERN-101 tablet formulation PK**
  - **Table 1: TERN-101 UD**
  - **Figure 1: TERN-101-US A101 Study Design**
  - **Figure 2: LDL cholesterol change from baseline**
  - **Figure 3: TERN-101 (capsule) plasma PK (Day 7)**
  - **Figure 4: TERN-101 induces sustain suppression of 7α-C4 and transient increases of FGF19**
  - **Figure 5: Phase 2a LIFT Study Design for TERN-101 Tablet Formulation in Phenotypic NASH Patients (NCT04328077)**
  - **REFERENCES**

**RESULTS**

- **Safety**
  - **Table 1: Adverse events**
  - **Pharmacokinetics**
  - **Pharmacodynamics**
  - **RESULTS**
  - **Treatment**
  - **Change from baseline (Day -1) in LDL. Data are presented as mean (± SEM)**
  - **Figure 6: Change in 7α-C4 and FGF19 relative to baseline (Day -1) on Day 7. Data are presented as mean (± SEM)**
  - **PK/PD analysis, a population PK model was built from observed TERN-101 plasma concentrations and used to calculate predicted TERN-101 half-life (AUC0-∞/C0)**
  - **Safety was assessed during dosing and for 10 (1) days after dosing.**

**CONCLUSIONS**

- TERN-101 was safe and well-tolerated with no reports of pruritus.
- All reported AEs were mild in severity, and no subject discontinued.
- Laboratory, vital signs, ECG, and other safety assessments did not show any trends across individual subjects or cohorts.
- Mean serum LDL changes from baseline with TERN-101 were comparable to those seen in with placebo.
- TERN-101 was potent and tolerated at which potent FXR target engagement is achieved in the liver.
- The 5 mg, 10 mg, and 15 mg TERN-101 tablet doses selected for the ongoing Phase 2a LIFT study are projected to achieve plasma exposures at which we observed 74-91% 7α-C4 reduction.

**REFERENCES**

Huisman L et al. Presented at the 2020 AASLD Digest
Yoo Y et al. Presented at the Liver Meeting 2020:
NAASD. Abstract #436A. Hepatology 2020
Hui JS et al. Presented at the EASL Congress 2020:
Abstract #313. Journal of Hepatology 2020
NCT04328077

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