INTRODUCTION

Chronic Hepatitis B (CHB) affects >250 million people worldwide and complications of CHB are associated with an annual mortality rate of ~500,000/year (WHO HBV fact sheet 2020). Despite its significant impact on global health, the current standard of care for CHB, nucleos(t)ide analogs, rarely results in functional cure, the goal of CHB treatment. There is a significant unmet medical need for CHB treatments which can enhance functional cure rates. ALG-010133 is an S-antigen Transport Inhibiting Oligonucleotide Polymer (STOPSTM) molecule which, in vitro, substantially reduces Hepatitis B virus (HBV) antigen (HBsAg) production and release from infected hepatocytes with single digit nM potency. ALG-010133 has been demonstrated to act synergistically with other anti-HBV drugs and is being developed as a part of a combination regimen to achieve higher rates of functional cure in CHB.

RESULTS

DOSE LEVELS EVALUATED*

- In the SAD, across 7 cohorts, the following single SC doses were evaluated: 20, 50, 75, 125, 200, 160, 200 mg
- In the MAD, across two cohorts, three weekly SC doses at the following levels were evaluated: 120, 180 mg

*All doses were given using 1 mg/mL solution, 1:1 dose and dilution ratio, without diluent (1 mL injection volume).

BASELINE CHARACTERISTICS

The baseline characteristics were generally well balanced across treatment groups and typical for a HV population.

PK - SAD

- Plasma ALG-010133 exposures increased in a greater than dose proportional manner at low doses and approached linearity with doses above 125 mg. Mean t1/2 was 3.3 to 8.3 hours and there was moderate inter-subject variability (22-60% CV for AUC). Bioavailability increased with higher doses as evidenced by correlated decreases in both CL/F and V/F.

PK - MAD

- No plasma accumulation with weekly dosing (AUC ratio = 0.92 [90%CI=0.81-1.03])

BASELINE CHARACTERISTICS

The baseline characteristics were generally well balanced across treatment groups and typical for a HV population.

SAFETY

Single and multiple ALG-010133 doses were generally well tolerated
- No serious adverse events
- Treatment emergent adverse event incidence was low
- The most common TEAEs (≥3 subjects) and their severities are reported in the table. There was no evidence of a clinically significant dose response in the incidence of TEAEs.

METHODS

Aim
To evaluate the safety and PK of subcutaneously (SC) administered ALG-010133 in healthy volunteers (HV). This is a three-part, multicenter, double-blind, randomized, placebo-controlled study: Part 1: 120 subjects. Part 2: No additional subjects. Part 3: 41 subjects. Part 3 evaluated the safety and PK of single or multiple (3 weekly) SC doses, respectively, of ALG-010133/placebo in HVs.

METHODS

AIM
To evaluate the safety and PK of subcutaneously (SC) administered ALG-010133 in healthy volunteers (HVs).

RESULTS

DOSE LEVELS EVALUATED*

- In the SAD, across 7 cohorts, the following single SC doses were evaluated: 20, 50, 75, 125, 200, 160, 200 mg
- In the MAD, across two cohorts, three weekly SC doses at the following levels were evaluated: 120, 180 mg

*All doses were given using 1 mg/mL solution, 1:1 dose and dilution ratio, without diluent (1 mL injection volume).

BASELINE CHARACTERISTICS

The baseline characteristics were generally well balanced across treatment groups and typical for a HV population.

PK - SAD

- Plasma ALG-010133 exposures increased in a greater than dose proportional manner at low doses and approached linearity with doses above 125 mg. Mean t1/2 was 3.3 to 8.3 hours and there was moderate inter-subject variability (22-60% CV for AUC). Bioavailability increased with higher doses as evidenced by correlated decreases in both CL/F and V/F.

PK - MAD

- No plasma accumulation with weekly dosing (AUC ratio = 0.92 [90%CI=0.81-1.03])

BASELINE CHARACTERISTICS

The baseline characteristics were generally well balanced across treatment groups and typical for a HV population.

SAFETY

Single and multiple ALG-010133 doses were generally well tolerated
- No serious adverse events
- Treatment emergent adverse event incidence was low
- The most common TEAEs (≥3 subjects) and their severities are reported in the table. There was no evidence of a clinically significant dose response in the incidence of TEAEs.

CONTACT
Matt McClure  mmcclure@aligos.com

SAFETY

Single and multiple ALG-010133 doses were generally well tolerated
- No serious adverse events
- Treatment emergent adverse event incidence was low
- The most common TEAEs (≥3 subjects) and their severities are reported in the table. There was no evidence of a clinically significant dose response in the incidence of TEAEs.

CONTACT
Matt McClure  mmcclure@aligos.com

SAFETY

Single and multiple ALG-010133 doses were generally well tolerated
- No serious adverse events
- Treatment emergent adverse event incidence was low
- The most common TEAEs (≥3 subjects) and their severities are reported in the table. There was no evidence of a clinically significant dose response in the incidence of TEAEs.

CONTACT
Matt McClure  mmcclure@aligos.com

SAFETY

Single and multiple ALG-010133 doses were generally well tolerated
- No serious adverse events
- Treatment emergent adverse event incidence was low
- The most common TEAEs (≥3 subjects) and their severities are reported in the table. There was no evidence of a clinically significant dose response in the incidence of TEAEs.

CONTACT
Matt McClure  mmcclure@aligos.com