

ASC30, an Oral GLP-1R Biased Small Molecule Agonist Demonstrated Superior Weigh Loss in Participants with Obesity: A 28-Day Multiple Ascending Dose Study

Jinzi Jason Wu Vanessa Wang

Ascletis Pharma (China) Co., Limited, Hong Kong

### **Disclosure**

Dr. Jinzi Jason Wu, presenter, is an employee of Ascletis Pharma (China) Co., Limited, Hong Kong

#### **Overview of ASC30**

- ASC30 is discovered and developed in-house at Ascletis as a first and only investigational small molecule GLP-1R fully biased agonist designed to be administered:
  - ➤ Once-daily oral tablet
  - Once-monthly SQ injection as a treatment therapy
  - > Once-quarterly SQ injection as a maintenance therapy
- ASC30 once-daily oral tablet demonstrated a 6.5% placebo-adjusted mean body weight reduction from baseline after 28-day treatment in multiple ascending dose (MAD) cohort 2 (weekly titrations of 2 mg, 10 mg, 20 mg, and 40 mg).
- ASC30 once-daily oral tablet also demonstrated a 4.5% placebo-adjusted mean body weight reduction from baseline after 28-day treatment in MAD cohort 1 (weekly titrations of 2 mg, 5 mg, 10 mg, and 20 mg).

### "Chugai Scaffold": Only four players in the clinical development\*

Drug	Sponsor	Structure	Clinical Status
Orforglipron	Eli Lilly		Phase III
ASC30**	Ascletis	Report of the second se	Phase II
Aleniglipron (GSBR-1290)	Structure Therapeutics		Phase II
Elecoglipron (AZD5004)	AZ/Eccogene		Phase I

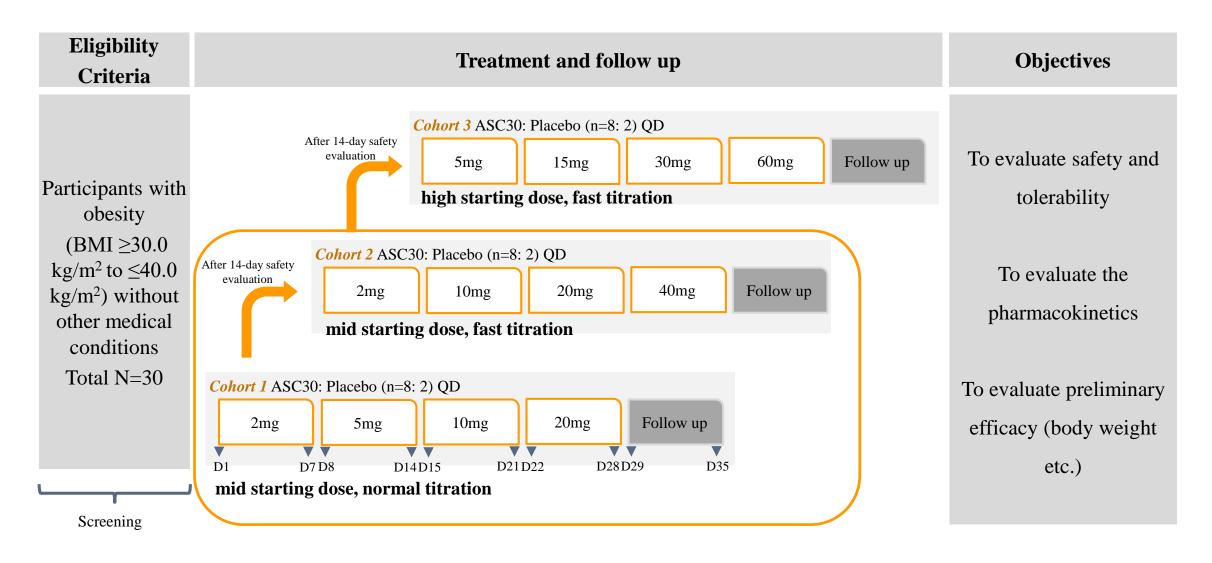
<sup>\*</sup>From www.clinicaltrials.gov as of 1 Aug 2025;

<sup>\*\*</sup>ASC30 is protected by two granted U.S. patents (US12234236B1& US12291530B1)

# ASC30 oral exposure is much higher than orforglipron in NHP (Head-to-head comparison)

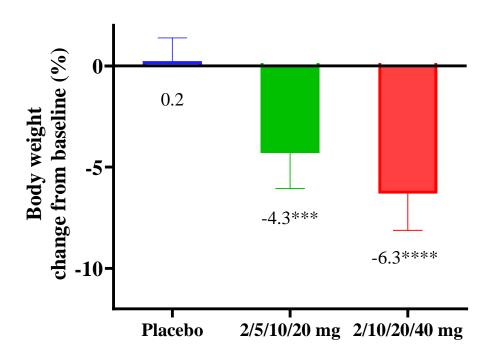
Oral dosing	5 mg/kg in Rat, AUC <sub>0-48h</sub> , h*ng/mL	15mg/kg in NHP, AUC <sub>0-24h</sub> , h*ng/mL
ASC30	91,858	8,097
Orforglipron	6,346	1,661
AUC ratio of ASC30 to orforglipron	14	5

## ASC30 tablets MAD (28 days) in obese patients explored various titrations (conducted in U.S.)



### ASC30 once-daily tablets demonstrated superior weight loss at Day 29

% body weight change from baseline at Day 29



\*p<0.05, \*\*p<0.01, \*\*\*p<0.001, \*\*\*\*p<0.0001

ASC30 MAD Cohorts 1 and 2 weight change at day

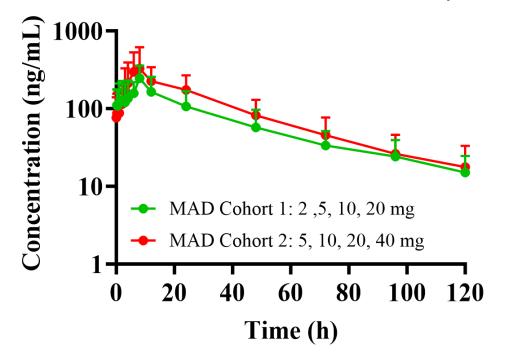
29 from baseline (Day 1 prior to first dose):

- $\rightarrow$  ASC30 MAD2 = -6.3% (n=8);
- $\rightarrow$  ASC30 MAD1 = -4.3% (n=7);
- ightharpoonup Placebo = +0.2% (n=6).
- ➤ No sign of plateau observed at Day 29.

#### 20 mg and 40 mg ASC30 demonstrated superior oral PK profile at steady state

#### ■ Higher AUC positively correlated with greater body weight reduction

Concentration-time curves of ASC30 Day 28

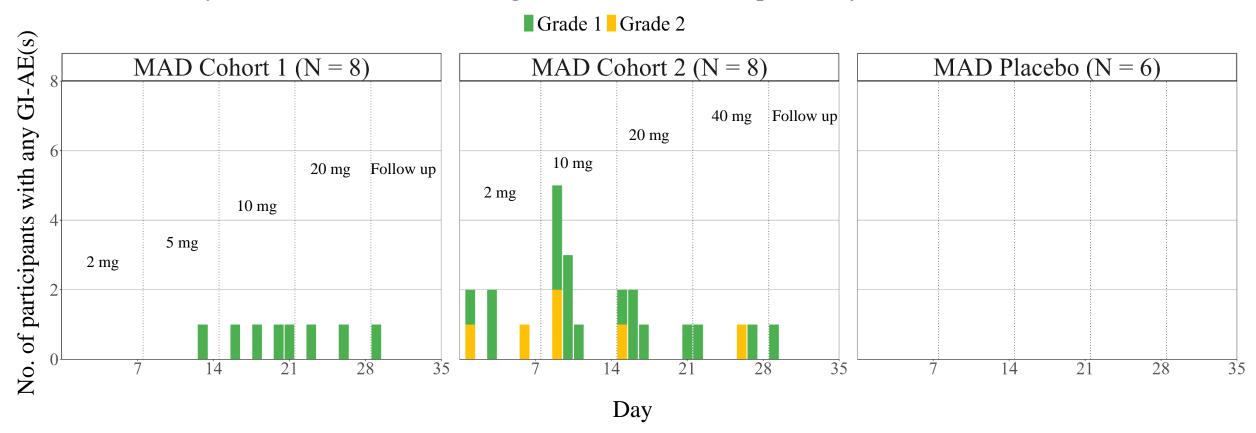


		<b>MAD Cohort 1</b> (N = 8)	<b>MAD Cohort 2</b> (N = 8)
Ε	Oose level (mg)	2, 5, 10, 20	2, 10, 20, 40
Day 28 (steady state)	T <sub>max</sub> (h)	8.000 (2.00-8.00)	8.000 (3.00-24.00)
	$C_{max}$ (ng/mL)	272±101	397 <b>±</b> 274
	AUC <sub>0-24h</sub> (h*ng/mL)	3,560±1,440	5,060±2,080
	$T_{1/2}(h)$	41.9±12.9	35.7±13.7

 $T_{max}$  is shown as median (range);  $C_{max}$ ,  $AUC_{0-24h}$ , and  $T_{1/2}$  are shown as mean  $\pm$  standard deviation.

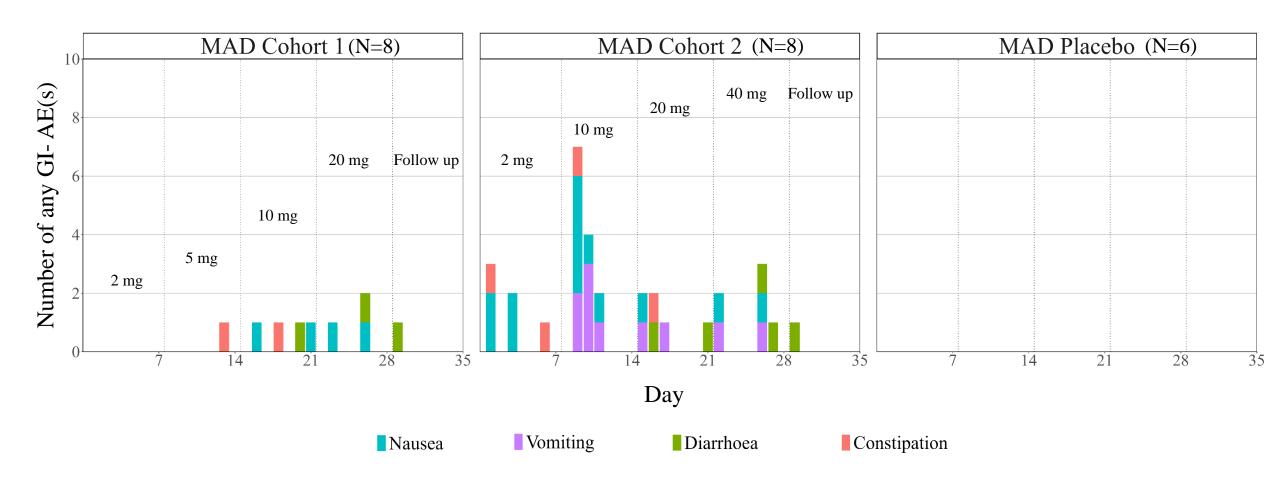
## ASC30 tablets MAD GI tolerability over 28-day treatment and 7-day follow-up: no vomiting incidence in MAD cohort 1 due to 2 mg to 5 mg weekly titration strategy

Severity of GI-AEs (Nausea, Vomiting, Diarrhoea and Constipation) by Treatment Over Time



During 28-day treatment and 7-day follow up, zero incidence of vomiting was reported in MAD cohort 1, whereas vomiting events occurred in MAD cohort 2, suggesting weekly titration from 2 mg to 5 mg represents an appropriate escalation pace and provides key evidence to inform the titration regimen for phase II.

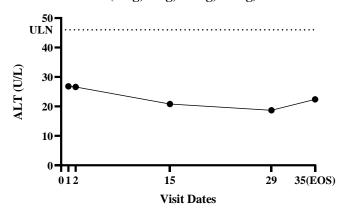
### **Incidences of GI-AEs by Treatment Over Time**



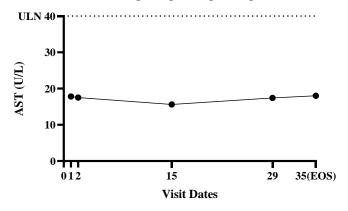
GI-AEs: Nausea, Vomiting, Diarrhoea and Constipation

### ASC30 MAD Cohorts 1 and 2 had no hepatic safety signals

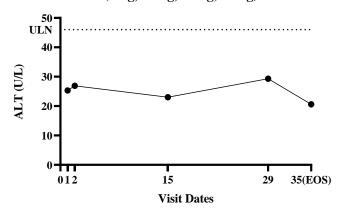
MAD Cohort 1 (2mg, 5mg, 10mg, 20mg) mean ALT value



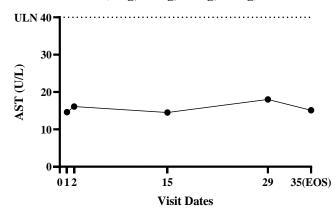
MAD Cohort 1 (2mg, 5mg, 10mg, 20mg) mean AST value



MAD Cohort 2 (2mg, 10mg, 20mg, 40mg) mean ALT value



MAD Cohort 2 (2mg, 10mg, 20mg, 40mg) mean AST value



No SAEs were reported. No Grade 3 or higher AEs were observed. There were no abnormal findings in laboratory tests, vital signs, ECGs (electrocardiograms, including QTc intervals), or physical exams.

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### **ASC30 Summary**

- ASC30 once-daily oral tablets demonstrated up to 6.5% placebo-adjusted mean body weight reduction from baseline after 28-day treatment
- ASC30 tablet's higher efficacy is supported by its higher oral drug exposures
- ASC30 is safe and well tolerated with only mild-to-moderate GI AEs
  - > We believe that GI AEs can further be reduced by "lower starting dose, slower titration" trial design for the ongoing ASC30 tablets 13-week Phase II study in U.S.

#### E-poster

#### Presentation number: 827

#### ASC30, an Oral GLP-1R Biased Small Molecule Agonist Demonstrated Superior Weigh Loss in Participants with Obesity: A 28-Day Multiple Ascending Dose Study

Jinzi Jason Wu, Vanessa Wang

Ascletis Pharma (China) Co., Limited, Hong Kong



#### Introduction & Objective

ASC30 is an oral GLP-1R biased small molecule agonist without β-arrestin recruitment, with unique and differentiated properties that enable the drug administration as both a once-monthly subcutaneous injection and a once-daily oral tablet. The completed single ascending dose (SAD) study of ASC30 oral tablet demonstrated a favorable tolerability profile and dose-proportional pharmacokinetics characteristics. We present here the weight loss, pharmacokinetics and tolerability of ASC30 once-daily oral tablet in the first two cohorts of a 28-day multiple ascending dose (MAD) study to treat patients with obesity (NCT06680440).

#### Materials and Methods

A 28-day randomized, double-blind, placebo-controlled MAD trial in participants with obesity (BMI 30-40 kg/m2), conducted in the United States. Study design shown in Figure 1. Figure 1 Study Design

Treatment and follow up Objectives Criteria Sung 15mg 30mg 60mg Fellow up To evaluate safety and Participants with tolerability (BMI ≥30.0  $kg/m^2$  to  $\leq 40.0$ 10mg 20mg ke/m2) without conditions Total N=30 To evaluate preliminary efficacy (body weight

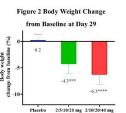
#### Results

etc.)

- Weight change from baseline was -6.3% (MAD2, n=8), -4.3% (MAD1, n=7), and +0.2% (placebo, n=6). No plateau observed at Day 29 (Figure 2).
- 20 mg and 40 mg ASC30 demonstrated superior steady-state oral pharmacokinetics(Figure 3 and Table 1).
- GI Tolerability: In the MAD study, Cohort 1 showed no vomiting, while Cohort 2 had events (Figure 4), indicating weekly titration from 2 mg to 5 mg was appropriate.
- No SAEs or Grade ≥3 AEs, including GI events, were observed. Labs, vitals, ECGs (QTc), and physical exams were normal. No hepatic safety signals were detected in MAD Cohorts 1 and 2 (Figure 5).

Table 1 Higher AUC positively correlated with greater body weight reduction

		MAD Cohort 1 (N = 8)	MAD Cohort 2 (N = 8)
Dose level (mg)		2, 5, 10, 20	2, 10, 20, 40
Day 28 (steady state)	T <sub>max</sub> (h)	8.000 (2.00-8.00)	8.000 (3.00-24.00)
	C <sub>max</sub> (ng/mL)	272±101	397±274
	AUC <sub>0-24h</sub> (h*ng/mL)	3560±1440	5060±2080
	T <sub>1/2</sub> (h)	41.9±12.9	35.7±13.7



\*p<0.05, \*\*p<0.01, \*\*\*p<0.001, \*\*\*\*p<0.0001

Figure 4 ASC30 tablets MAD GI tolerability over 28-dday treatment and 7-day follow-up: no vomiting incidence in MAD cohort 1 due to 2mg to 5 mg weekly titration strategy

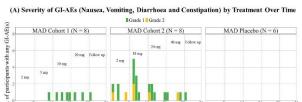
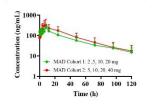


Figure 3 Concentration-time curves of ASC30 Day 28



20 mg Follow up

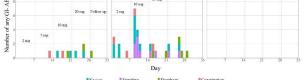
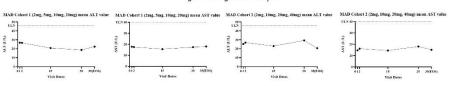


Figure 5 Changes in liver enzymes

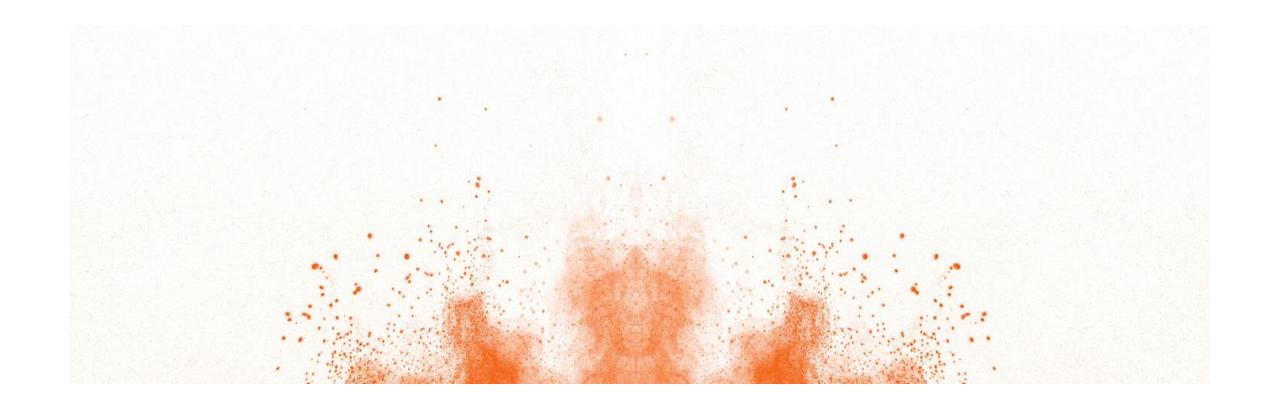
(B) Incidences of GI-AEs by Treatment Over Time



#### Conclusion

- ASC30 once-daily oral tablet demonstrated up to 6.5% placebo-adjusted mean body weight reduction from baseline after 28-day treatment
- ASC30 tablet's higher efficacy is supported by its higher drug exposures
- ASC30 is safe and well tolerated with only mild-to-moderate GI AEs

> We believe that GI AEs can further be reduced by "lower starting dose, slower titration" trial design for the ongoing ASC30 tablet 13-week Phase II study in U.S.



## **Thanks**