Treatment with dual agonist (survodutide) improves eating behavior in people living with overweight/obesity

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Objective

- To assess the effect of survodutide, an investigational dual GCGR/GLP-1R agonist, on eating behaviors in people living with overweight or obesity

Methods

- This was an analysis of a multinational, 46-week, phase II trial in which 387 people living with overweight or obesity (body mass index [BMI] ≥27 kg/m^2) were randomized to double-blind treatment with once-weekly subcutaneous placebo or survodutide 0.6 mg, 2.4 mg, 3.6 mg, or 4.8 mg. Doses were escalated over 20 weeks from 0.3 mg initially (ClinicalTrials.gov: NCT04667377)
- Participants were aged 18 to <75 years and did not have diabetes
- Participants received diet and exercise advice to achieve approximately 500 kcal/day energy deficit and 150–300 minutes per week moderate-intensity aerobic and strength exercises
- Eating behavior attributes were assessed at baseline, week 20, and week 46 using the novel EB PRO, which comprises a Total Eating Behavior Score based on 2 domains of Desire to Eat and Capacity to Resist (see poster P-004)

Results

Demographic and clinical characteristics of participants were similar between treatment groups at baseline

	Survodutide					
Characteristic	0.6 mg QW (n=77)	2.4 mg QW (n=78)	3.6 mg QW (n=76)	4.8 mg QW (n=76)	Placebo QW (n=77)	Total (N=384)
Sex, n (%)						
Female	51 (66.2)	54 (69.2)	51 (67.1)	53 (69.7)	53 (68.8)	262 (68.2)
Age, years	48.6 (12.6)	49.0 (13.1)	50.3 (11.8)	47.6 (13.5)	50.0 (13.5)	49.1 (12.9)
Race, n (%)						
White	59 (76.6)	60 (76.9)	63 (82.9)	59 (77.6)	60 (77.9)	301 (78.4)
Asian	8 (10.4)	9 (11.5)	9 (11.8)	7 (9.2)	7 (9.1)	40 (10.4)
Black/African American	10 (13.0)	8 (10.3)	3 (3.9)	8 (10.5)	8 (10.4)	37 (9.6)
Multiple	0	1 (1.3)	1 (1.3)	0	1 (1.3)	3 (0.8)
Native Hawaiian/Pacific Islander	0	0	0	1 (1.3)	1 (1.3)	2 (0.5)
American Indian/Alaska Native	0	0	0	1 (1.3)	0	1 (0.3)
BMI, kg/m^2	37.8 (6.3)	37.6 (7.3)	37.0 (5.7)	37.6 (6.0)	35.8 (5.0)	37.1 (6.1)
Body weight, kg	107.0 (18.7)	106.6 (23.0)	104.7 (19.6)	105.9 (17.4)	104.3 (23.0)	105.7 (20.4)

Data are mean (standard deviation) unless otherwise specified for the full analysis set (all randomized participants who received ≥1 dose of study drug and had analyzable data for ≥1 efficacy endpoint). QW, once weekly.

Survodutide (BI 456906), a dual glucagon receptor (GCGR)/glucagon-like peptide-1 receptor (GLP-1R) agonist, aided improvement in eating behaviors in people living with overweight or obesity

What was known

- Impaired eating behaviors are associated with chronic energy imbalance in people living with overweight or obesity
- It is important to characterize the effects of investigational and licensed anti-obesity medications on eating behaviors in people living with overweight and obesity

What's new

- This analysis of a randomized phase II clinical trial found that survodutide, an investigational dual GCGR/GLP-1R agonist, aided improvement in eating behaviors compared to placebo with appropriate dietary and lifestyle counseling in people living with overweight or obesity
- This study employed the novel Eating Behavior Patient-Reported Outcome (EB PRO) instrument (see poster P-004). This measure has potential utility to assess eating behavior changes in people living with overweight or obesity in routine care and clinical trials

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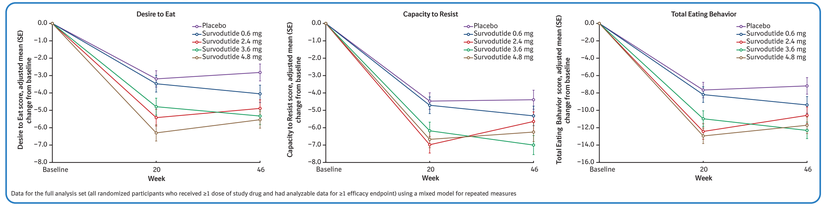
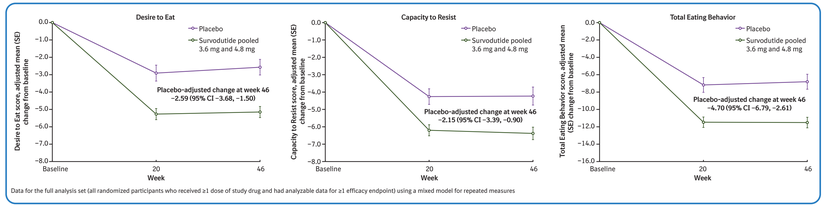
Survodutide-treated participants showed greater improvement than placebo-treated participants in both the Desire to Eat and Capacity to Resist domains and the Total Eating Behavior score at all doses, with the largest improvement observed in those treated with 3.6 mg or 4.8 mg



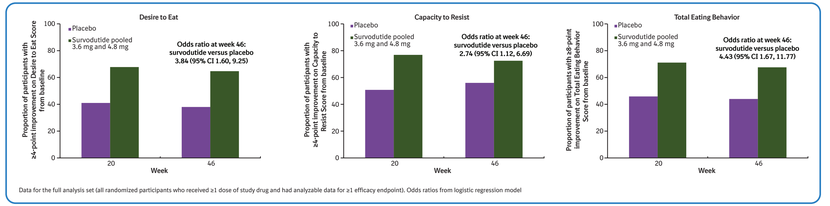
Data for the full analysis set (all randomized participants who received ≥1 dose of study drug and had analyzable data for ≥1 efficacy endpoint) using a mixed model for repeated measures

In post hoc analysis (n=185), the pooled survodutide 3.6 mg and 4.8 mg group exhibited significantly greater improvements than the placebo group at week 46 in Desire to Eat (mean change of −5.15 and −2.57, respectively), Capacity to Resist (−6.38 and −4.23), and Total Eating Behavior (−11.51 and −6.81)



Data for the full analysis set (all randomized participants who received ≥1 dose of study drug and had analyzable data for ≥1 efficacy endpoint) using a mixed model for repeated measures

A higher proportion of the pooled survodutide 3.6 mg and 4.8 mg group than the placebo group had a ≥4-point improvement in Desire to Eat (week 46: 64.7% and 38.0%, respectively) and Capacity to Resist scores (72.5% and 56.0%) and an ≥8-point improvement in Total Eating Behavior Score (67.6% and 44.0%)



Data for the full analysis set (all randomized participants who received ≥1 dose of study drug and had analyzable data for ≥1 efficacy endpoint). Odds ratios from logistic regression model

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