

PEMVIDUTIDE PRESERVES LEAN BODY MASS DURING WEIGHT LOSS IN PATIENTS WITH OVERWEIGHT AND OBESITY: RESULTS OF A PHASE 2 MRI-BASED BODY COMPOSITION SUB-STUDY

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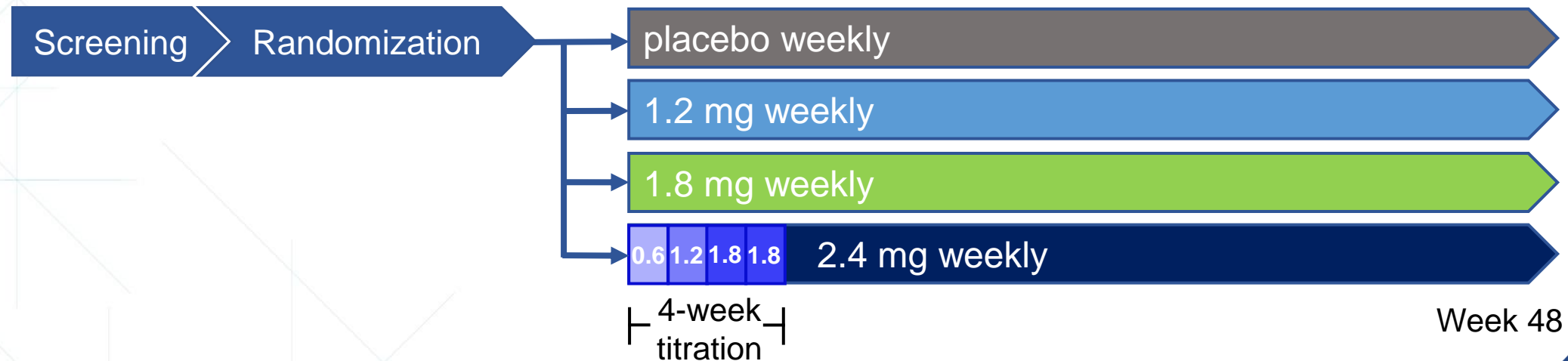
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BACKGROUND AND OBJECTIVE

- Pemvidutide is a potency-balanced GLP-1/glucagon dual receptor agonist which was previously shown to significantly reduce body weight vs placebo in obese subjects.
- The quality of weight loss achieved with incretin-based therapies, including preservation of lean mass, may reduce:
 - Risk of falls and fractures
 - Development of co-morbidities
 - Higher rates of all-cause mortality
- Visceral adipose tissue is associated with risk for cardiovascular disease
- The objective of this study was to evaluate the changes in body composition with weight loss in subjects enrolled in the Phase 2 MOMENTUM trial of pemvidutide in the treatment of obesity.

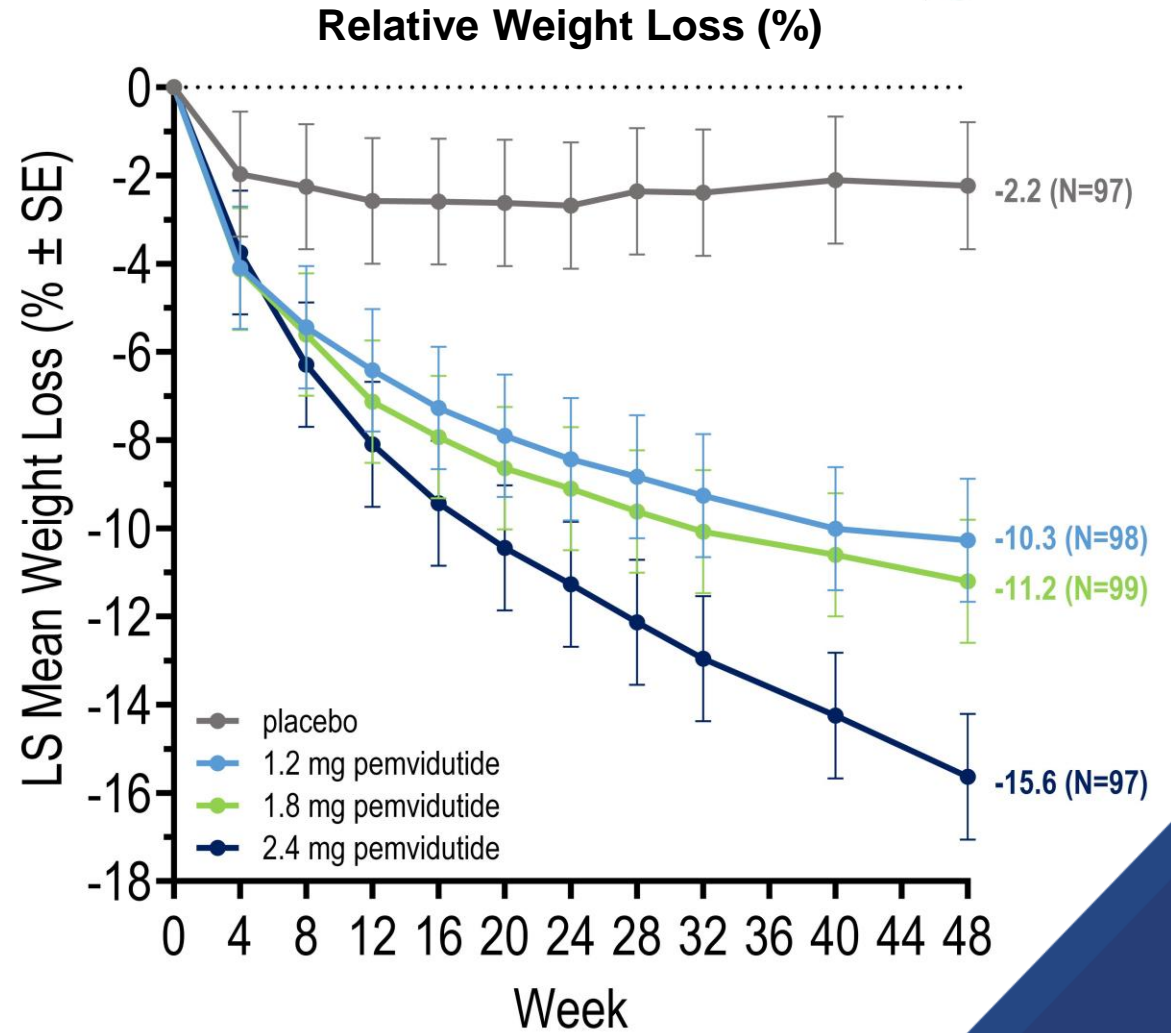
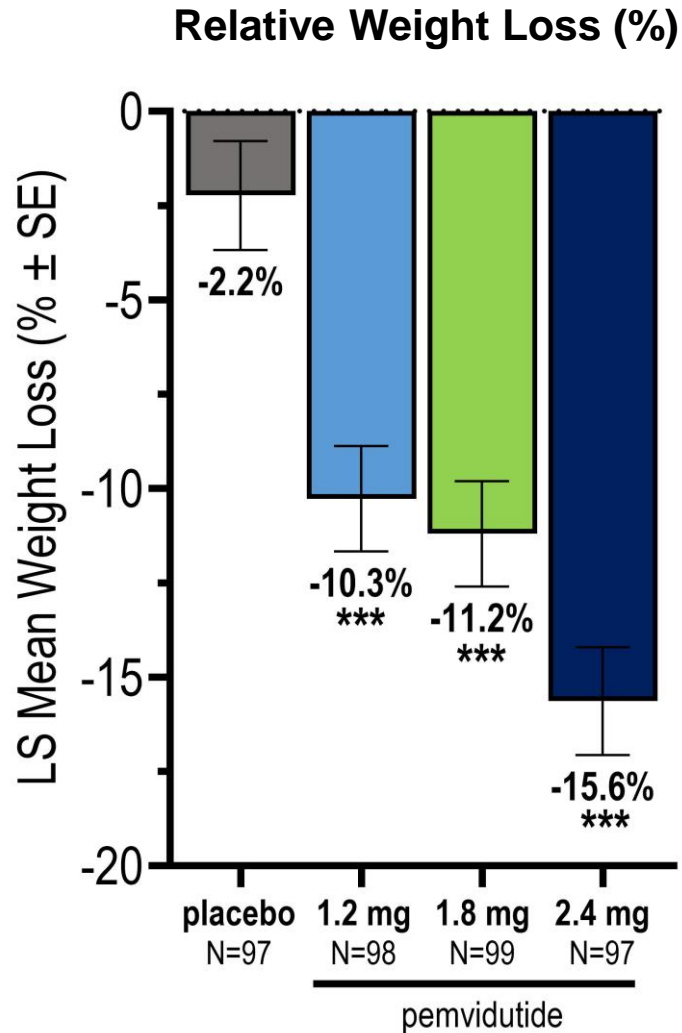
MOMENTUM OBESITY TRIAL DESIGN

- Phase 2, 48-week trial of pemvidutide in 391 subjects with overweight or obesity
- Randomized 1:1:1:1 to 4 treatment arms, stratified by gender and baseline BMI, with standard lifestyle interventions
- Body composition MRIs were completed in 67 subjects, 50 receiving pemvidutide, at baseline and Week 48
 - Lean mass, visceral adipose tissue (VAT), subcutaneous adipose tissue (SAT), and total adipose tissue (TAT)



WEIGHT LOSS OF 15.6% ACHIEVED AT WEEK 48 ON 2.4 MG

MEAN WEIGHT LOSS OF 32.2 LBS AND MAXIMAL WEIGHT LOSS OF 87.1 LBS



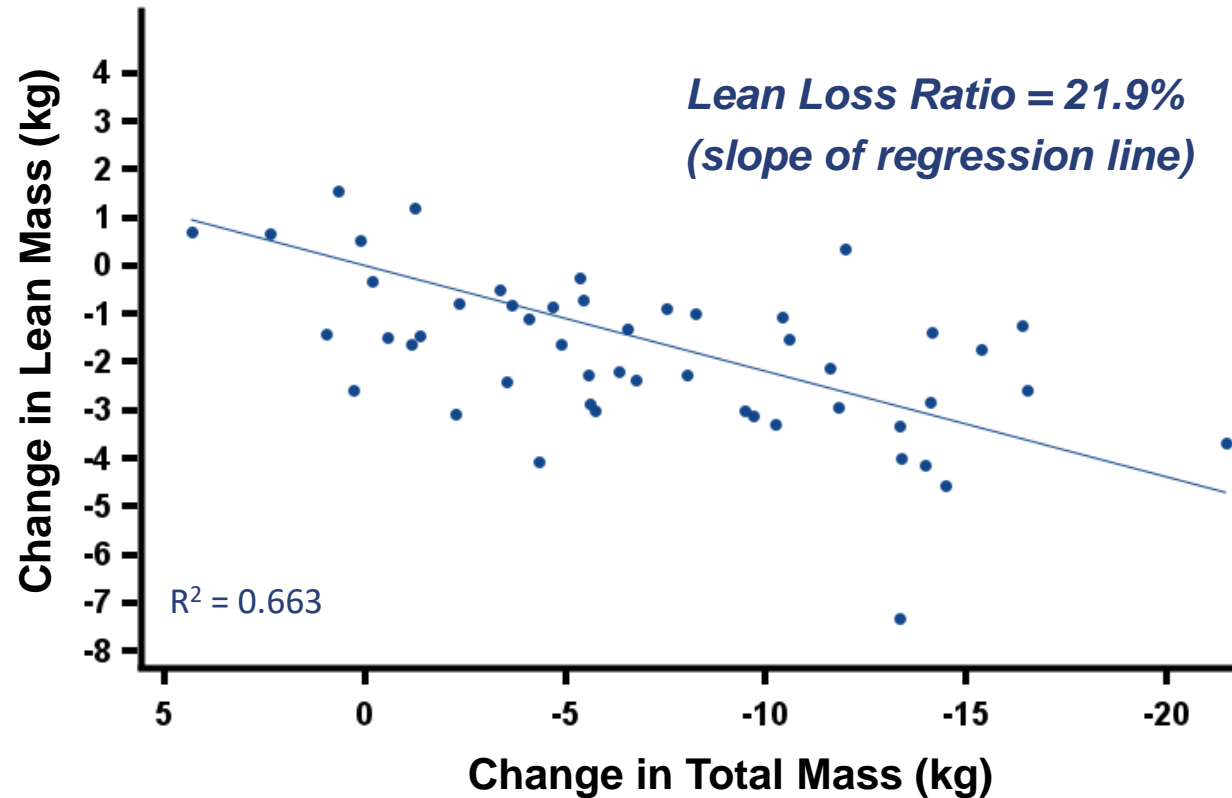
LEAN LOSS RATIO LOWER THAN REPORTED WITH DIET AND EXERCISE

MRI-BASED BODY COMPOSITION ANALYSIS CONFIRMS PREFERENTIAL LOSS OF ADIPOSE TISSUE OVER LEAN TISSUE

LEAN LOSS RATIO

Change in Lean Mass / Change in Total Mass*

Pemvidutide-treated Subjects (n = 50 across all dose groups)

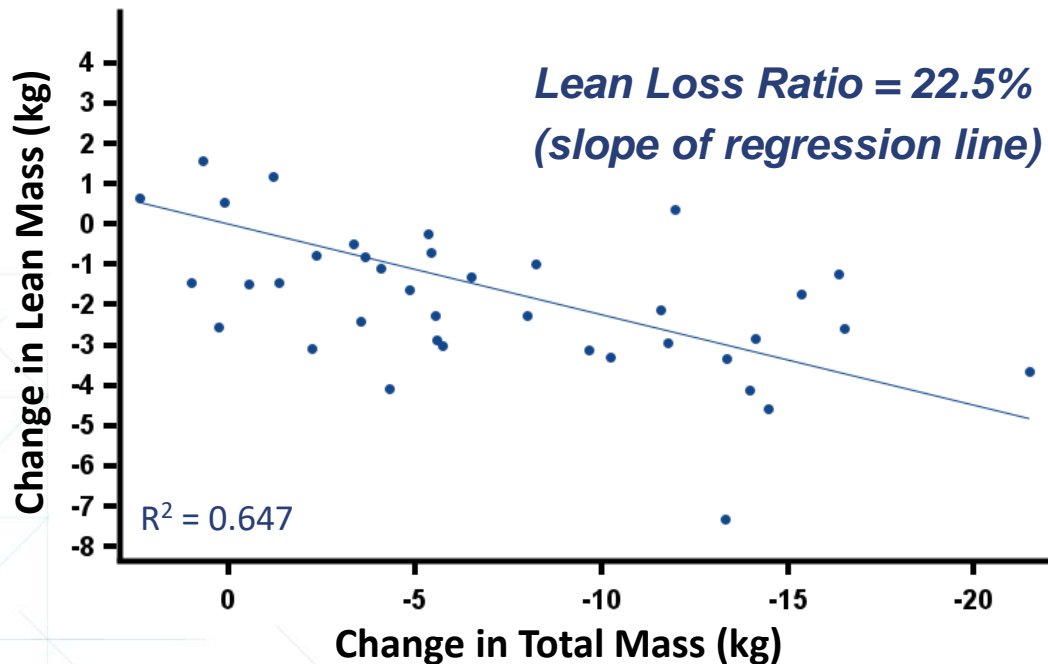


*Change in Total Mass = Lean Mass Loss + Adipose Mass Loss

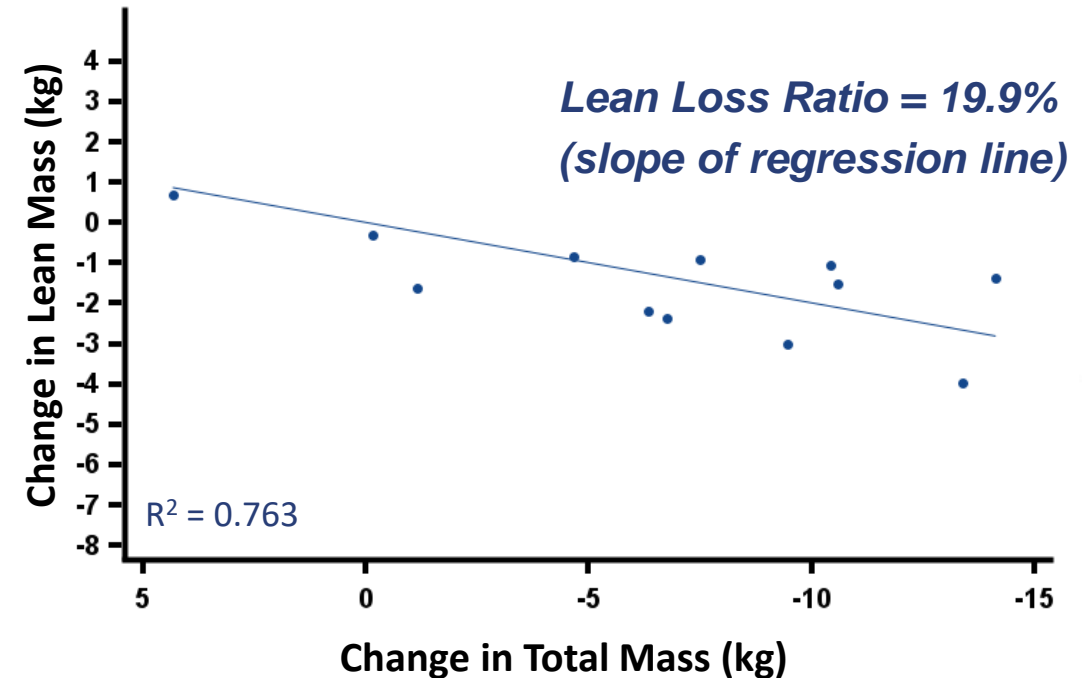
LEAN MASS PRESERVATION MAINTAINED IN OLDER SUBJECTS

PREVENTING LEAN MASS LOSS IN THE ELDERLY MAY REDUCE RISK OF FALLS AND FRACTURES

SUBJECTS < 60 YEARS OLD (N=38)



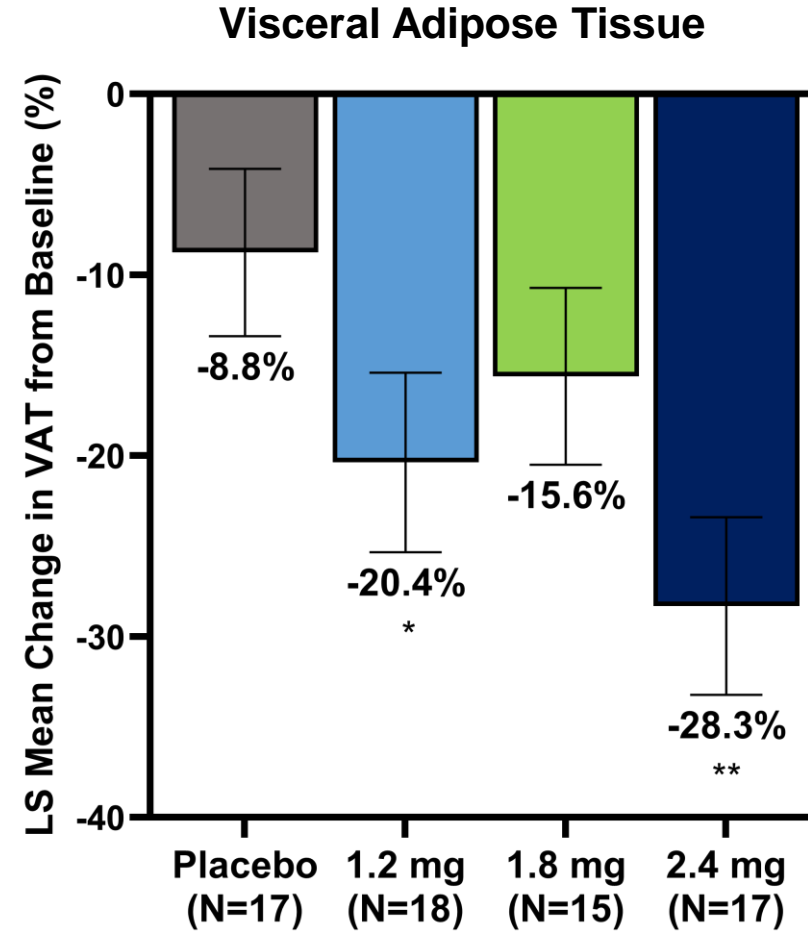
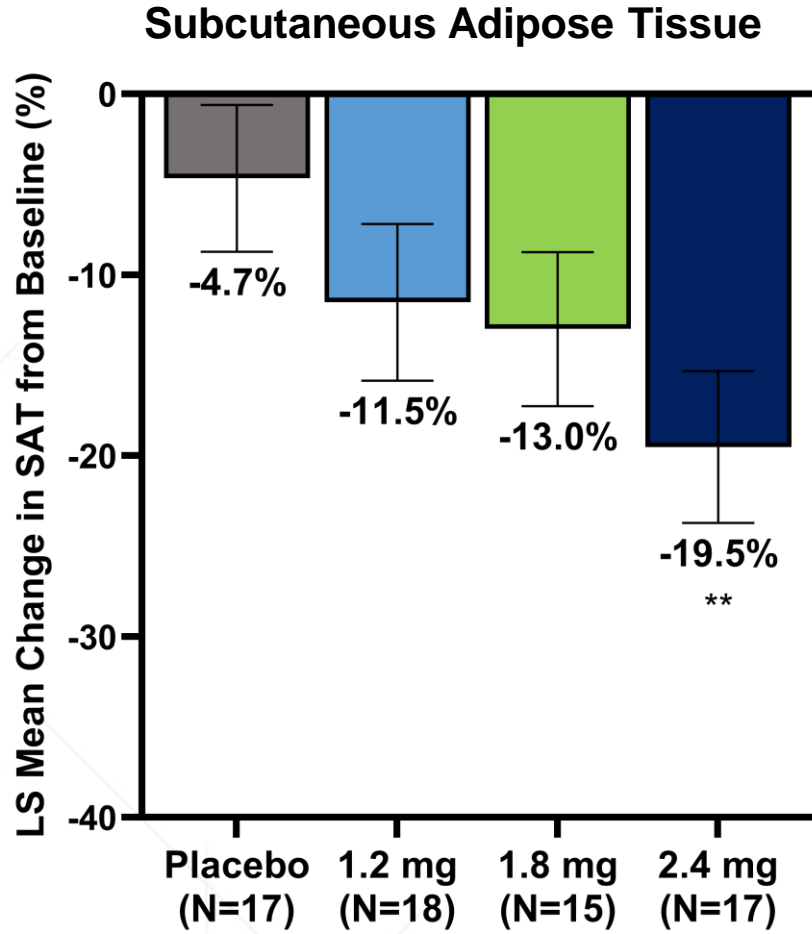
SUBJECTS ≥ 60 YEARS OLD (N=12)



*Change in Total Mass = Lean Mass Loss + Adipose Mass Loss

VISCERAL ADIPOSE TISSUE REDUCED BY 28.3% AT WEEK 48 ON 2.4 MG

PREFERENTIAL REDUCTION OF VAT, THE ADIPOSE TISSUE DEPOT ASSOCIATED WITH CV RISK



PEMVIDUTIDE IMPROVES BODY COMPOSITION

- Robust mean weight loss of 15.6% on pemvidutide 2.4 mg at Week 48
- Lean Loss Ratio of only 21.9%, representing class-leading preservation of lean mass
- Preservation of lean mass maintained in the elderly, which may reduce the risk for falls and fractures
- Preferential reduction of VAT, which may be associated with reduced risk for cardiovascular disease

Pemvidutide Preserves Lean Body Mass During Weight Loss in Patients with Overweight and Obesity: Results of a Phase 2 MRI-Based Body Composition Sub-Study

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Background

Obesity and Body Composition with Weight Loss

- Pemvidutide is a potency-balanced GLP-1/glucagon dual receptor agonist that was previously shown to significantly reduce body weight vs placebo in subjects with obesity
- The quality of weight loss achieved with incretin-based therapies, including preservation of lean mass, may reduce:
 - Risk of falls and fracture
 - Development of co-morbidities
 - Higher rates of all-cause mortality
- Visceral adipose tissue is associated with increased risk for cardiovascular disease

Aims

- Evaluate the changes in body composition with weight loss in subjects enrolled in the Phase 2 MOMENTUM trial of pemvidutide in the treatment of obesity.

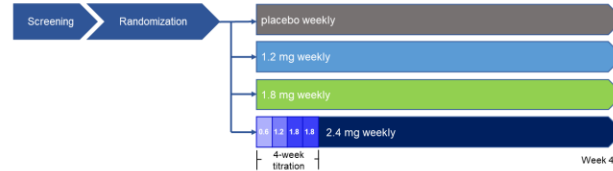
Methods

Study Population – Key Eligibility Criteria

- Clinicaltrials.gov# NCT05295875
- Men and women, ages 18-65 years
- BMI ≥ 30 kg/m² or BMI ≥ 27 kg/m² with at least one obesity-related comorbidity
- HbA1c $\leq 6.5\%$ and fasting glucose ≤ 125 mg/dL
- At least one unsuccessful weight loss attempt
- Minimum of ~ 25% of subjects were to be male

Study Design

- Phase 2, 48-week trial of pemvidutide in 391 subjects with overweight or obesity
- Randomized 1:1:1:1 to 4 treatment arms, stratified by gender and baseline BMI, with standard lifestyle interventions
- Body composition MRIs were completed in 67 subjects, 50 who received pemvidutide, at baseline and Week 48



Outcome Measures

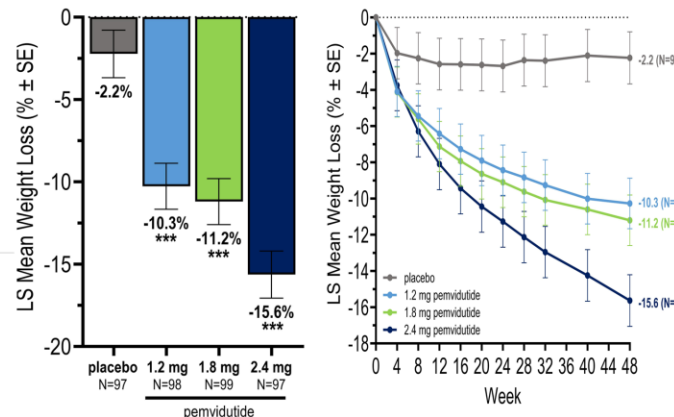
- Lean mass, visceral adipose tissue (VAT), subcutaneous adipose tissue (SAT), and total adipose tissue (TAT) were quantified at baseline and after 48 weeks of pemvidutide treatment

Results

Characteristics of Study Participants

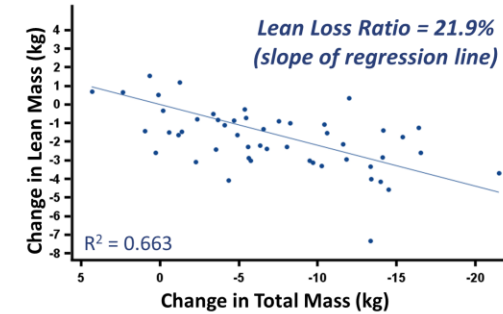
Characteristic	Treatment				
	Placebo (N=17)	1.2 mg (N=14)	1.8 mg (N=15)	2.4 mg (N=17)	
Age, years	mean (SD)	53.35(10.0)	51.33(9.5)	49.33(14.4)	52.76(12.6)
Gender	female, N (%)	13 (76.5%)	16 (88.9%)	11 (73.3%)	13 (76.5%)
BMI, kg/m ²	mean (SD)	37.3 (6.1)	36.9 (4.8)	34.8 (5.5)	35.4 (4.8)
Body weight, kg	mean (SD)	100.7 (18.8)	102.7 (12.5)	99.1 (18.8)	101.0 (16.8)
Race	White, N (%)	11 (64.7%)	16 (88.9%)	10 (66.7%)	16 (94.1%)
	African-American, N (%)	3 (17.6%)	1 (5.6%)	4 (26.7%)	1 (5.9%)
	Asian, N (%)	1 (5.9%)	1 (5.6%)	0 (0.0%)	0 (0.0%)
	Native or American Indian, N (%)	0 (0.0%)	0 (0.0%)	1 (6.7%)	0 (0.0%)
	Other, N (%)	2 (11.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Ethnicity	Hispanic, N (%)	3 (17.6%)	2 (11.1%)	2 (13.3%)	2 (11.8%)
	not Hispanic, N (%)	14 (82.4%)	16 (88.9%)	13 (86.7%)	15 (88.2%)

Reduction in Body Weight by Week 48



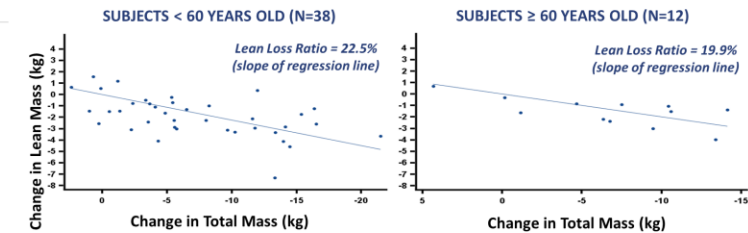
Data are means \pm SE. *** p < 0.001 vs. placebo, mixed model for repeated measures

Lean Loss Ratio at Week 48

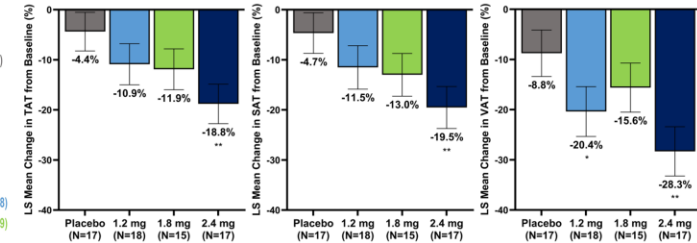


*Change in Total Mass = Lean Mass Loss + Adipose Mass Loss; n=50 across all dose groups

Lean Loss Ratio at Week 48 by Age Subgroup



Change in Adipose Tissue Depots at Week 48



Data are means \pm SE. * p < 0.05, ** p < 0.01, *** p < 0.001 vs placebo (ANCOVA)

Conclusions

- Lean Loss Ratio of only 21.9%, representing class-leading preservation of lean mass in all age groups
- Preferential reduction of VAT, which is associated with reduced risk for cardiovascular disease