Tirzepatide for the Treatment of Obesity the SURMOUNT-1 Clinical Trial

Results of the first Phase 3 Obesity Trial with Tirzepatide, the novel GIP/GLP-1 Receptor Agonist

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on behalf of the SURMOUNT-1 investigators

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Disclosures

As faculty of Weill Cornell Medical College, we are committed to providing transparency for any and all external relationships prior to giving an academic presentation.

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Primary Outcomes

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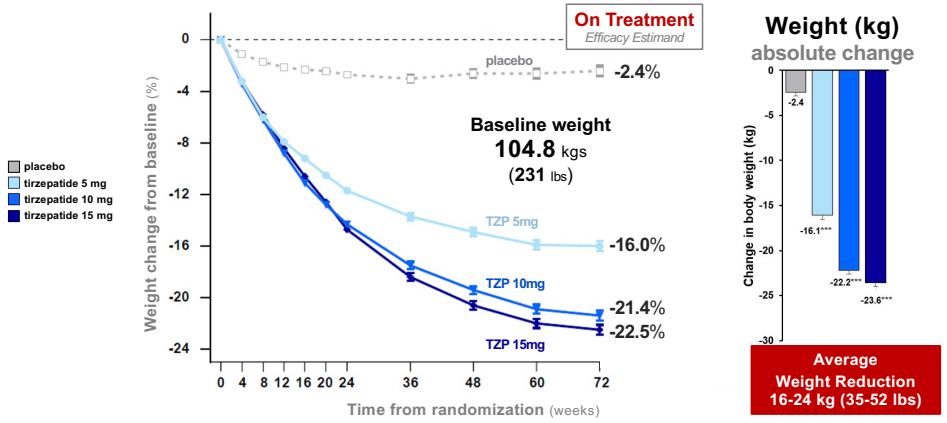
Weight Reduction Over 72 weeks: absolute change



Jastreboff AM, et al. *N Engl J Med* 2022. Jul 21;387(3):205-216

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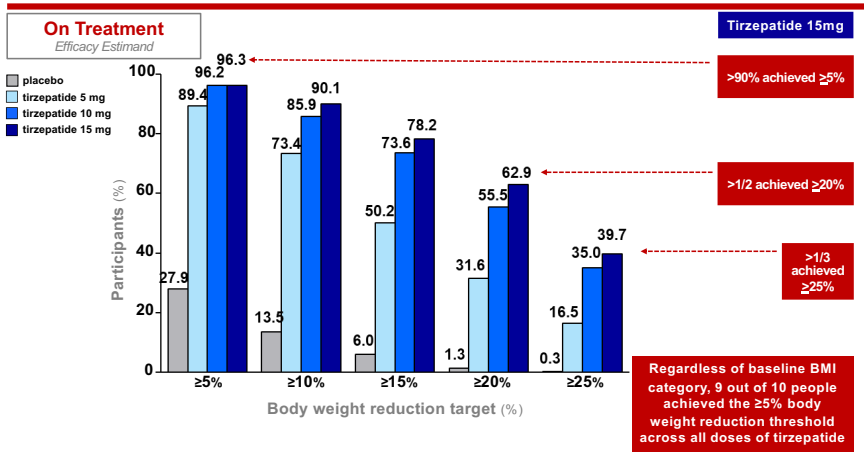
Percent of Participant Reaching Weight-Reduction Targets



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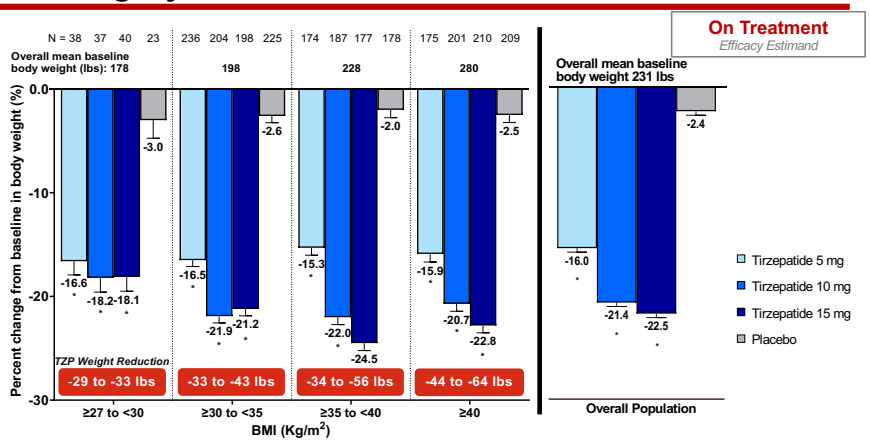
Percent Change From Baseline in Body Weight at Week 72 by BMI Category



Data are LSM (error bars are SE); MMRM analysis. mITT (efficacy analysis set). * p<0.001 vs placebo.
Abbreviations: BMI = body mass index; LSM = least-squares mean; mITT = modified Intent-to-Treat; MMRM = mixed model repeated measures; SE = standard error; TZP = tirzepatide.

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Cardiometabolic Outcomes

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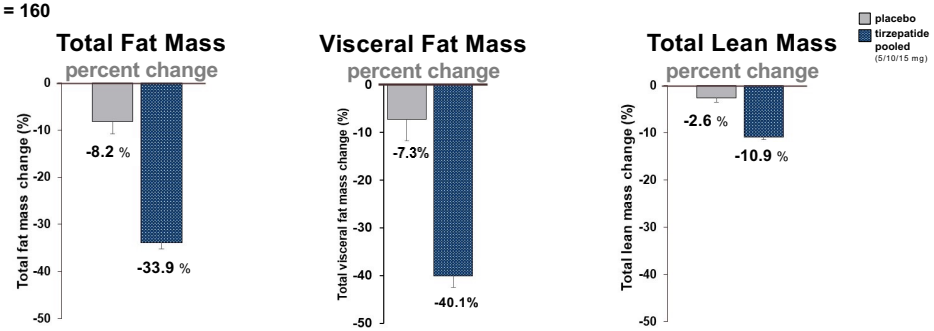
Change in Body Composition (DXA)

On Treatment
Efficacy Estimand

n = 160



As with lifestyle and surgical treatments, participants on tirzepatide had a ~3 times greater percent reduction in fat mass than lean mass, resulting in an overall improvement in body composition.

Additionally, participants on tirzepatide had significant improvements in visceral fat mass.

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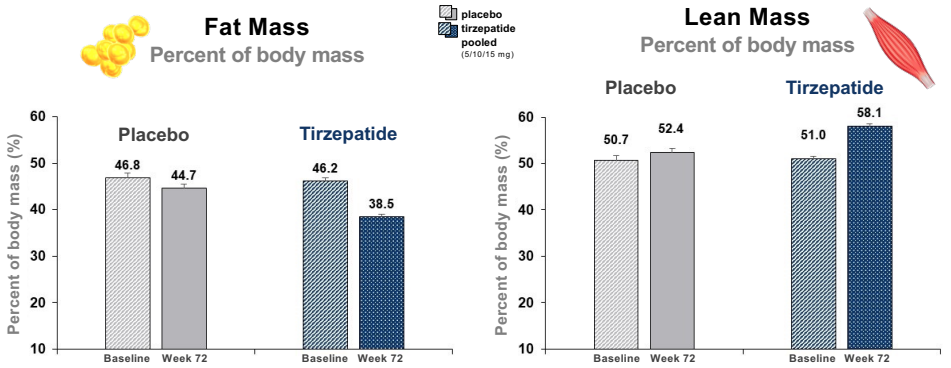
Change in Body Composition (DXA): Percent of Body Mass

On Treatment
Efficacy Estimand



Participant on tirzepatide demonstrated proportionally greater decrease in fat mass and proportionally greater increase in lean mass

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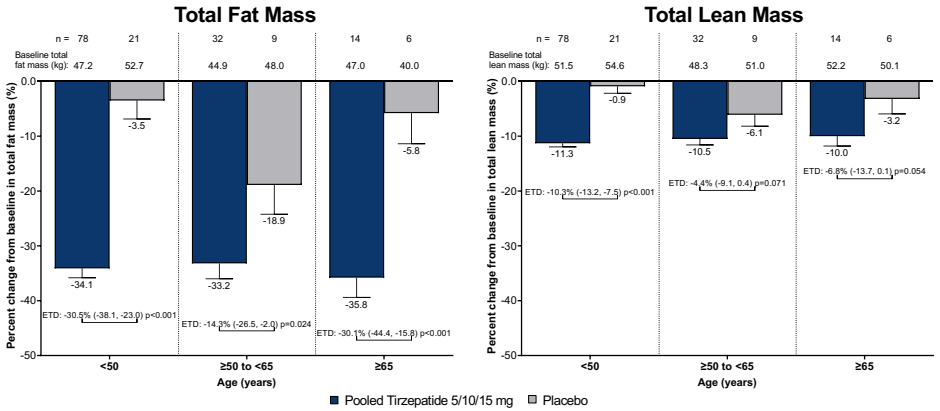
Percent Change From Baseline in Total Fat and Lean Mass at Week 72 by Age Subgroups



Data are LSM (error bars are SE); ANCOVA analysis. mITT (efficacy analysis set). Estimated treatment differences (ETD) are LSM (95% confidence interval) vs placebo.
Abbreviations: ANCOVA = analysis of covariance; LSM = least-squares mean; mITT = modified Intent-to-Treat; n = number of participants with baseline and post-baseline data; SE = standard error.

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Patient Reported Outcomes

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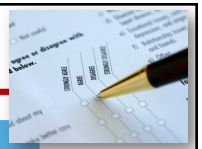
Patient Reported Outcomes (PRO)
SF-36 v2



PRO (Patient-Reported Outcomes)

The status of a patient's health condition that directly comes from the patient

PROM (Patient-Reported Outcomes Measures)

The measurement tool used to collect the data

SF-36 v2

A short-form **health survey** with 36 questions assesses **8 domains** of functional health and well-being

Ref: Adapted from - Supplemental Material to the CMS Measures Management System (MMS) Hub

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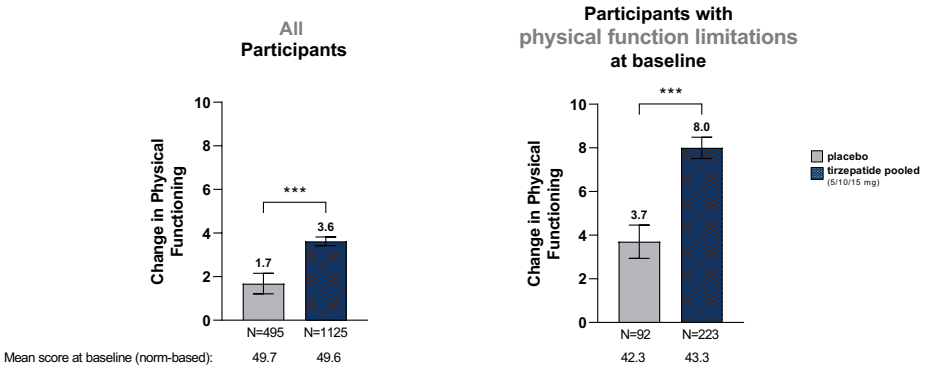
Patient Reported Outcomes (SF-36 v2): Physical function

On Treatment
Efficacy Estimand



Physical functioning scores significantly improved at 72 weeks compared to placebo, particularly in participants with physical function limitations at baseline

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Safety and Tolerability

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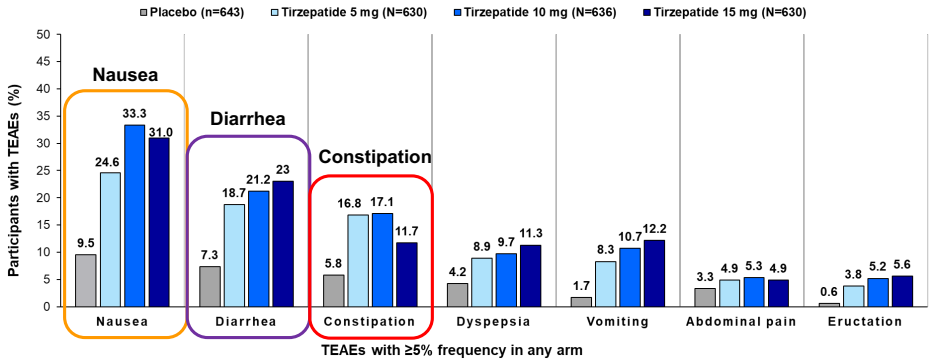
Gastrointestinal-related Treatment Emergent Adverse Events



The most frequently reported gastrointestinal-related adverse events were nausea, diarrhea, and constipation, which occurred in more participants in the tirzepatide groups than placebo.

TEAE, treatment emergent adverse event; mITT population (safety analysis set);

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Gastrointestinal Adverse Events Reported as Primary Reason for Discontinuation of the Study Drug

Parameter	Placebo (N=643) n (%)	TZP 5 mg (N=630) n (%)	TZP 10 mg (N=636) n (%)	TZP 15 mg (N=630) n (%)
Participants with Study Drug discontinuation due to Adverse Events	17 (2.6)	27 (4.3)	45 (7.1)	39 (6.2)
Participants with Study Drug discontinuation due to Gastrointestinal Adverse Events	**3 (0.5)**	**12 (1.9)**	**28 (4.4)**	**26 (4.1)**

Gastrointestinal adverse events were reported as the primary reason for study drug discontinuation.

Discontinuation due to gastrointestinal events was reported in less than 5% of participants on tirzepatide.

mITT population (safety analysis set); n (%): number (percentage) of participants

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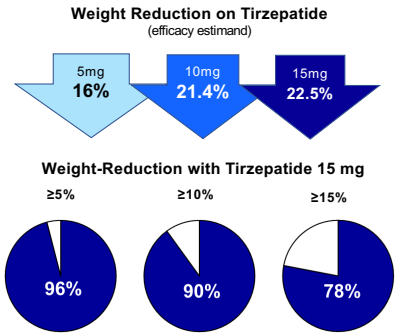
Summary of Efficacy and Safety Results of SURMOUNT-1

All 3 doses of tirzepatide demonstrated substantial, clinically meaningful and sustained body weight reduction compared to placebo



- Up to **63% of participants achieved the ≥20%** weight-reduction target with tirzepatide
- All prespecified **cardiometabolic measures improved** with tirzepatide
- The most frequently reported adverse events were **gastrointestinal**, mild to moderate, and transient occurring primarily during dose-escalation
- The **tolerability** and **safety** profile of tirzepatide is consistent with the GLP-1 receptor agonist class in people with obesity

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Acknowledgements

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