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Once-Weekly Semaglutide in Adolescents with Obesity

Daniel Weghuber, M.D., Timothy Barrett, Ph.D., Margarita Barrientos-Pérez, M.D.,
Inge Gies, Ph.D., Dan Hesse, Ph.D., Ole K. Jeppesen, M.Sc., Aaron S. Kelly, Ph.D.,
Lucy D. Mastrandrea, M.D., Rasmus Sørrig, Ph.D., and Silva Arslanian, M.D.,
for the STEP TEENS Investigators*

Tirzepatide Once Weekly for the Treatment of Obesity

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SURMOUNT-1 Investigators*

Reinder Reuvers – GE/bar/onco differentiant, 12 april 2023



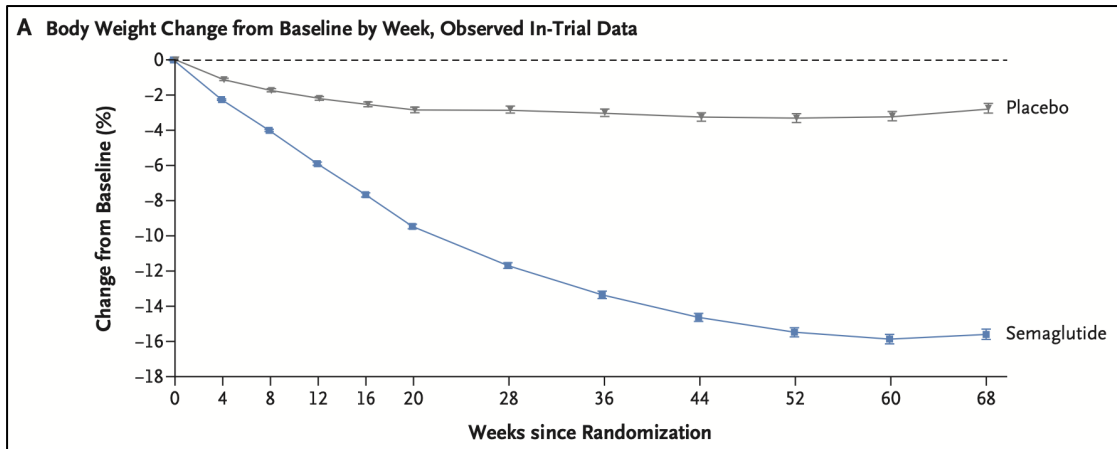


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Semaglutide: GLP-1 agonist

Bewezen effect in volwassenen¹



Geen data bekend in adolescenten





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Opzet

STEP-TEENS: 229 inclusies

12-18jr, BMI in 95^e percentiel, of 85^e percentiel met comorbiditeit

68 weken + observatie

Semaglutide 2.4mg vs placebo, beide groepen GLI

Eindpunt: % BMI verandering

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Baseline karakteristieken

Table 1. Characteristics of the Participants at Baseline

Characteristic	Total (N = 201)
Sex — no. (%)	
Male	76 (38)
Female	125 (62)
Age — yr	15.4±1.6
Age group — no. (%)	
12 to <15	72 (36)
15 to <18	129 (64)
Race — no. (%)†	
Asian	4 (2)
Black	16 (8)
White	159 (79)
Other	22 (11)
Hispanic or Latino ethnic group — no. (%)†	22 (11)
Tanner stage — no. (%)‡	
2	8 (4)
3	14 (7)
4	54 (27)
5	125 (62)
Height — cm	169.7±9.8
Body weight — kg	107.5±24.5
BMI§	
Mean	37.0±6.4
Percentage of 95th percentile	131.8±21.2
Standard-deviation score	3.31±0.86

134 Semaglutide vs 67 placebo

90% studie voltooid

87% juiste dosering

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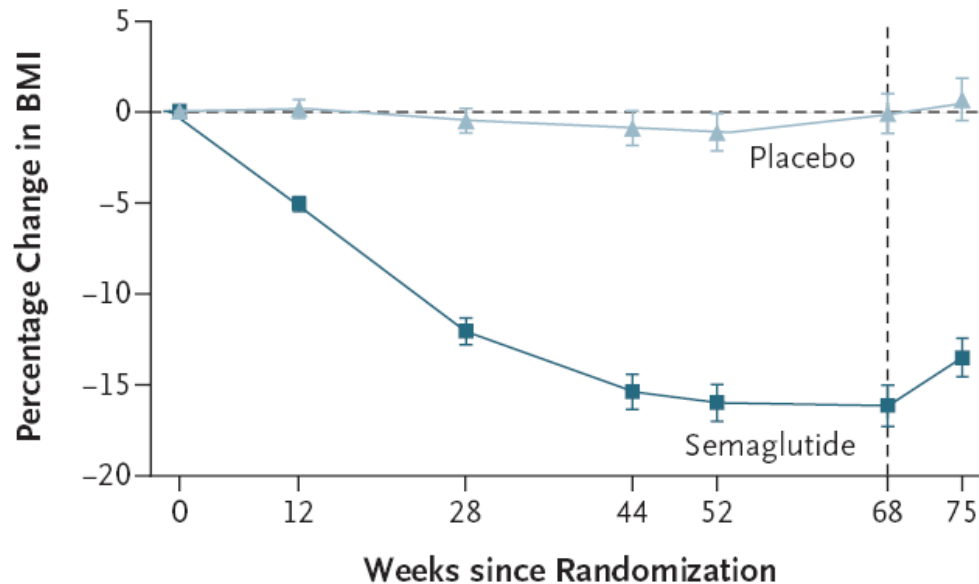




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A Change in BMI from Baseline



BMI reductie: 16.7%

Gewichtsreductie: 17.4%

No. of Participants

Placebo	67	56	63	61	62	62	61
Semaglutide	134	119	131	130	131	131	128

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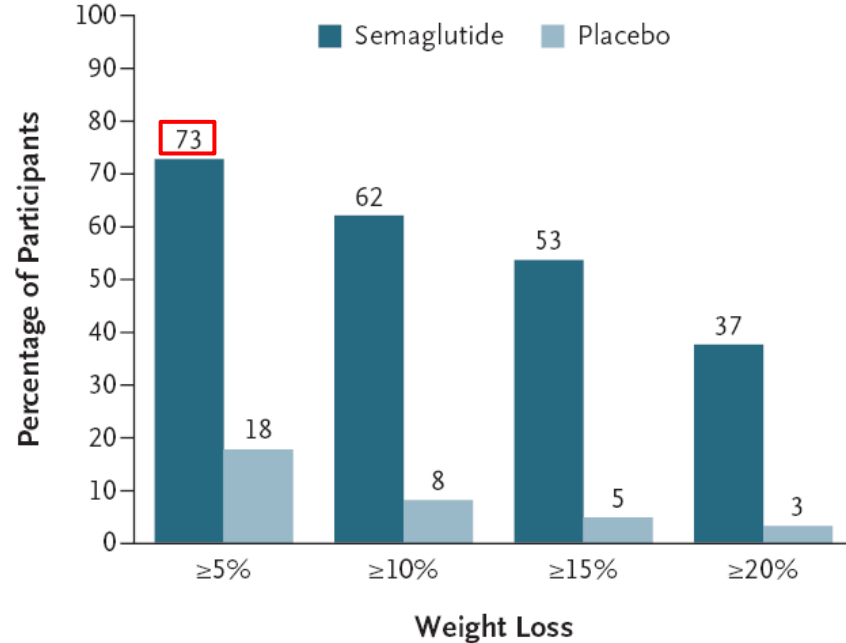




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B Weight-Loss Thresholds at Week 68



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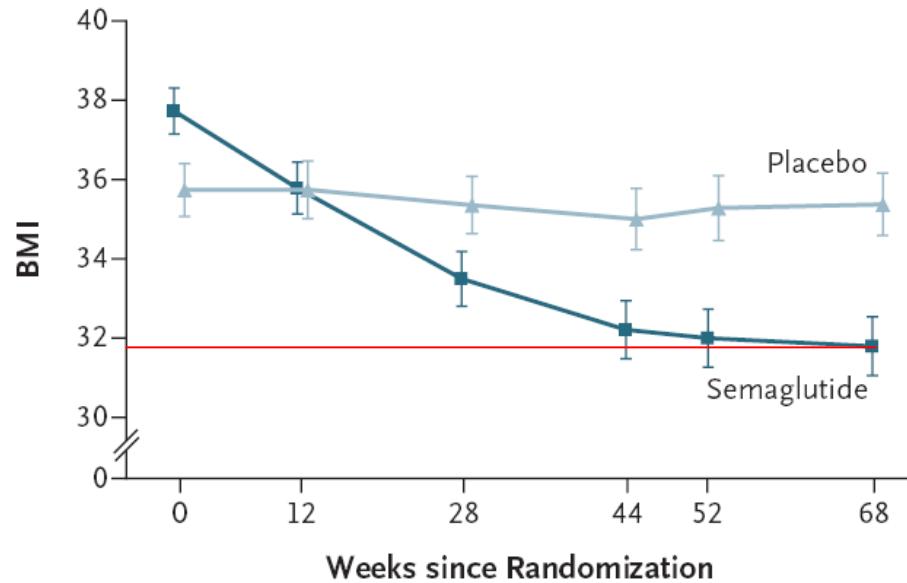




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E BMI According to Weeks since Randomization



No. of Participants

Placebo	67	56	63	61	62	62
Semaglutide	134	119	131	130	131	131

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Bijwerkingen

79% Semaglutide 82% placebo

Ernstig:	11%	9%
Gestaakt:	5%	4%
Galblaas:	4%	0%

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Concluderend

BMI reductie van 16.7%, gewichtsreductie van 17.4%

Subpopulatie non-responders

Na staking medicatie weer gewichtstoename

Veilig middel om te geven





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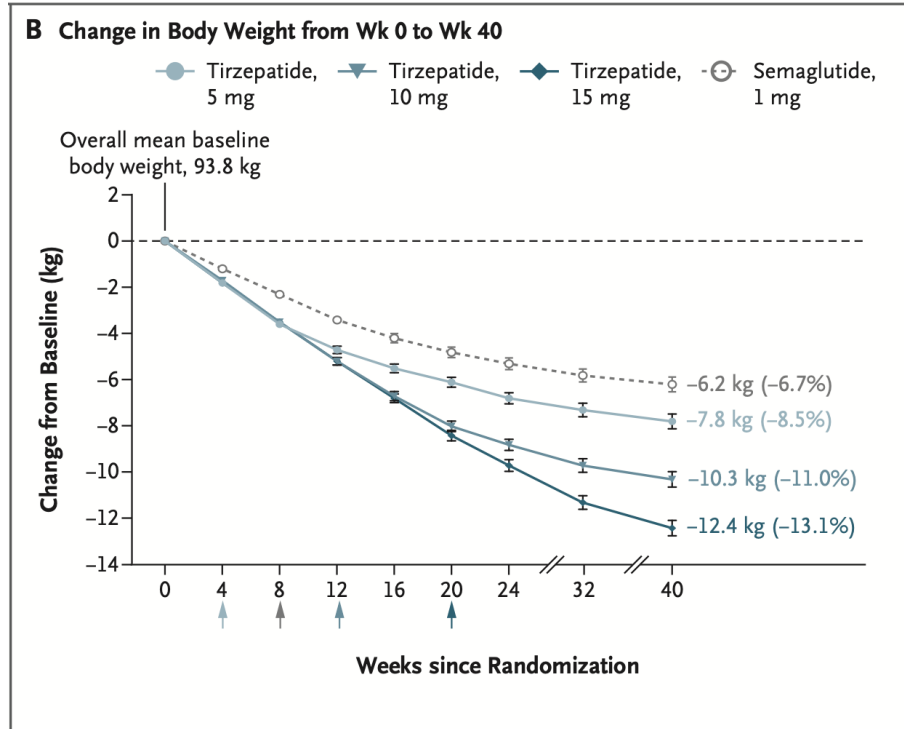
SURMOUNT

Tirzepatide: GLP-1 & GIP agonist

Gewichtsreductie bij DM2
patiënten²

Groter effect op BMI reductie
dan semaglutide^{2,3}

Onbekend effect bij obesitas
zonder DM2



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2. N Engl J Med 2021;385:503-15.

3. Indian J Endocr Metab 2021;25:475-83



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Opzet

SURMOUNT: 2539 inclusies

18jr of ouder, BMI >30, dan wel 27< met comorbiditeit.

Tirzepatide 5-10-15mg vs placebo, beide groepen GLI

Geen DM2

72 weken

Eindpunt: % gewichtsverandering



Baseline karakteristieken

Characteristic	Total (N = 2539)
Age — yr	44.9±12.5
Female sex — no. (%)	1714 (67.5)
Race or ethnic group — no. (%)†	
American Indian or Alaska Native	231 (9.1)
Asian	276 (10.9)
Black or African American	201 (7.9)
White	1792 (70.6)
Native Hawaiian or other Pacific Islander	9 (0.4)
Multiple	30 (1.2)
Hispanic or Latino — no. (%)	1214 (47.8)
Duration of obesity — yr	14.4±10.83
Body weight — kg	104.8±22.12
Mean body-mass index	38.0±6.81

1896 Tirzepatide vs 643 placebo

86% studie voltooid

82% voorgeschreven dosering

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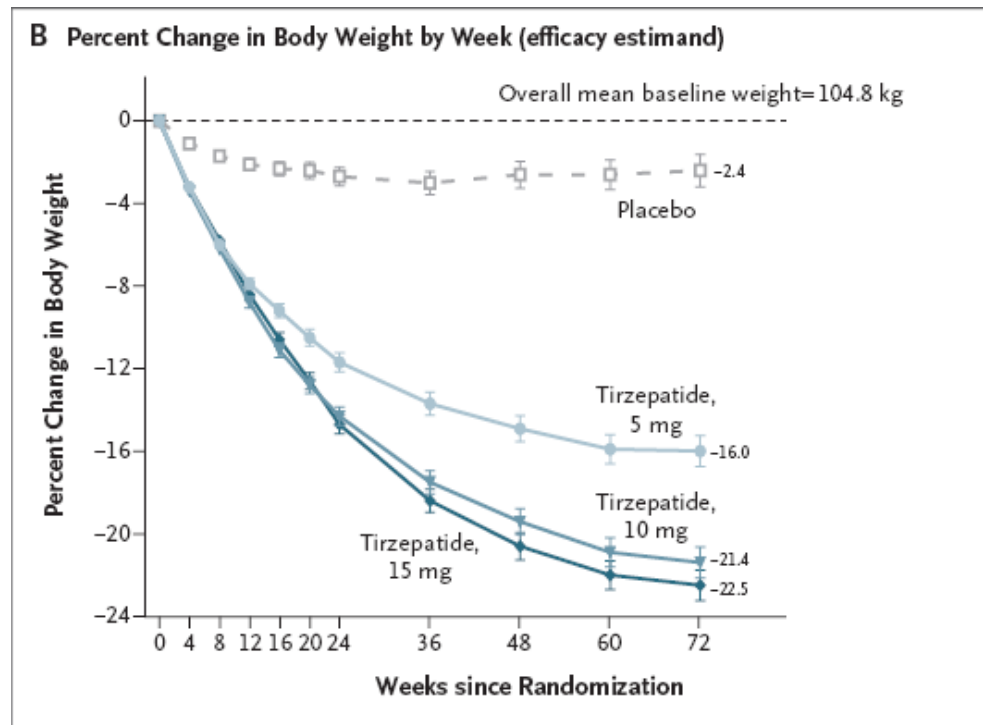




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■ Tirzepatide, 5 mg ■ Tirzepatide, 10 mg ■ Tirzepatide, 15 mg ■ Placebo



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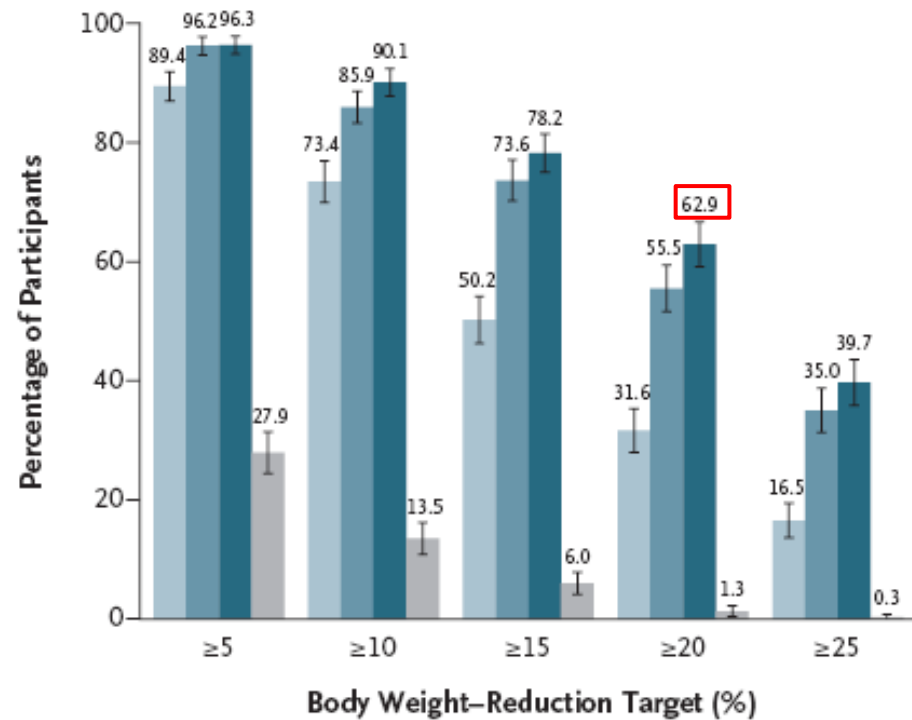


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■ Tirzepatide, 5 mg ■ Tirzepatide, 10 mg ■ Tirzepatide, 15 mg ■ Placebo

D Participants Who Met Weight-Reduction Targets (efficacy estimand)





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Bijwerkingen

	82% Tirzepatide	72% placebo
Ernstig*:	6%	7%
Stopt:	6%	3%
Galblaas:	1%	1%

* 20% COVID gerelateerd

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Concluderend

Tirzepatide gemiddeld 22% gewichtsreductie

Hoog percentage $\geq 20\%$ gewichtsreductie

Veilig om te geven





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Discussie

Medicatie geeft gemiddeld 17-22% gewichtsreductie

Meer keuze voor behandeling

Overschatting effect

Levenslang medicatie nodig⁴

Lange termijneffecten onduidelijk





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Vragen?

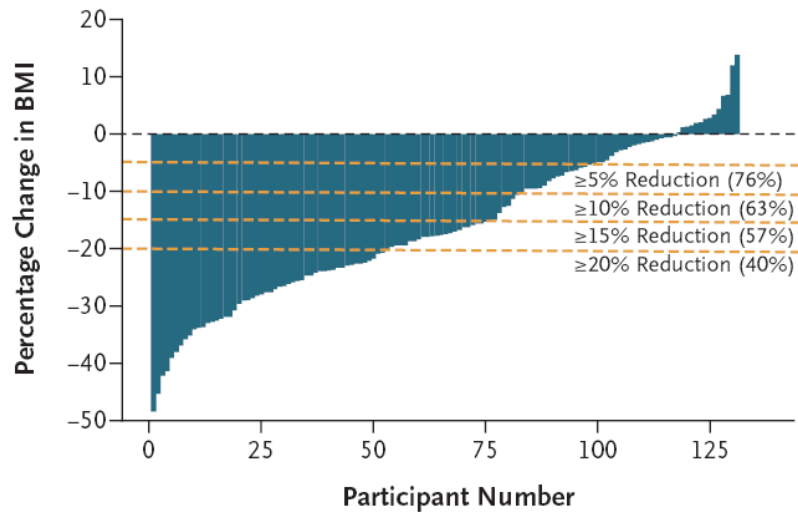




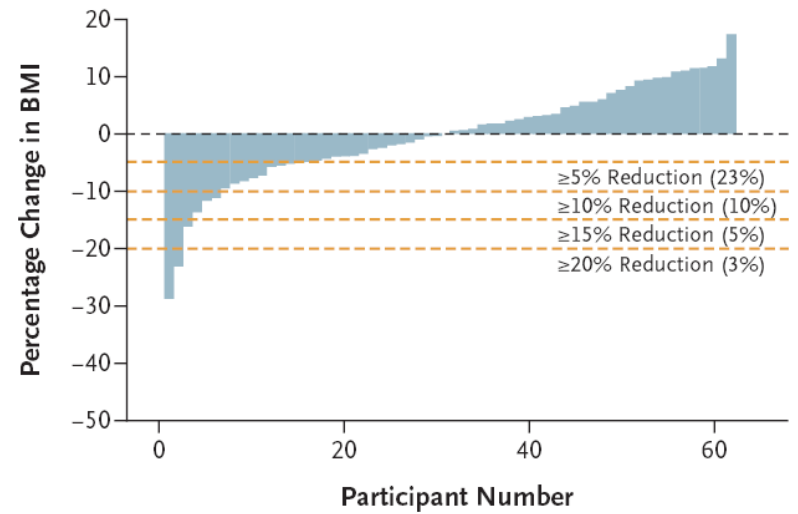
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C Change in BMI at Week 68 in the Semaglutide Group



D Change in BMI at Week 68 in the Placebo Group



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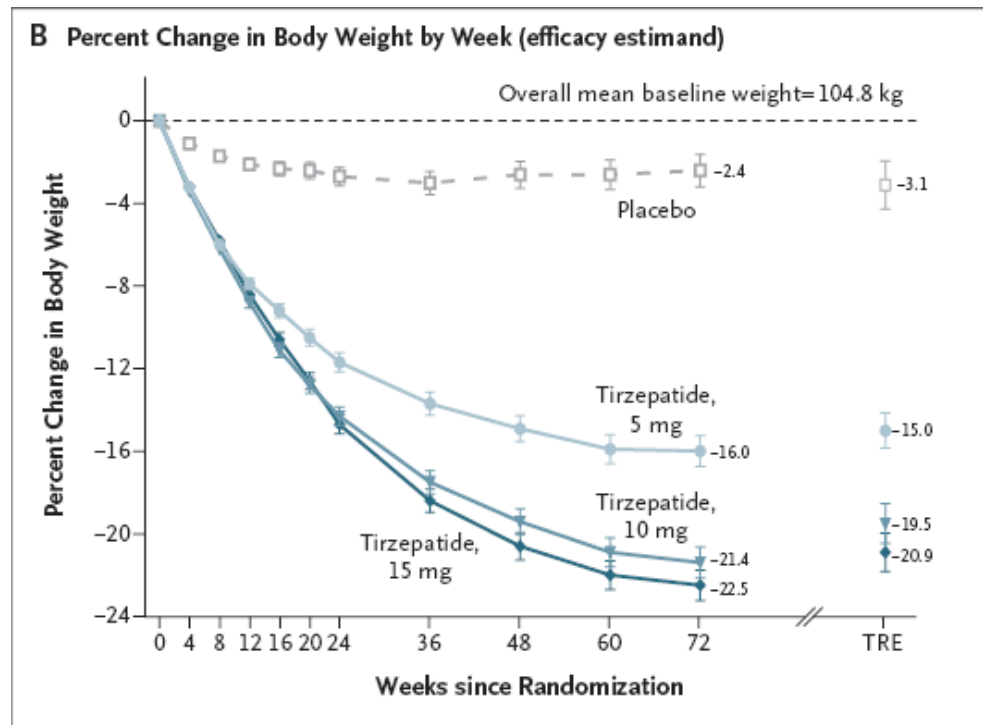




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