

Liraglutide For Weight Management in Pubertal Adolescents With Obesity: A Randomized Controlled Trial

Claude Marcus

1

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

A Randomized, Controlled Trial of Liraglutide for Adolescents with Obesity

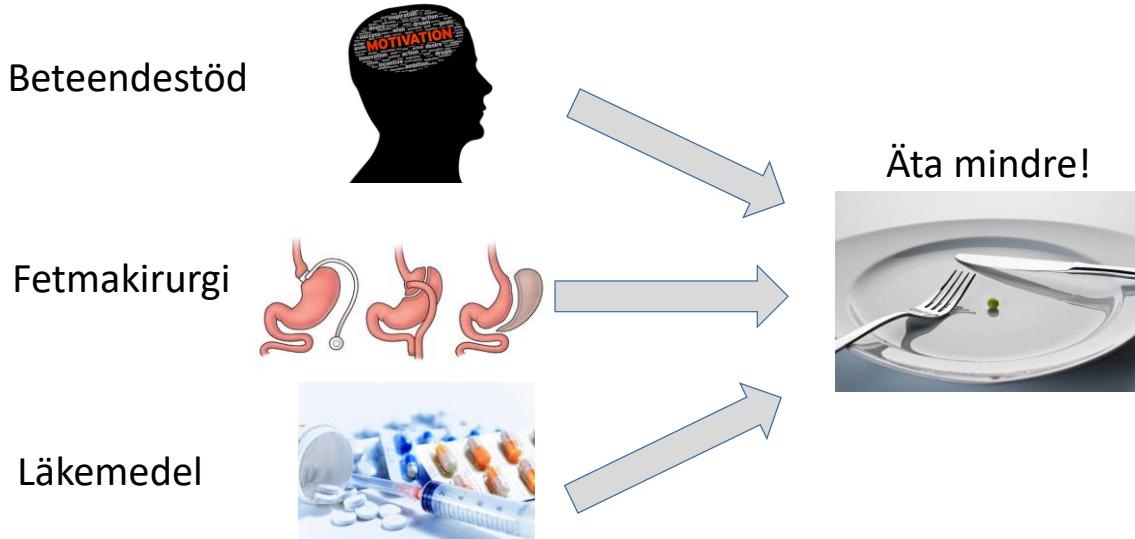
Aaron S. Kelly, Ph.D., Pernille Auerbach, M.D., Ph.D., Margarita Barrientos-Perez, M.D.,
Inge Gies, M.D., Ph.D., Paula M. Hale, M.D., Claude Marcus, M.D., Ph.D.,
Lucy D. Mastrandrea, M.D., Ph.D., Nandana Prabhu, M.Sc.,
and Silva Arslanian, M.D., for the NN8022-4180 Trial Investigators*

N Engl J Med 2020;382:2117-28.
DOI: 10.1056/NEJMoa1916038

2

1

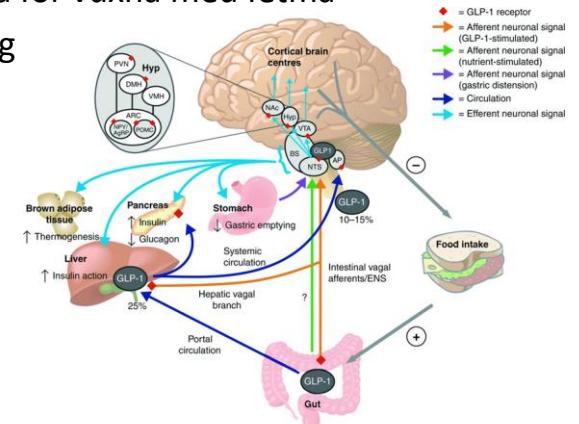
Alla typer av behandling syftar till samma sak:



3

Liraglutide

- En modifierad GLP-1 molekyl med en fettsyra påsatt
- Förlängd halveringstid: 13h vs 10 minuter för GLP-1
- Säljs och är rabatterat för typ2 diabetes
- Godkänt men inte rabbaterat som Saxenda för vuxna med fetma
- Högre dos för fetma än för diabetes: 3.0mg
- Dagliga injektioner

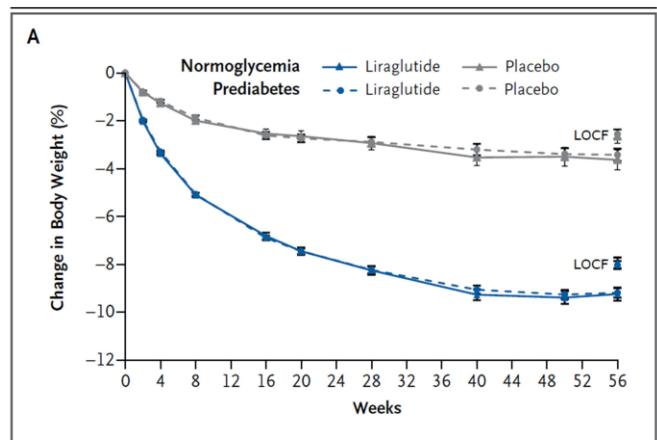


4

2

Liraglutide effects on weight loss in adults

- 20-30% are non responders
- Side effects: gastrointestinal, primarily
- Possible severe effect: pancreatitis
- Positive long-term effects on cardiovascular risks

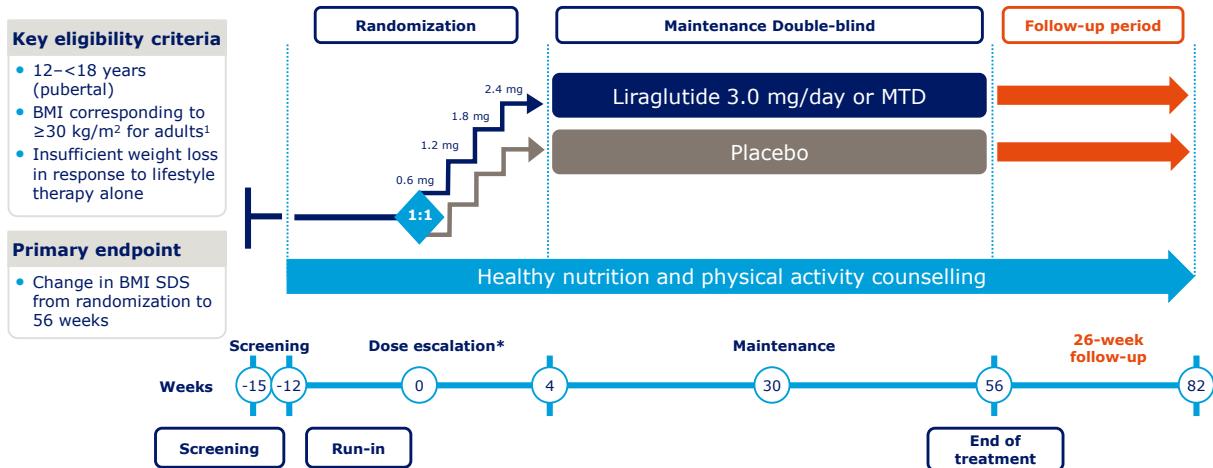


NEJM 2015

5

Trial Design

Randomized controlled, double-blind multinational study



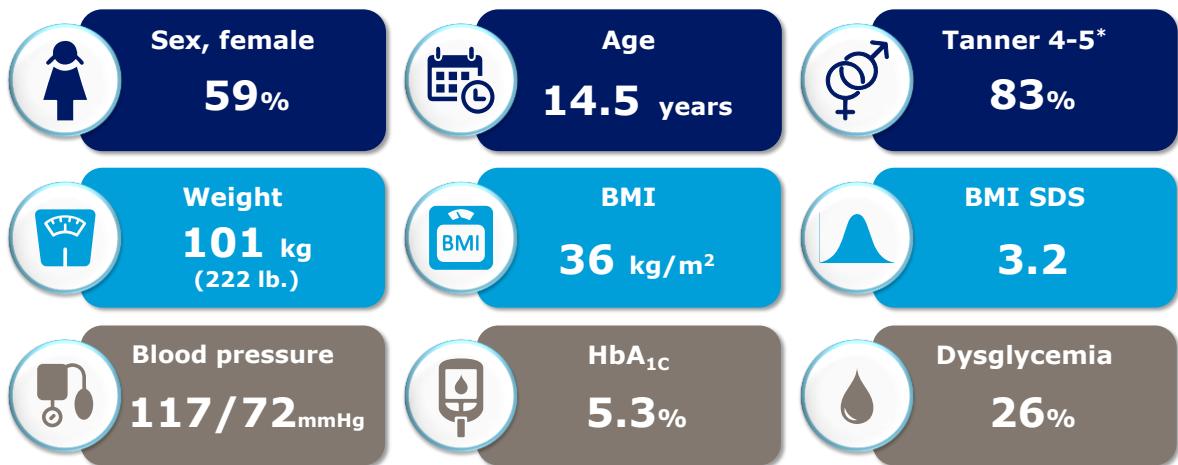
1. Cole TJ, et al. BMJ (Clinical research ed) 2000;320:1240-3.

Randomization was stratified by pubertal and glycemic status. Quality of life was assessed by Impact of Weight on Quality of Life [IWQOL]-Kids questionnaire. BMI SDS, body mass index standard deviation score; MTD, maximum tolerated dose; QoL, quality of life.

Kelly et al. N Engl J Med 2020; doi:10.1056/NEJMoa1916038

6

Baseline Characteristics



Full analysis set: all randomized participants who received ≥ 1 dose of trial product and have any post-randomization data. Data are observed means or numbers [observed mean proportions], respectively.

*Overall tanner stage for each participant is calculated as maximum tanner stage combining all the categorical questions per visit.

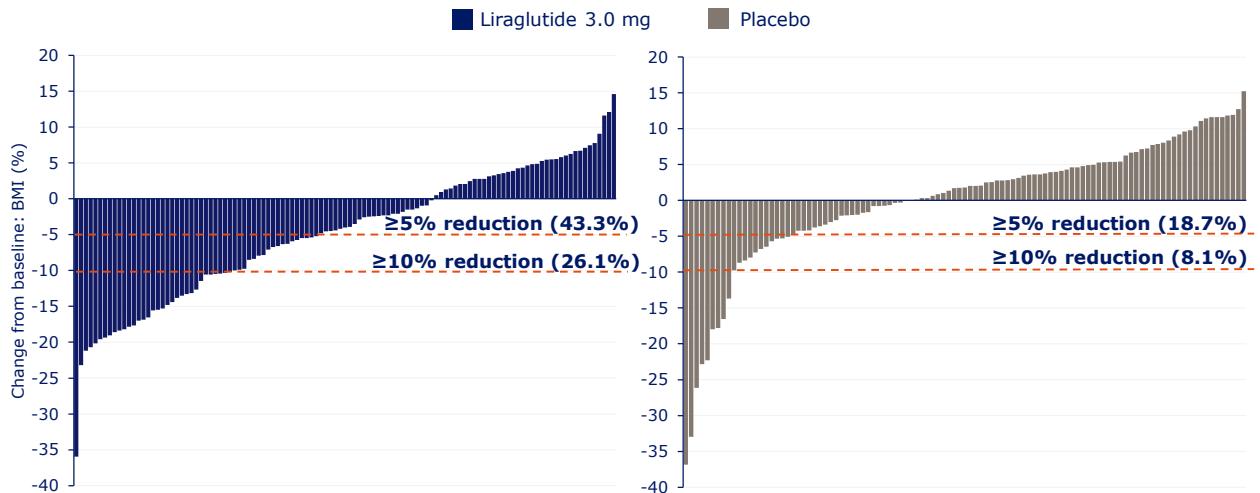
HbA_{1c}, glycated hemoglobin

Kelly et al. *N Engl J Med* 2020; doi:10.1056/NEJMoa1916038

7

Change In BMI Percent

0–56 weeks



Full analysis set. Statistical analysis is logistic regression with jump-to-reference missing data imputation.

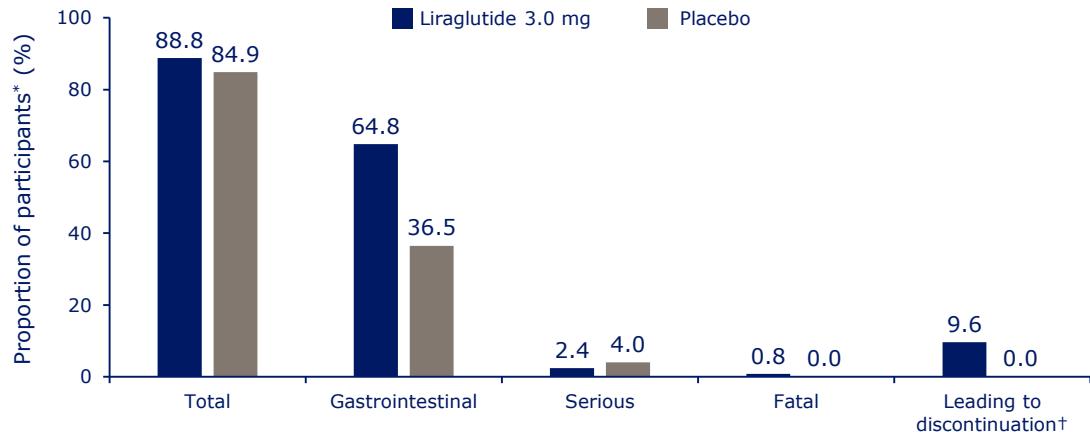
*post-hoc analysis

Kelly et al. *N Engl J Med* 2020; doi:10.1056/NEJMoa1916038

8

Adverse Events Overview

0–56 weeks



Safety analysis set (n=125 for liraglutide and n=126 for placebo). Data are from participants on-treatment (including events occurring up to 14 days after the last day on trial product).

*Participants experiencing at least one event.

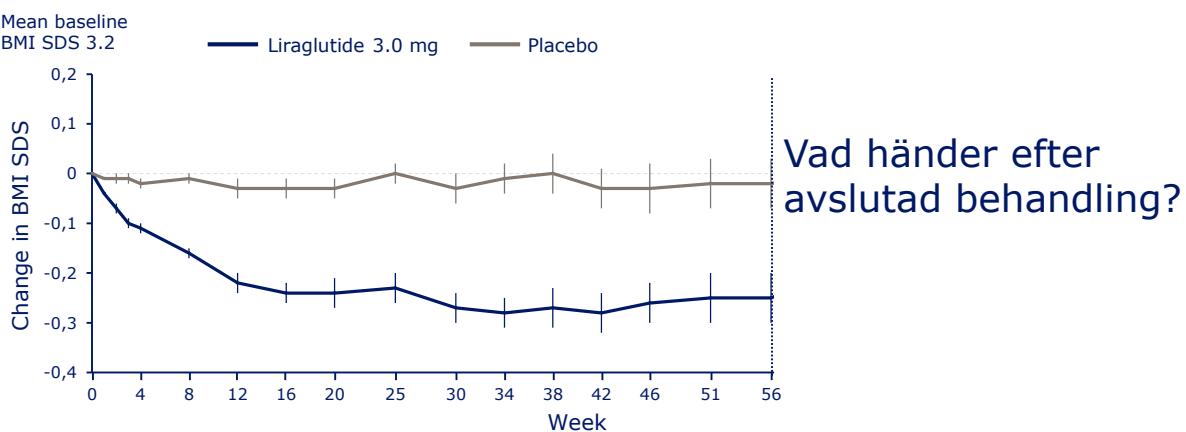
†Leading to discontinuation of trial product

Kelly et al. N Engl J Med 2020; doi:10.1056/NEJMoa1916038

9

BMI SDS Over Time

0–56 weeks



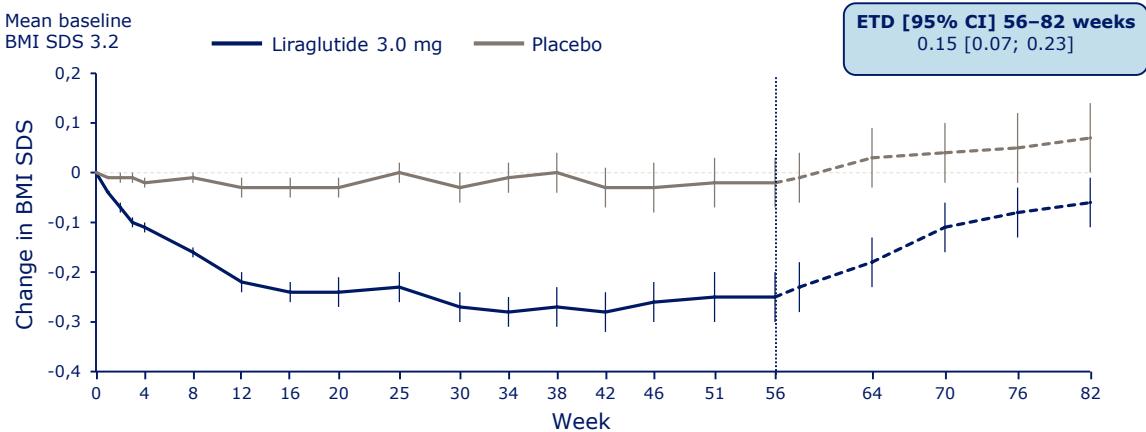
Full analysis set. Graph is observed mean data \pm SEM. n, number of participants included in the analysis.
CI, confidence interval; ETD, estimated treatment difference; SEM, standard error of the mean

Kelly et al. N Engl J Med 2020; doi:10.1056/NEJMoa1916038

10

BMI SDS Over Time

0–82 weeks



Full analysis set. Graph is observed mean data \pm SEM. n, number of participants included in the analysis. CI, confidence interval; ETD, estimated treatment difference; SEM, standard error of the mean

Kelly et al. N Engl J Med 2020; doi:10.1056/NEJMoa1916038

11



Vad händer nu?

- Ansökan inskickad i både USA och EU om indikation för fetmabehandling från 13 åå
- Tveksamt om läkemedlet blir rabatterat..



Thank you

E. Hagman

13