Can semaglutide, a GLP-1 agonist, which mimics a hormone that regulates appetite and blood sugar levels, help non-obese people achieve and maintain weight loss

Submission date 12/03/2025	Recruitment status Recruiting	 Prospectively registered Protocol
Registration date 17/03/2025	Overall study status Ongoing	 Statistical analysis plan Results
Last Edited	Condition category Nutritional, Metabolic, Endocrine	 [] Individual participant data [X] Record updated in last year

Plain English Summary

Background and study aims

This study assesses the efficacy of compounded semaglutide (GLP-1 agonist), the active ingredient of an FDA-approved weight loss drug for patients with obesity, for weight loss and weight maintenance in otherwise healthy normal and overweight people (BMI < 29.9). The study will also evaluate safety, efficacy, extent of weight loss with likely consequential health benefits and define a novel, and likely lower, dosing regimen for semaglutide (GLP-1 agonist) for weight loss in a non-obese population. The study plans to propose a novel method to declare the ideal or target weight which bridges the difference in body composition, bone structure and sex. Achieving a target weight is also proposed to measure the success of the weight loss program. The 'success zone' is defined as within 75% of the target weight.

Who can participate? Healthy volunteer men and women aged 21-82 years old

What does the study involve?

Weekly doses, dose adjustments, when semaglutide (GLP-1 agonist) was stopped, when target weight was attained, and weight maintenance were collected. No diet was prescribed. This is an ongoing rolling database.

What are the possible benefits and risks of participating? Benefits include weight loss. Risks may include common side effects such as nausea, gastrointestinal discomfort, and rare adverse reactions, which will be managed through continuous medical support.

Where is the study run from? Sharon Giese, MD, private medical office. When is the study starting and how long is it expected to run for? April 2022 to May 2025

Who is funding the study? Investigator initiated and participants self-funded care

Who is the main contact? Dr. Sharon Giese, sgiesemd@gmail.com

Contact information

Type(s) Public, Scientific, Principal Investigator

Contact name Dr Sharon Giese

Contact details Sharon Giese, MD 114 East 61st street New York United States of America 10065 +1 212-421-3400 sgiesemd@gmail.com

Additional identifiers

EudraCT/CTIS number Nil known

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers Nil known

Study information

Scientific Title Use of semaglutide for successful elective weight loss in a non-obese population and likely health benefits

Study hypothesis Semaglutide can be used for successful weight loss in the non-obese population.

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 11/03/2025, BeyondBound Institutional Review Board (IRB) (1980 Festival Plaza Dr. Suite 300, Las Vegas, 89135, United States of America; +1 646-217-0403; info@beyondbound. org), ref: BB2503SG-083

Study design

Observational non-randomized single-center study design with two follow-ups

Primary study design Observational

Secondary study design Cohort study

Study setting(s) Home, Internet/virtual, Other therapist office, Telephone

Study type(s)

Efficacy

Participant information sheet

Not available in web format, please use the contact details to request a participant information sheet

Condition

Weight loss and the benefits

Interventions

This internal, prospective, non-randomized, non-blinded, dynamic, cohort observational study was conducted at Dr Sharon Giese's aesthetic medicine practice located in New York City, from May 2022 until the present. All standard ethical guidelines were followed. A single intervention, administration of compounded, subcutaneous, semaglutide was objectively assessed for its effectiveness in aiding weight loss, primarily in the non-obese population (BMI <29.9). Participants will undergo a structured elective weight loss program that includes the administration of semaglutide at doses that do not exceed FDA-approved guidelines. The intervention will involve regular monitoring of weight, nutritional monitoring, and medical supervision to ensure adherence and safety. Participants will receive detailed education on the medication, its potential side effects, and strategies for managing any adverse reactions. Weekly follow-ups will be conducted via email and in-person or virtual consultations to assess progress and address any concerns.

Patients stayed on medication until their target weight was attained. Following the maintenance of the target weight, the medication dose was incrementally decreased, as long as weight loss was maintained. Patients had the choice to stay on the medication or discontinue it at any time.

Data will be collected through a combination of medical observations, patient self-reports, and structured follow-ups. Participants will track their weight, dietary habits, and any side effects using standardized forms and weekly check-ins. Medical records will be reviewed to document progress, adherence to the program, and any reported adverse events. Surveys and

questionnaires will be administered periodically to assess participants' experiences, satisfaction, and overall well-being. All data will be securely stored in compliance with HIPAA regulations to ensure confidentiality and accuracy.

All participant data will be anonymized by assigning unique identification codes to ensure privacy. Confidential information will be securely stored in an encrypted, password-protected system, with access restricted to the principal investigator and authorized research staff. Any physical documents will be kept in a locked cabinet within a secure office to prevent unauthorized access. Data will be retained for the required period in compliance with ethical and legal guidelines and will then be permanently deleted or securely destroyed. These measures will ensure that participant confidentiality is maintained throughout the study.

The protocol for the compounded semaglutide medication with cyanocobalamin (B12) (5/ 0.5mg /1cc) was to inject 0.25mg or 5 units of medication subcutaneously into your thigh or abdomen, once weekly and check in with the office or nutritional coach to titrate the dose for appetite suppression, dosing and timing was adjusted as necessary to achieve appetite suppression and weight-loss. If patients experienced adverse events, such as reflux, nausea, vomiting, or diarrhea, medication was discontinued until symptoms resolved for three days. The maximum dose will never exceed 2.4 mg. Patients with sustained weight loss plateaus or a slow rate at higher doses of semaglutide and patients with insulin resistance were switched to tirzepatide/niacinamide (17/ 2 mg/1cc), with doses ranging from 2.5 to 15 mg. Data are also collected from the patients regarding, achieving target weight, and weight maintenance, whether with or without medication. Patients will stay on the medication until the target weight is achieved or at what point they opt to stop losing weight. Data will continue to be collected through 2 years following the patients from day 0. The data is rolling and collection is ongoing with people being enrolled weekly. The stated goal is: 1) weight loss, 2) weight maintenance and 3) to wean off the medication.

Intervention Type

Drug

Pharmaceutical study type(s)

Not Applicable

Phase Not Applicable

Drug/device/biological/vaccine name(s) Semaglutide

Primary outcome measure

Weight loss is measured by the participant taking their weight using a digital scale each morning. Patients have a recording sheet to record their weekly weight and medication dose. A photo is taken of the digital scale weight at days 0, 45, 180, and one and 2 years.

Secondary outcome measures

Defining the success of the weight loss program: Weight maintenance within the success zone will be assessed using regular weight measurements at baseline, 6 months, 1 year, and 2 years

Overall study start date

20/04/2022

Overall study end date

10/03/2026

Eligibility

Participant inclusion criteria

1. Patients who were unable to attain their desired weight loss by any other means

2.21 years old and over

3. Participants must agree to follow the prescribed treatment protocol, including weekly communication with a nutritional coach, weighing themselves, and adherence to medication dosage guidelines.

4. Participants who are taking semaglutide off-label must have consented and acknowledged the potential risks and outcomes.

Participant type(s)

Healthy volunteer

Age group

Mixed

Lower age limit

21 Years

Upper age limit 82 Years

Sex

Both

Target number of participants 400

Total final enrolment 326

Participant exclusion criteria

- 1. Pregnancy or breastfeeding
- 2. Taking medications such as metformin
- 3. Type 1 or type 2 diabetes or any other single co-morbidity
- 4. Individuals with BMI< 18.5 or > 40
- 5. A history of eating disorders
- 6. Severe gastrointestinal disorders
- 7. Severe adverse reactions to GLP-1 agonists, or other medical conditions that would pose a risk
- in a weight loss program
- 8. Unable to comply with follow-up procedures

Recruitment start date

20/04/2022

Recruitment end date

15/05/2025

Locations

Countries of recruitment United States of America

Study participating centre Sharon Giese, MD Townhouse 114, 114 East 61st street New York United States of America 10065

Sponsor information

Organisation Sharon Giese, MD

Sponsor details 114 East 61st street New York United States of America 10065 +1 212-421-3400 sgiesemd@gmail.com

Sponsor type Industry

Website sharongiesemd.com

Funder(s)

Funder type Other

Funder Name Investigator initiated and participants self-funded care

Results and Publications

Publication and dissemination plan

Planed publication in a peer-reviewed journal

Intention to publish date

30/04/2025

Individual participant data (IPD) sharing plan

The datasets generated during and analysed during the current study will be available upon request from Sharon Giese, MD, sgiesemd@gmail.com. Participants are anonymized to a number on a master Google doc. The sheet contains participants' sex, age, height, dose of semaglutide, and weight change over time. It also shows who has reached the target weight and success zone and who is off of the medication. All participants have given written consent. HIPPA and all ethical guidelines were followed. The master Google doc is available within one week on request in a view-only format.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Other files</u>			17/03/2025	No	No