Real-World Evaluation of the Natural History and Long-Term Clinical Effects of GLP-1 and GLP-1/GIP Therapies in Spanish Adults Living With Obesity: REFLECT Spain

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Study Planned

Administrative details

EU PAS number

EUPAS1000001169

Study ID

1000001169

DARWIN EU® study

No

Study countries

Spain

Study description

Unique Protocol ID: K9531-5103-ESP

Study status

Planned

Contact details

Study institution contact

Kailera Therapeutics, Inc. info-clinicalstudies@kailera.com

Study contact

info-clinicalstudies@kailera.com

Primary lead investigator

Medical Director

Primary lead investigator

Study timelines

Date when funding contract was signed

Actual: 31/10/2026

Study start date

Planned: 30/11/2026

Date of final study report

Planned: 31/01/2030

Regulatory

Was the study required by a regulatory body?

No

Is the study required by a Risk Management Plan (RMP)?

Not applicable

Methodological aspects

Study type

Study type list

Study topic:

Disease /health condition

Human medicinal product

Study type:

Non-interventional study

Scope of the study:

Disease epidemiology

Drug utilisation

Evaluation of patient-reported outcomes

Safety study (incl. comparative)

Data collection methods:

Secondary use of data

Study design:
K9531-5103-ESP is a retrospective observational cohort study designed to characterise the natural history, treatment patterns, clinical outcomes, and healthcare resource utilisation of adults living with obesity in Spain.

Main study objective:
K9531-5103-ESP will evaluate the natural history of obesity in Spain using longitudinal real-world healthcare data. The study is intended to provide context regarding participant characteristics, disease burden, treatment patterns, clinical outcomes, and healthcare utilisation among adults living with obesity in routine clinical practice.

A random index date will be assigned to each qualifying participant from eligible visit dates, requiring at least 12 months of prior data to assess eligibility. Newly qualifying participants in subsequent years will receive an index date within their first year of eligibility. Baseline characteristics will be assessed at the index date, with follow-up to evaluate changes and prespecified outcomes.

The study will also provide real-world evidence on obesity and obesity management in routine clinical practice and support the design of 4 prospective cohorts intended to mirror the following three Phase 3 registrational, randomized, double-blinded, placebo-controlled trials that are currently investigating the effects of ribupatide compared with placebo and semaglutide: K9531-3103 (NCT07284875), K9531-3104 (NCT07284901), and K9531-3107 (NCT07284979).

Retrospective observational cohort studies of the natural history of obesity will also be conducted in the United States (US) (K9531-5101-US [REFLECT US]) and in the United Kingdom (UK) (K9531-5102-UK [REFLECT UK]).

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Medicinal product name

OZEMPIC

WEGOVY

RYBELSUS

MOUNJARO

Medicinal product name, other

Semaglutide

Tirzepatide

Population studied

Short description of the study population

Participants will be defined by body mass index (BMI), type 2 diabetes mellitus (T2DM), cardiometabolic comorbidities, and treatment with glucagon-like peptide-1 (GLP-1)/glucose-dependent insulinotropic polypeptide (GIP) at index.

Participants must meet protocol-defined inclusion and exclusion criteria during at least 1 outpatient visit that occurred between June 1, 2019, and June 30, 2024.

Age groups

- **Adult and elderly population (≥18 years)**

- Adults (18 to < 65 years)
  - Adults (18 to < 46 years)
  - Adults (46 to < 65 years)
- Elderly (≥ 65 years)
  - Adults (65 to < 75 years)
  - Adults (75 to < 85 years)
  - Adults (85 years and over)

Estimated number of subjects

1.355.389

Study design details

Setting

Key Inclusion Criteria:

Cohort 1:

• BMI ≥30 kilograms/square metre (kg/m^2) on at least 2 visits or

• BMI ≥27 to <30 kg/m^2 on at least 2 visits and previously diagnosed with at least 1 of the following the year before the second BMI ≥27 to <30 kg/m^2 visit: hypertension; dyslipidemia; obstructive sleep apnoea; ischemic cardiovascular disease

Cohort 2:

• BMI ≥27 kg/m^2 on at least 2 visits

• Diagnosis of T2DM the year before the second BMI ≥27 kg/m^2 visit

Cohort 3:

• BMI ≥35 kg/m^2 on at least 2 visits

Cohort 4:
• BMI ≥35 kg/m^2 on at least 2 visits
• At least 1 filled semaglutide prescription

Key Exclusion Criteria:

Cohorts 1, 3, and 4:
• History of type 1 diabetes mellitus (T1DM) or T2DM
• One-year pre-index history of T1DM, T2DM, diabetic ketoacidosis or hyperosmolar state/coma
• One-year pre-index laboratory evidence of diabetes mellitus (DM) including haemoglobin A1c ≥6.5%, fasting glucose ≥126 milligrams/decilitre (mg/dL), or random glucose or 2-hour glucose measurement from a 2-hour oral glucose tolerance test ≥200 mg/dL

Cohort 2:
• One-year pre-index history of T1DM, DM due to underlying condition, drug or chemical induced DM, other specified, diabetic ketoacidosis or hyperosmolar state/coma
• One-year pre-index history of T2DM with hypoglycaemia with coma or T2DM with hypoglycaemia without coma and use of hypoglycaemia treatment

All Cohorts:
• Three-month pre-index initiation of medications strongly associated with weight gain
• One-year chronic treatment with medications that strongly affect

gastrointestinal motility

• One-year pre-index diagnosis of multiple endocrine neoplasia Type 2 or medullary thyroid cancer

• One-year pre-index diagnosis of chronic or acute pancreatitis

• One-year pre-index diagnosis of gastric-emptying abnormalities

• One-year pre-index diagnosis of severe major depressive disorder/episode and disruptive mood disorders

Note: Other protocol-specified criteria may apply.

Outcomes

Primary Outcomes:

1. Percentage Change from Index Date in Body Weight

Secondary Outcomes:

2. Number of Participants with Obesity Per 1,000 Patient Years
3. Participant Age
4. Participant Sex
5. Participant Race
6. Participant Ethnicity
7. Participant Weight
8. Number of Participants Admitted to the Hospital
9. Length of Inpatient Hospital Stay (Days)
10. Number of Outpatient Visits
11. Annual Healthcare Cost
12. Change from Index Date in Body Weight
13. Change from Index Date in Systolic Blood Pressure and Diastolic Blood Pressure
14. Time from Index Date to Death (All Cause)
15. Number of Participants Admitted to the Hospital
16. Length of Inpatient Hospital Stay (Days)

17. Number of Outpatient Visits
18. Annual Healthcare Cost
19. Number of Participants Initiating GLP-1 or GLP-1/GIP by 6-month Intervals
20. Number of Participants Permanently Discontinuing GLP-1 or GLP-1/GIP by 6-month Intervals
21. Systolic Blood Pressure and Diastolic Blood Pressure in the Intention-to-treat (ITT) and Per-protocol (PP) Subgroups at Index
22. Percentage Change in Body Weight in ITT and PP Subgroups
23. Time from Index Date to Death (All Cause) for ITT and PP Subgroups
24. Number of Participants Admitted to the Hospital for ITT and PP Subgroups
25. Length of Inpatient Hospital Stay (Days) for ITT and PP Subgroups
26. Number of Outpatient Visits for ITT and PP Subgroups
27. Annual Healthcare Cost for ITT and PP Subgroups
28. Systolic Blood Pressure and Diastolic Blood Pressure in Age Subgroups
29. Percentage Change in Body Weight by Age Subgroups
30. Time From Index Date to Death (All Cause) in Age Subgroups
31. Number of Participants Admitted to the Hospital for Age Subgroups
32. Length of Inpatient Hospital Stay (Days) for Age Subgroups
33. Number of Outpatient Visits for Age Subgroups
34. Annual Healthcare Cost for Age Subgroups

Data management

ENCePP Seal

The use of the ENCePP Seal has been discontinued since February 2025. The ENCePP Seal fields are retained in the display mode for transparency but are no longer maintained.

Data sources

Data source(s)

BIG-PAC

Data sources (types)

Electronic healthcare records (EHR)

Use of a Common Data Model (CDM)

CDM mapping

No

Data quality specifications

Check conformance

Yes

Check completeness

Yes

Check stability

Yes

Check logical consistency

Yes

Data characterisation

Data characterisation conducted

Yes