

# Programme of Epidemiological Studies of Lixisenatide and other GLP-1 Receptor Agonists

**First published:** 05/07/2017

**Last updated:** 25/06/2024

Study

Ongoing

## Administrative details

### PURI

<https://redirect.ema.europa.eu/resource/19786>

### EU PAS number

EUPAS19769

### Study ID

19786

### DARWIN EU® study

No

### Study countries

☐ Belgium

## Study description

I. Database study of GLP-1 Receptor Agonists and Risk of Acute Pancreatitis, Pancreatic Cancer and Thyroid Cancer, in Particular Medullary Thyroid Cancer.

This is a retrospective cohort study designed to assess the risk of acute pancreatitis, pancreatic cancer and medullary thyroid cancer associated with use of GLP-1 RA when compared to patients prescribed other types of anti-diabetic drugs. This study will establish the profile of users of GLP-1 RAs and of other anti-diabetic medications. Two cohorts based on prescription databases were established, in Belgium and the Lombardy Region, Italy. Study specific analysis were planned, followed by meta-analyses of the two results.

II. Patient Registry of Lixisenatide Use in Adult Type 2 Diabetes This is a patient registry of patients with diabetes exposed to lixisenatide.

The primary objectives of this study are to monitor the occurrences of acute pancreatitis, pancreatic cancer and thyroid cancer, especially medullary carcinoma of the thyroid, among adult type 2 diabetes patients treated with lixisenatide and to compare their risks with that of users of (1) Other GLP-1 receptor agonists from the Database Study, (2) Other diabetic medications from the Database Study, (3) The general population.

---

## Study status

Ongoing

## Research institutions and networks

### Institutions

# International Prevention Research Institute (IPRI)

☐ France

**First published:** 19/03/2010

**Last updated:** 05/04/2012

**Institution**

**EU Institution/Body/Agency**

**ENCePP partner**

AIM-IMA Brussels, Belgium

CRS-SISS Milano, Italy

## Contact details

### Study institution contact

Peter Boyle

**Study contact**

[Contact-US@sanofi.com](mailto:Contact-US@sanofi.com)

### Primary lead investigator

Peter Boyle

**Primary lead investigator**

## Study timelines

### Date when funding contract was signed

Actual: 30/09/2012

---

**Study start date**

Actual: 01/01/2002

---

**Data analysis start date**

Actual: 01/07/2015

---

**Date of interim report, if expected**

Actual: 12/06/2016

---

**Date of final study report**

Planned: 23/10/2019

---

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Sanofi

## Study protocol

[lixisenatide-epidemiologic-study-protocol-2013-12-02-final.pdf](#)(2.46 MB)

## Regulatory

**Was the study required by a regulatory body?**

Yes

---

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

EU RMP category 3 (required)

## Methodological aspects

### Study type

### Study type list

**Study topic:**

Disease /health condition

Human medicinal product

---

**Study type:**

Non-interventional study

---

**Scope of the study:**

Assessment of risk minimisation measure implementation or effectiveness

Safety study (incl. comparative)

**Data collection methods:**

Secondary use of data

---

**Main study objective:**

The primary objectives of this study are to estimate:

1. Incidence rates of acute pancreatitis (ICD10 K85) among adult type 2 diabetes patients treated with GLP-1 receptor agonists (i.e. exenatide and liraglutide), as well as patients treated with other anti-diabetic drugs and to examine the risk of acute pancreatitis in users of GLP-1 receptor agonists

compared to users of other anti-diabetic medications;

2. Incidence rates of pancreatic cancer (ICD10 C25) among adult type 2 diabetes patients treated with GLP-1 receptor agonists (i.e. exenatide and liraglutide), as well as patients treated with other anti-diabetic drugs and to examine the risk of pancreatic cancer in users of GLP-1 receptor agonists compared to users of other anti-diabetic medications;

3. Incidence rates of thyroid cancer (ICD10 C73) (especially medullary thyroid cancer) among adult type 2 diabetes patients treated with GLP-1 receptor agonists (i.e. exenatide and liraglutide), as well as patients treated with other anti-diabetic drugs and to examine the odds ratio of medullary thyroid cancer in users of GLP-1 receptor agonists compared to users of other anti-diabetic medications.

This study is designed to focus on the risk associated with use of GLP-1 agonists and will investigate the following primary hypotheses:

1. That adult patients prescribed GLP-1 RAs have an increased risk of acute pancreatitis when compared to patients prescribed other types of anti-diabetic drugs;
2. That adult patients prescribed GLP-1 RAs have an increased risk of pancreatic cancer when compared to patients prescribed other types of anti-diabetic drugs;
3. That adult patients prescribed GLP-1 RAs have an increased risk of medullary thyroid cancer when compared to patients prescribed other types of anti-diabetic drugs.

## Study Design

### **Non-interventional study design**

Cohort

Other

---

**Non-interventional study design, other**

Retrospective study

## Study drug and medical condition

**Name of medicine**

LYXUMIA

---

**Study drug International non-proprietary name (INN) or common name**

LIXISENATIDE

---

**Anatomical Therapeutic Chemical (ATC) code**

(A10BJ03) lixisenatide

lixisenatide

---

**Medical condition to be studied**

Pancreatitis

Pancreatic carcinoma

Medullary thyroid cancer

## Population studied

**Short description of the study population**

The study focused on diabetic patients prescribed with lixisenatide identified from the patients registry in Denmark, Norway and Sweden.

---

**Age groups**

Adults (18 to < 46 years)

Adults (46 to < 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

---

**Special population of interest**

Other

---

**Special population of interest, other**

Diabetic patients

---

**Estimated number of subjects**

550000

## Study design details

**Outcomes**

Acute pancreatitis, pancreatic cancer, medullary thyroid cancer.

---

**Data analysis plan**

The studies in Belgium and Lombardy Region are based on the same protocol using the same methods for subject selection, drug exposure assessment, and statistical analysis. In both settings a “new users design” is implemented. Subjects contribute in a time dependent manner to the different exposure groups. Crude and standardized incidence rates (per 100,000 person years) of the outcome event are calculated for each exposure group. The risk of outcome events is evaluated using Cox proportional hazard models including time-dependent variables, stratified on age and gender and adjusted for

gallbladder disease and insulin therapy. Hazard ratios (HRs) from Belgium and Italy are pooled using fixed effects meta-analyses.

## Documents

### Study results

[csr-lixisenatide-PASS-EMA.pdf](#)(2.64 MB)

---

## Data management

### Data sources

#### Data sources (types)

[Administrative healthcare records \(e.g., claims\)](#)

### Use of a Common Data Model (CDM)

#### CDM mapping

No

### Data quality specifications

#### Check conformance

Unknown

---

#### Check completeness

Unknown

---

### **Check stability**

Unknown

---

### **Check logical consistency**

Unknown

## **Data characterisation**

### **Data characterisation conducted**

No