

# NN1250-4189 A multi-centre, prospective, non-interventional study of insulin degludec investigating the safety and effectiveness in a real world population with type 1 and 2 diabetes mellitus (ReFLeCT)

**First published:** 12/03/2015

**Last updated:** 02/07/2024

Study

Finalised

## Administrative details

### EU PAS number

EUPAS7880

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### Study ID

29493

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### DARWIN EU® study

No

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### Study countries

☐ Denmark

☐ Italy

- ☐ Netherlands
  - ☐ Spain
  - ☐ Sweden
  - ☐ Switzerland
  - ☐ United Kingdom
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### Study description

This study is conducted in Europe. The aim of the study is to investigate the safety and effectiveness of insulin degludec (Tresiba®) in a real world population with type 1 (T1DM) and 2 (T2DM) diabetes mellitus.

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### Study status

Finalised

## Research institutions and networks

### Institutions

**Novo Nordisk**

**First published:** 01/02/2024

**Last updated:** 01/02/2024

**Institution**

**Multiple centres:** 200 centres are involved in the study

## Contact details

### Study institution contact

Clinical Reporting Anchor and Disclosure (1452) Novo Nordisk A/S  
pactadmin@novonordisk.com

Study contact

[pactadmin@novonordisk.com](mailto:pactadmin@novonordisk.com)

### Primary lead investigator

Clinical Reporting Anchor and Disclosure (1452) Novo Nordisk A/S

Primary lead investigator

## Study timelines

### Date when funding contract was signed

Actual: 05/11/2014

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### Study start date

Planned: 16/03/2015

Actual: 16/03/2015

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### Date of final study report

Planned: 19/03/2019

Actual: 27/03/2019

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Novo Nordisk A/S

## Study protocol

[4189-protocol-version-2-redacted.pdf](#)(463.25 KB)

[4189-protocol-version-5-redacted.pdf](#)(555.04 KB)

## Regulatory

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

No

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### **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

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**Study type:**

Non-interventional study

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**Scope of the study:**

Effectiveness study (incl. comparative)

Safety study (incl. comparative)

**Data collection methods:**

Primary data collection

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**Main study objective:**

The primary objective is to monitor and assess the safety of Tresiba®, used with any other anti diabetic treatment and according to label, by analysing whether treatment with Tresiba® OD is associated with a change in the rate of any hypoglycaemic episodes occurring during the observation period, compared to the rate of any hypoglycaemic episodes occurring during the baseline period.

## Study Design

**Non-interventional study design**

Cohort

## Study drug and medical condition

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

INSULIN DEGLUDEC

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## **Medical condition to be studied**

Diabetes mellitus

Type 1 diabetes mellitus

Type 2 diabetes mellitus

## Population studied

### **Short description of the study population**

Male or female patients aged  $\geq 18$  years of age with either T1DM or T2DM (insulin using) (clinically diagnosed) prior to visit 1, who signed an informed consent form, and whose physician plans to start Tresiba® treatment.

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### **Age groups**

Adults (18 to < 46 years)

Adults (46 to < 65 years)

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### **Special population of interest**

Other

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### **Special population of interest, other**

Diabetes mellitus patients

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### **Estimated number of subjects**

1262

## Study design details

## Outcomes

Change in the number of any hypoglycaemic episodes, Change from baseline in HbA1c (glycosylated haemoglobin)Change from baseline in FPG (Fasting Plasma Glucose)Change from the baseline period in the number of severe hypoglycaemic episodesChange from baseline in HR-QoL (health-related quality of life) questionnaire scores (PROs (patient reported outcome): SF-36 (short form 36), and DTSQ(Diabetes Treatment Satisfaction Questionnaire ))

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## Data analysis plan

All observational endpoints will be analysed on the full analysis set (FAS). The FAS includes all patients who received at least 1 dose of Tresiba® at visit 2. Patients who complete visit 1 but do not initiate Tresiba® at visit 2 will be excluded from the analysis. Patients will be analysed separately based on being T1DM or T2DM patients treated with insulin.

## Documents

### Study results

[4189-nsr-eu-pas-reg-redacted.pdf](#)(1.15 MB)

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## 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 sources (types)

Other

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### Data sources (types), other

Prospective patient-based data collection

## Use of a Common Data Model (CDM)

### CDM mapping

No

## Data quality specifications

### Check conformance

Unknown

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### Check completeness

Unknown

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### Check stability

Unknown

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### Check logical consistency

Unknown

## Data characterisation

### Data characterisation conducted

Unknown