



#1 dispensed basal insulin as prescribed by Endocrinologists<sup>1\*</sup>

**TRESIBA**<sup>®</sup>  
insulin degludec injection

# QUESTIONS AND ANSWERS

## About once-daily Tresiba<sup>®</sup> (insulin degludec injection)

For your patients starting basal insulin

### What is Tresiba<sup>®</sup> and what is it indicated for?

Tresiba<sup>®</sup> (insulin degludec injection) is an ultra-long-acting basal insulin analogue used to lower blood glucose.<sup>2\*</sup>

Tresiba<sup>®</sup> is indicated for once-daily treatment of adults with diabetes mellitus to improve glycemic control.

Tresiba<sup>®</sup> is also indicated for the treatment of pediatric patients (>2 years old) with type 1 diabetes mellitus.

### How did Tresiba<sup>®</sup> compare to Lantus<sup>®</sup>?

In an event-driven, non-inferiority clinical trial (of 2-year median duration) in patients with inadequately controlled type 2 diabetes (T2DM) at high risk of cardiovascular events.<sup>2,3†</sup>

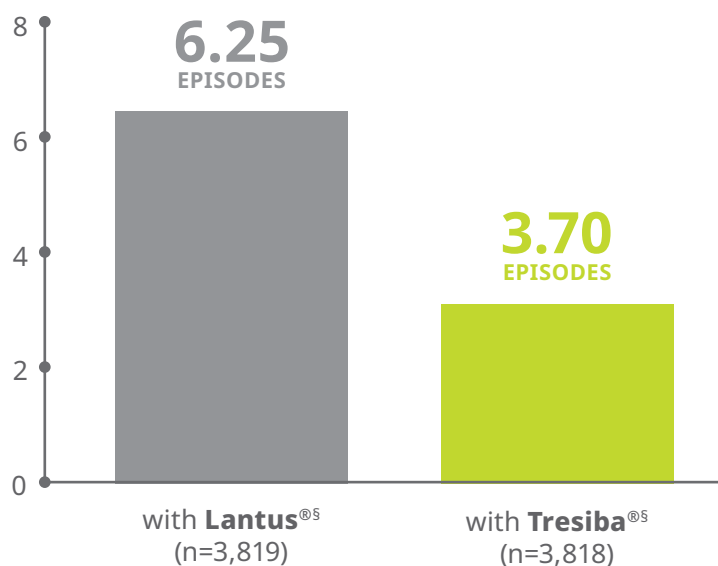
**Tresiba<sup>®</sup> was non-inferior to Lantus<sup>®</sup>** in time to occurrence of an Event Adjudication Committee-confirmed, 3-component major adverse cardiovascular event (**MACE**) (1° endpoint)

## HAZARD RATE RATIO:‡ 0.91

(95% CI [0.78; 1.06] vs. Lantus<sup>®§</sup>)  
3-component MACE occurred in 8.5% of the Tresiba<sup>®</sup> group (n=325) vs. 9.3% of the Lantus<sup>®</sup> group (n=356)

Tresiba<sup>®</sup> is not indicated for cardiovascular outcomes.

### Low rate of severe hypoglycemia demonstrated (2° endpoint)<sup>¶</sup>



Rate of **severe hypoglycemia** per 100 patient-years of observation  
Rate ratio<sup>\*\*</sup>: 0.60 (0.48; 0.76)<sup>††</sup>

\* Clinical significance has not been established.

† See back cover for full study design.

‡ Hazard rate ratio and 95% CI is based on a Cox proportional hazards regression.

§ In addition to standard of care for diabetes and cardiovascular disease.

¶ Severe hypoglycemia was defined as an episode requiring assistance of another person to actively administer carbohydrate, glucagon, or take other corrective actions.

\*\* The rate ratio and 95% CI is based on a negative-binomial regression with log (PYO) as an offset.

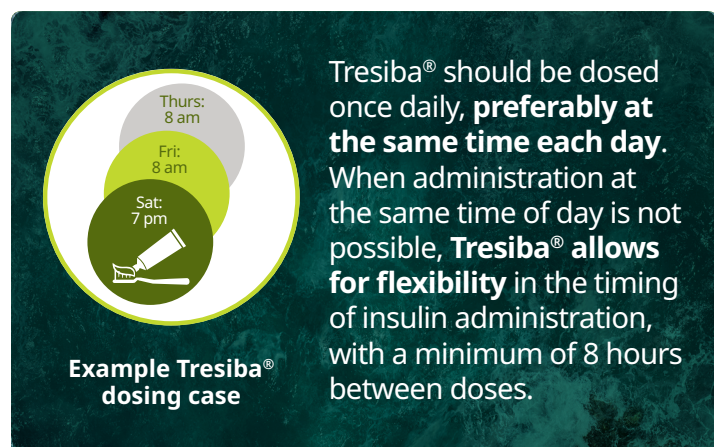
†† Test for superiority evaluated at 5% level for significant (2-sided p<0.001).

The Type I error was controlled by means of a pre-specified hierarchical testing strategy. CI, confidence interval.

## What is the duration of action and dosing for Tresiba®?

Duration of action: 42+ HOURS

### Convenient once-daily dosing<sup>2\*†</sup>



Fictitious case; may not be representative of all patients.

## Initiating Tresiba® for your patients<sup>2†‡</sup>

### Insulin-naïve

Adults with **T2DM**

- Start with **10 Units** followed by individual dosage adjustments

**T1DM**

- Calculate total daily insulin dose as **0.2–0.4 Units/kg/day**
- Initiate Tresiba® as  $\frac{1}{3}$ – $\frac{1}{2}$  of total daily insulin requirement
- Administer remainder as mealtime insulin

### Switching from another basal insulin

Adults with **T2DM**

- **1:1** from once-daily basal insulin
- **Reduce dose by 20%** from twice-daily basal insulin or Toujeo®

**T1DM**

- Reduce dose by 20%

- Close glucose monitoring is recommended during the transfer and in the following weeks
- If needed, adjust doses and timing of concurrent mealtime insulin or antidiabetic treatments

## How could you get this patient started with Tresiba®?

### Patient Profile



#### Margot

- 62 years of age
- Type 2 diabetes
- Insulin-naïve

#### Starting Tresiba®

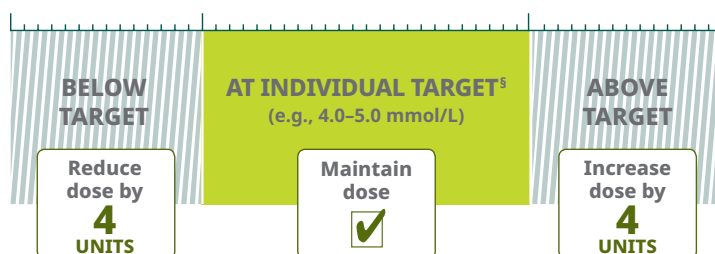
- Start with **10 Units** dosed once daily followed by individual dosage adjustments

For more dosage and administration instructions, please refer to the Product Monograph.

## How can Tresiba® be titrated in patients with type 2 diabetes?

### Example dosing and titration schedule<sup>4</sup>

Once-daily Tresiba® can be **titrated once a week** based on **that morning's** fasting (pre-breakfast) glucose measurement:



Adapted from Philis-Tsimikas, et al., 2013.

Margot has been titrating her dose up by 4 Units every week because she has not reached her pre-breakfast glucose target. At 4 weeks, she will be taking 22 Units of Tresiba® daily.

# What if Margot missed a dose of Tresiba®?

## ? Example Tresiba® dosing case

- Margot takes her Tresiba® consistently, every day at 7 am
- Margot was up early taking care of her grandson and forgot to take her dose. She should:
  - Take her dose **as soon as she remembers**
- Margot remembers her forgotten dose at lunch time, 12 pm, so she takes her dose immediately
  - Since there are **more than 8 hours** between 12 pm and 7 am, she can **return to her usual dosing time** the next morning and remain consistent with her usual dosing schedule

## How is Tresiba® supplied?

Tresiba® is administered as a subcutaneous injection and is available in the FlexTouch® prefilled pen.<sup>2</sup>

| Dosage Form                 | FlexTouch® 200 Units/mL | FlexTouch® 100 Units/mL |
|-----------------------------|-------------------------|-------------------------|
| Maximum Units per Injection | 160 Units               | 80 Units                |
| Units per Pen               | 600 Units               | 300 Units               |
| Dose Increment              | 2 Units                 | 1 Unit                  |
| Pens per Box                | 3 Pens                  | 5 Pens                  |
| Units per Box               | 1,800 Units             | 1,500 Units             |



No dose recalculations are needed to determine the dose of Tresiba®. The dose counter shows the dose dialed in Units.

## How is Tresiba® stored?

### Before first use:

Store Tresiba® in a refrigerator (2°C–8°C).

### In use:

After first opening or if carried as a spare, Tresiba® can be stored at room temperature (not above 30°C) or in a refrigerator (2°C–8°C) for 56 days (8 weeks).<sup>2</sup>

## What are the features of the FlexTouch® pen?

- Easy to use—the only prefilled pen with a light-touch button and no push-button extension<sup>5\*</sup>
- End-of-dose click to confirm dose delivery<sup>6\*</sup>
- Rated significantly easier to use by patients and HCPs (all  $p < 0.0001$ )<sup>5,7</sup>
  - **83%** of patients and HCPs preferred to use FlexTouch® versus SoloSTAR® (n=120) and **85%** preferred to use FlexTouch® versus KwikPen™ (n=160)\*
  - 9% for SoloStar®, 6% had no preference (n=120)
  - 4% for KwikPen™, 9% had no preference (n=160)

\* Clinical significance has not been established.  
† The dosage of Tresiba® should be individualized and titrated under the supervision of a healthcare provider in accordance with the metabolic needs of the patient and the glycemic control target and with appropriate glucose monitoring.  
‡ Please refer to the Product Monograph for complete dosing information.  
§ From Diabetes Canada Guideline: Glycemic targets should be individualized. Diabetes Canada targets may differ. Please see guideline for more information.  
Fictitious case; may not be representative of all patients.  
T1DM: type 1 diabetes mellitus; T2DM: type 2 diabetes mellitus.



## Is Tresiba® covered by provincial formularies?

Tresiba® is covered by most provincial formularies across Canada\*—including in Quebec as a general benefit†

### **Clinical use:**

- Not recommended for treatment of diabetic ketoacidosis

### **Contraindication:**

- During episodes of hypoglycemia

### **Most serious warnings and precautions:**

**Hypoglycemia** is the most common adverse effect of insulin

- Glucose monitoring is required
- Uncorrected hypo- or hyperglycemic reactions can cause loss of consciousness, coma and even death
- Use caution and medical supervision when converting insulin products

### **Administration**

- Inspect visually prior to administration and only use if solution appears clear and colourless
- Do not mix with any other insulin, administer intravenously or use in insulin infusion pumps

### **Other relevant warnings and precautions:**

- Refer to respective product monographs for concomitant oral antidiabetic agents for their warnings and precautions
- Stress or concomitant illness, especially infections and febrile conditions, may change insulin requirements

- Tresiba® should not be diluted
- Combination with thiazolidinediones (TZD) not indicated in type 2 diabetes; can cause heart failure and edema
- Risks associated with sharing insulin delivery devices
- Hyperglycemia
- Risk of hypokalemia
- Dosing may need to be adjusted in patients with renal and/or hepatic impairment
- Risk of immune responses (e.g., systemic allergic reactions or antibody production)
- Pregnant and nursing women
- Pediatrics
- Geriatrics

### **For more information:**

Please consult the Product Monograph at [www.Tresibapm-e.ca](http://www.Tresibapm-e.ca) for more information relating to adverse reactions, drug interactions, and dosing information which have not been discussed in this piece.

The Product Monograph is also available by calling us at 1-800-465-4334.

\* Public formulary coverage is available in all provinces with the exception of British Columbia.

† Tresiba® was previously listed as an exceptional medication for treatment of diabetes where a prior trial with an intermediate-acting insulin has not allowed for adequate control of the glycemic profile without causing an episode of serious hypoglycemia or frequent episodes of hypoglycemia.

### **References:**

1. Data on file: IQVIA data. Novo Nordisk Canada Inc. November 2020.
2. Tresiba® Product Monograph. Novo Nordisk Canada Inc., 2019.
3. Marso SP, et al. Efficacy and safety of degludec versus glargine in type 2 diabetes. *N Eng J Med*. 2017;377(8):723-732. 7,637 patients with inadequately controlled type 2 diabetes and atherosclerotic cardiovascular disease were randomized to either Tresiba® or Lantus® in a randomized, double-blind, treat-to-target, event-driven clinical trial. Each was administered once-daily between dinner and bedtime in addition to standard of care for diabetes and cardiovascular disease for a median duration of 2 years. Event Adjudication Committee (EAC)-confirmed 3-component major adverse cardiovascular event (MACE) was defined as cardiovascular death, non-fatal myocardial infarction, or non-fatal stroke. Non-inferiority of Tresiba® to Lantus® was considered confirmed if the upper limit of the two-sided 95% confidence interval for the hazard ratio of MACE was below 1.3.
4. Philis-Tsimikas A, et al. Insulin degludec once-daily in type 2 diabetes: Simple or step-wise titration (BEGIN: once simple use). *Adv Ther*. 2013;30(6):607-622.
5. Bailey T, et al. Usability and preference evaluation of a prefilled insulin pen with a novel injection mechanism by people with diabetes and healthcare professionals. *Curr Med Res Opin*. 2011;27(10):2043-2052.
6. Pfützner A, et al. Accuracy and preference assessment of prefilled insulin pen versus vial and syringe with diabetes patients, caregivers, and healthcare professionals. *Curr Med Res Opin*. 2013;29(5):475-481.
7. Oyer D, et al. Ease of use and preference of a new versus widely available prefilled insulin pen assessed by people with diabetes, physicians and nurses. *Expert Opin Drug Deliv*. 2011;8(10):1259-1269.
8. Diabetes Canada Clinical Practice Guidelines Expert Committee. Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. *Can J Diabetes*. 2018;42:S1-S325.