Trulicity® (dulaglutide) demonstrates superiority in reduction of cardiovascular events for broad range of people with type 2 diabetes

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Only 31 percent of REWIND trial participants had established CV disease

INDIANAPOLIS, Nov. 5, 2018 /PRNewswire/ -- Trulicity® (dulaglutide) significantly reduced major adverse cardiovascular events (MACE), a composite endpoint of cardiovascular (CV) death, non-fatal myocardial infarction (heart attack) or non-fatal stroke, meeting the primary efficacy objective in the precedent-setting REWIND trial. Eli Lilly and Company's (NYSE: LLY) once-weekly Trulicity is the first type 2 diabetes medicine to demonstrate superiority in the reduction of MACE events in a clinical trial that included a majority of participants who did not have established CV disease.

The study included a majority of patients without established CV disease at baseline, a first for the GLP-1 receptor agonist class. REWIND assessed the risk of MACE in adults with type 2 diabetes with a wide range of CV risk. The study compared the effect of once-weekly Trulicity 1.5 mg to placebo when added to standard of care.

"The REWIND study was ambitious, assessing whether Trulicity could protect people with type 2 diabetes from experiencing an initial cardiovascular event, and prevent future events in those who have established cardiovascular disease," said Hertzel Gerstein, M.D., MSc, FRCPC, professor of medicine and deputy director of the Population Health Institute at McMaster University and Hamilton Health Sciences, and REWIND study chair. "The MACE reduction demonstrated by Trulicity, across a broad range of people with type 2 diabetes, is compelling and we look forward to analyzing and reporting all of the data."

REWIND is distinct compared to other CV outcome trials due to the limited number of people with established CV disease who participated in the trial, allowing Trulicity’s CV effect to be measured in a broad population of people with type 2 diabetes. Importantly, REWIND had a median follow-up period of more than 5 years, the longest for a CV outcome trial in the GLP-1 receptor agonist class. In comparison, other CV outcomes trials had more people with a higher baseline A1C and a greater percentage of patients who had established CV disease. Of the 9,901 REWIND participants, the mean baseline A1C was relatively lower at 7.3 percent, and only 31 percent had established CV disease.

"The broad range of people with type 2 diabetes studied in REWIND, including those with and without cardiovascular disease, underscores the importance of these findings in this precedent-setting trial," said Enrique Conterno, president, Lilly Diabetes and Lilly USA. "Millions of people with type 2 diabetes face a high risk for cardiovascular disease. These data further validate Trulicity as a well-established option for people with type 2 diabetes."

The safety profile of Trulicity in REWIND was generally consistent with the GLP-1 receptor agonist class. Lilly plans to submit these data to regulatory authorities next year and to share detailed results at the American Diabetes Association Scientific Sessions in 2019.

About the REWIND Study
REWIND (Researching cardiovascular Events with a Weekly INcretin in Diabetes) was a multicenter, randomized, double-blind, placebo-controlled trial designed to assess the effect of Trulicity 1.5 mg, a weekly glucagon-like peptide 1 receptor agonist (GLP-1 RA), compared to placebo, both added to standard of care, on cardiovascular (CV) events in adults with type 2 diabetes. The primary CV outcome was the first occurrence of MACE (the composite of CV death or non-fatal myocardial infarction or non-fatal stroke). Secondary outcomes include each component of the primary composite CV outcome, a composite clinical microvascular outcome comprising retinal or renal disease, hospitalization for unstable angina, heart failure requiring hospitalization or an urgent heart failure visit, and all-cause mortality. The 9,901 participants from 24 countries had a mean duration of diabetes of 10 years and a mean baseline A1C of 7.3 percent. Thirty-one percent of participants had established CV disease at baseline. Prior (or established) cardiovascular disease in REWIND was defined as prior myocardial infarction, prior ischemic stroke, prior unstable angina, prior revascularization (coronary, carotid, or peripheral), prior hospitalization for ischemia-related events (unstable angina or myocardial ischemia on imaging, or need for percutaneous coronary intervention), or prior documented myocardial ischemia.

The REWIND trial’s international scope, high proportion of women, high proportion of people without established cardiovascular disease and inclusion of participants with a lower mean baseline A1C suggest that the findings will be directly relevant to the typical type 2 diabetes patient seen in general practice throughout the world.

Indication and Limitations of Use for Trulicity®

Trulicity is a once-weekly injectable prescription medicine to improve blood sugar (glucose) in adults with type 2 diabetes mellitus. It should be used along with diet and exercise. Trulicity is not recommended as the first medication to treat diabetes. It has not been studied in people who have had inflammation of the pancreas (pancreatitis). Trulicity should not be used by people with type 1 diabetes, people with diabetic ketoacidosis, or people with a history of severe gastrointestinal (GI) disease. It is not a substitute for insulin. It has not been studied in children under 18 years of age.

Important Safety Information for Trulicity®

Patients should tell their healthcare provider if they get a lump or swelling in their neck, have hoarseness, trouble swallowing, or shortness
of breath while taking Trulicity. These may be symptoms of thyroid cancer. In studies with rats or mice, Trulicity and medicines that work like Trulicity caused thyroid tumors, including thyroid cancer. It is not known if Trulicity will cause thyroid tumors or a type of thyroid cancer called medullary thyroid carcinoma (MTC) in people. Patients should not take Trulicity if they or any of their family members have ever had MTC or if they have Multiple Endocrine Neoplasia syndrome type 2 (MEN 2).

Patients should not take Trulicity if they have had an allergic reaction to dulaglutide or any of the other ingredients in Trulicity.

Trulicity should not be used in children under 18 years of age.

**Trulicity may cause serious side effects, including:**

- **Inflammation of the pancreas (pancreatitis).** If a patient has pain in their stomach area (abdomen) that is severe and will not go away, they should stop taking Trulicity and call their healthcare provider right away. The pain may happen with or without vomiting. It may be felt going from the abdomen through to the back.
- **Low blood sugar (hypoglycemia).** If patients are using another medicine that can cause low blood sugar (such as insulin or a sulfonylurea) while taking Trulicity, their risk for getting low blood sugar (hypoglycemia) may be higher. Signs and symptoms of low blood sugar may include dizziness, blurred vision, anxiety, irritability, mood changes, sweating, slurred speech, hunger, confusion or drowsiness, shakiness, weakness, headache, fast heartbeat, or feeling jittery. Patients should talk to their healthcare provider about low blood sugar and how to manage it.
- **Serious allergic reactions.** Patients should stop taking Trulicity and get medical help right away if they have symptoms of a serious allergic reaction including: swelling of the face, lips, tongue or throat; problems breathing or swallowing; severe rash or itching; fainting or feeling dizzy; or very rapid heartbeat.
- **Acute kidney injury.** In people who have kidney problems, diarrhea, nausea, and vomiting may cause a loss of fluids (dehydration). This may cause kidney problems to get worse.
- **Severe stomach problems.** Trulicity may cause stomach problems, which could be severe.

Patients should tell their healthcare provider if they:

- have or have had problems with their pancreas, kidneys, or liver.
- have severe problems with their stomach, such as slowed emptying of the stomach (gastroparesis) or problems with digesting food.
- have any other medical conditions.
- are pregnant or plan to become pregnant, or if they become pregnant while taking Trulicity. It is not known if Trulicity will harm their unborn baby.
- are breastfeeding or plan to breastfeed. It is not known if Trulicity passes into breast milk. Patients should not use Trulicity while breastfeeding without first talking to their healthcare provider.
- are taking other medicines including prescription and over-the-counter medicines, vitamins, and herbal supplements.
  - Trulicity may affect the way some medicines work and some medicines may affect the way Trulicity works.
- are taking other medicines to treat diabetes, including insulin or sulfonylureas.

If patients take too much Trulicity, they should call their healthcare provider or go to the nearest emergency room right away.

**The most common side effects with Trulicity may include:** nausea, diarrhea, vomiting, abdominal pain and decreased appetite. Patients should talk to their healthcare provider about any side effect that bothers them or does not go away. These are not all the possible side effects of Trulicity. Patients should call their doctor for medical advice about side effects.

Patients are encouraged to report side effects of prescription drugs to the FDA. Visit [www.fda.gov/medwatch](http://www.fda.gov/medwatch) or call 1-800-FDA-1088.

**Please click to access Prescribing Information, including Boxed Warning about possible thyroid tumors including thyroid cancer, and Medication Guide.**

**Please see Instructions for Use included with the pen.**

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**About Diabetes**

Approximately 30 million Americans¹ and an estimated 425 million adults worldwide have diabetes.² Type 2 diabetes is the most common type internationally, accounting for an estimated 90 to 95 percent of all diabetes cases in the United States alone.¹ Diabetes is a chronic disease that occurs when the body does not properly produce or use the hormone insulin.

**About Lilly Diabetes**

Lilly has been a global leader in diabetes care since 1923, when we introduced the world's first commercial insulin. Today we are building upon this heritage by working to meet the diverse needs of people with diabetes and those who care for them. Through research, collaboration and quality manufacturing we strive to make life better for people affected by diabetes. We offer a wide range of therapies and a continued determination to provide real solutions—from medicines and technologies to support programs and more. For the latest updates, visit [http://www.lillydiabetes.com/](http://www.lillydiabetes.com/) or follow us on Twitter: @LillyDiabetes and Facebook: LillyDiabetesUS.

**About Eli Lilly and Company**

Lilly is a global healthcare leader that unites caring with discovery to make life better for people around the world. We were founded more than a century ago by a man committed to creating high-quality medicines that meet real needs, and today we remain true to that mission in all our work.
Across the globe, Lilly employees work to discover and bring life-changing medicines to those who need them, improve the understanding and management of disease, and give back to communities through philanthropy and volunteerism. To learn more about Lilly, please visit us at www.lilly.com and www.lilly.com/newsroom/social-channels.

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This press release contains forward-looking statements (as that term is defined in the Private Securities Litigation Reform Act of 1995) about Trulicity (dulaglutide) as a treatment for type 2 diabetes and as a potential treatment for the reduction of cardiovascular events and its safety profile and reflects Lilly’s current belief. However, as with any pharmaceutical product, there are substantial risks and uncertainties in the process of development and commercialization. Among other things, there can be no guarantee that future study results will be consistent with study findings to date, that Trulicity will receive additional regulatory approvals or that Trulicity will prove to be commercially successful. For further discussion of these and other risks and uncertainties, see Lilly’s most recent Form 10-K and Form 10-Q filings with the United States Securities and Exchange Commission. Except as required by law, Lilly undertakes no duty to update forward-looking statements to reflect events after the date of this release.


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