

Unique Protocol ID: 13000

Secondary ID: I3P-LQ-GKBB

Brief Title: Safety and Tolerability Study in Patients With Type 2 Diabetes Mellitus

Official Title: Phase 1 Placebo Controlled Study to Assess Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of LY After Multiple Oral Doses in Patients with Type 2 Diabetes Mellitus

Study Type: Interventional

Sponsor: Eli Lilly

Collaborators: N/A

Brief Summary: Study to evaluate the safety and tolerability of LY2608204 in patients with type 2 diabetes

Detailed Description:

Subjects will receive an oral capsule(s), placebo or active drug administered once daily for approximately 14 days in each of the first 3 cohorts.

The starting dose for the fourth cohort will be decided after review of safety and glycemic data in the first 3 cohorts. Subjects in the fourth cohort will be dose titrated up to a maximum of 160 mg based on tolerability.

Overall Status: Completed

Study Start Date: January 2010

Study Completion Date: July 2010 Actual

Study Design:

Primary Purpose: Treatment

Study Phase: 1

Interventional Model: Single Group Assignment

Number of Arms: 2

Masking: Single Blind (Subject)

Allocation: Randomized

Control: Placebo Control

Endpoint Classification: Pharmacokinetics/Dynamics Study

Enrollment: 24 Anticipated

Primary Outcome Measure:

Measure: Clinically significant effects of LY2608204

Timeframe: Baseline to through day 21

Secondary Outcome Measure:

Measure: Pharmacokinetics - concentration maximum (C<sub>max</sub>) after multiple oral doses in patients with type 2 diabetes

Timeframe: Pre-dose, Day 1, 6,7,8,14,16,19 and 21

Measure: Pharmacokinetics Area Under the Curve (AUC) after multiple oral doses in patients with type 2 diabetes

Timeframe: Pre-dose, Day 1, 6,7,8,14,16,19 and 21

Measure: Change from baseline in fasting blood glucose

Timeframe: Baseline, Day 1, 7, 14 and 21

Measure: Change from baseline in fasting blood insulin

Timeframe: Baseline, Day 1, 7, 14 and 21

Measure: Change from baseline in glucagon-like peptide-1

Timeframe: Baseline, Day 1, 7, 14 and 21

Measure: Change from baseline in glucagon

Timeframe: Baseline, Day 1, 7, 14 and 21

Condition(s): Diabetes Mellitus, Type 2

Keywords:

Diabetes

blood sugar

Arms	Assigned Interventions
Experimental: LY2608204	Drug: LY2608204 20-160 mg, oral, daily for 14 days
Placebo Comparator: Placebo	Drug: Placebo Oral, daily for 14 days

#### Eligibility Criteria:

##### Inclusion Criteria:

- Patients diagnosed with type 2 diabetes who are currently treated with diet/lifestyle measures alone or in combination with stable metformin monotherapy with inadequately controlled blood glucose levels
- Hemoglobin A1c > 7 % and < 10 % at screening
- Women must be surgically sterile or post-menopausal
- Body mass index > 18.5 kg/m<sup>2</sup> and < 35.0 kg/m<sup>2</sup>
- Venous access sufficient to allow blood sampling
- Are reliable and available for the duration of study and willing to follow study procedures
- Have given written informed consent
- Have supine systolic blood pressure < 160 mmHg and supine diastolic blood pressure < 100 mmHg
- Alanine aminotransferase or aspartate aminotransferase levels below 1.5 times the upper limit of the reference range
- Bazett's-corrected QT interval less than or equal to 450 msec for men and less than or equal to 470 msec for women

##### Exclusion Criteria:

- Have significant history of past or current cardiovascular, respiratory, hepatic, renal, gastrointestinal, endocrine (other than diabetes), hematological, or neurological disorders capable of significantly altering the absorption, metabolism or elimination of drugs or of constituting a risk when taking the study drug formulations or interfering with the interpretation of data
- An abnormality in the 12-lead ECG that in the opinion of the investigator increases the risk of participating in the study
- Patients who have any evidence of heart insufficiency, hypokalemia, family history of long-QT-syndrome or are receiving drugs which extend the QT interval
- Have taken any glucose lowering oral agents other than metformin in the past 6 months
- Use of insulin for diabetic control within 1 year of study entry
- Have any other type of diabetes mellitus other than type 2
- Use of any known inducers or inhibitors of CYP3A within 14 days prior to the first dosing with study drug
- History of a hypoglycemic event with acute mental status alteration that was not preceded by prodromal symptoms recognizable to the patient

- Triglycerides > 400 mg/dL at screening
- Serum creatinine >1.3 mg/dL in women, >1.5 mg/dL in men
- Clinical evidence of active diabetic proliferative retinopathy
- Known significant autonomic neuropathy as evidenced by urinary retention, orthostatic hypotension, diabetic diarrhea or gastroparesis
- Clinically significant coronary events or symptoms within 6 months prior to study entry
- Clinically significant peripheral vascular disease
- Have a history of hypersensitivity to the study drug or any of the excipients or to medicinal products with similar chemical structures
- Have received treatment with any other study drug in the last 8 weeks before administration of the first dose in this clinical study
- Evidence of human immunodeficiency virus infection and/or positive human HIV antibodies/antigen
- Evidence of hepatitis C and/or positive hepatitis C virus antibody
- Evidence of hepatitis B and/or positive hepatitis B surface antigen
- Use of known drugs of abuse and/or positive findings on urinary drug screening, other than findings consistent with medication prescribed by the patient's physician or over-the-counter medications
- Donation or loss of blood equal to or exceeding 500 mL during the 8 weeks before the first administration of study drug
- Patients who have an average weekly alcohol intake that exceeds 21 units per week (males) and 14 units per week (females) (1 unit = 12 oz or 360 mL of beer; 5 oz or 150 mL of wine; 1.5 oz or 45 mL of distilled spirits) or patients unwilling to stop alcohol consumption 24 hours prior to admission until the completion of each in-patient study period
- Patients who smoke >5 cigarettes or other tobacco products per day before study entry. Patients will not be allowed to smoke for the duration of the study

Minimum Age: 21

Maximum Age: 70

Gender: Both

Contact for Public Queries: Call 1-877-CTLILLY (1-877-285-4559) or 1-317-615-4559 Mon - Fri 9 AM - 5 PM Eastern time (UTC/GMT - 5 hours, EST)

Contact for Scientific Queries: 1-877-CTLILLY (1-877-285-4559) or 1-317-615-4559

Locations:

Lilly Clinical Trial Site  
George, South Africa  
Completed