

5<sup>th</sup> World Congress on

# Diabetes & Metabolism

November 03-05, 2014 Embassy Suites Las Vegas, USA

## Glargine (Lantus): A new horizon ultralong basal insulin in type II diabetes along with triple drug

Premanidhi Panda

Dr. Panda Diabetes Institute, India

**Introduction:** Diabetes mellitus, often simply referred to as diabetes—is a group of metabolic diseases in which a person has high blood sugar, either because the body does not produce enough insulin, or because cells do not respond to the insulin that is produced. The greatest increase in prevalence is, however, expected to occur in Asia and Africa, where most patients will probably be found by 2030. Type 2 diabetes mellitus consists of an array of dysfunctions characterized by hyperglycemia and resulting from the combination of resistance to insulin action, inadequate insulin secretion, and excessive or inappropriate glucagons secretion. It requires two to three drug combinations produce good effects and less side effects. Therefore these two drugs taken into consideration like Glargine ultra long basal insulin (Lantus). It shows good glycemic control FBS, 2hr PPBS & HbA1C and Cholesterol and Triglyceride. Particularly study was done whose blood sugar was not controlled by Glimiperide, Metformin and Pioglitazone or Voglibose combines three drug therapies.

**Brief Description:** Insulin glargine, marketed by Sanofi-Aventis under the name Lantus, is a long-acting basal insulin analogue, given once daily to help control the blood sugar level of those with diabetes. It consists of microcrystals that slowly release insulin, giving a long duration of action of 18 to 26 hours, with a “peakless” profile (according to the insulin glargine package insert). Pharmacokinetic ally, it resembles basal insulin secretion of non-diabetic pancreatic beta cells. Sometimes, in type 2 diabetes and combination Glimeperide, Metformin & Pioglitazone/Voglibose with Uncontrolled Diabetes. There were 500 type 2 diabetic patients (age 45 +/- 15 years,) with poor glycemic control on oral ant diabetic agents randomized to treatment for 1 Year with bedtime insulin glargine. Oral agents were continued unchanged. The fasting blood glucose (FBG) target was <(120 mg/dl).

**Results:** Average glycemic control improved similarly with both insulins (HbA(1c), [reference range <6.5%] (glargine along with three drug regimen,). However, there was less nocturnal hypoglycemia (9.9 vs. 24.0% of all patients, glargine with three drugs regimen and lower post-dinner glucose concentrations 140 to 150mg/dl, with insulin glargine. Insulin doses and weight gain were comparable. In patients reaching target FBG, HbA(1c) averaged 5.8 to 6.7 in the glargine.

**Conclusions:** Use of insulin glargine (Lantus) compared with without Lantus with three drugs to be continued as before is associated with less nocturnal hypoglycemia and lower post-dinner glucose levels. These data are consistent with peak less and longer duration of action of insulin glargine compared without Lantus. Achievement of acceptable average glucose control requires titration of the insulin dose to an FBG target 110mg/dl. These data support use of insulin glargine (Lantus) in insulin combination regimens in type 2 diabetes. Patients with shorter duration T2DM better achieved target A1C levels and had lower hypoglycemia than those who had longer disease duration. Insulin glargine (Lantus) was associated with reduced A1C and fewer hypoglycemic events than comparators, regardless of disease duration.

### Biography

Premanidhi Panda has completed his MBBS at the age of 24 years from Berhampur University, India and Postdoctoral studies, MD (MED) from Utkal University School of Medicine. He is the Director of Dr. Panda Diabetes Institute, India. He has worked in Tisco Hospital, India, Benghazi Medical (Libya), Medwin Hospital with repute. He has been awarded as “India’s Best Doctor Award:-2013 (Diabetes)”.

[drpanda@sify.com](mailto:drpanda@sify.com)