

26th International Conference on Diabetes and Endocrinology

&

16th International Conference on Nutrition and Health

Nov 22-23, 2018 | Paris, France

Recent updates on glucokinase activators and glucokinase regulatory protein disrupters for the treatment of type 2 diabetes mellitus

Aditi Kaushik IK Gujrat Punjab Technical University, India

The impairment of glucose metabolism leads to hyperglycemia and type 2 diabetes mellitus. Glucokinase enzyme is the key regulator of glucose homeostasis that catalyzes the conversion of glucose to glucose-6-phosphate in liver and pancreatic cells. In hepatocytes, GK controls the glucose uptake and glycogen synthesis. The action of liver GK is controlled by glucokinase regulatory protein (GKRP) partially. In fasting conditions, the GKRP binds with GK and inactivate it from carbohydrate metabolism and serve as new target for treatment of diabetes mellitus. However, the GK activators as potential antidiabetic agents but results in increased risks of hypoglycemia. The allosteric inhibitors of the GK-GKRP interaction are coming as alternative agents that can mitigate the risk associated with GK activators. This review discusses the recent advances and current status of potential molecules targeted to GK activators and GK-GKRP disrupters

e: aditikaushik2006@gmail.com

Notes: