

KRE© Kamla-Raj 2017

Int J Hum Genet, 17(3): 140-144 (2017) DOI:10.31901/24566330.2017/17.03.07

Brief Communication

Genomics of Type 2 Diabetes Mellitus and Glycemic Traits

Vipin Gupta¹ and Gagandeep Kaur Walia²

¹Department of Anthropology, University of Delhi, Delhi 110 007, India ²Public Health Foundation of India, Gurgaon, Haryana, India

KEYWORDS Genome-wide Association Study. Type 2 Diabetes. India. Glycemic Traits

ABSTRACT The increased burden of type 2 diabetes mellitus (T2DM) has accelerated the number of genetic studies in different human populations for detecting at least predictive biomarkers related to T2DM. Genome-wide association designs have successfully identified number of potential genetic variants associated with T2DM and explained the polygenic nature of T2DM inheritance using large sample sizes. Genetic epidemiologists have also explored the quantitative glycemic traits simultaneously with T2DM and provided comprehensive picture of overlapping findings through biological pathways. Indian studies on genetics of T2DM are generally limited to the candidate gene based association designs and efforts were primarily made to validate the European findings. This manuscript is a broad comparative account of efforts in genetic evaluation of T2DM and its related measures in Western and Indian populations.