Understanding type 2 diabetes: impact of precision metabolomics

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Abstract:

Metabolites are functional readouts of physiological status in health in disease. We have used targeted metabolomics powered by mass spectrometry to identify biomarkers supporting early diagnosis of type 2 diabetes and its progression. The advantages of metabolic biomarkers are the robust and reproducible measurements. The biomarkers of type 2 diabetes have been replicated in Europe and Korea but not in India as yet. We have started a validation project involving clinical care unit and analytical unit in India to foster technology development and clinical replication. This project is supported by BMBF and IMCR in Germany and India, respectively.