PROJECT SUMMARY

Ref No.: MRIC-EIBS-0042	**Title:** Predictive genomics: A novel approach to Diabetes Management
Local Company: Axonova Pharma Ltd	
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TECHNICAL ABSTRACT

Axonova proposes to develop a project on Predictive Genomics for Diabetes. Non communicable diseases, including Diabetes, are the leading causes of death in Mauritius. While the Government and relevant institutions are investing massively in the treatment and management of the disease, there is still major improvement to be done in sensitizing and detecting diabetes among the general population.

While Type 2 Diabetes (T2D) is a multifactorial disease. There is a high correlation between excess weight, lifestyle and increasingly, evidenced based studies are showing the direct relationship between genetic variations and risk of developing T2D. There is a 70% chance of developing T2D in an individual when both parents have the disease. This is pertinent to Mauritius with the prevalence of T2D and pre-diabetic conditions within the population.

Axonova aims to introduce the concept of Predictive Genomics, a novel approach to predicting the development of T2D in an individual by combining physiological data, genetics and lifestyle to provide a customised report to the patient to assess his/her risk factor. By using a validated DIABETESpredict algorithm, a tailor-made report can be generated to help the individual adjust his/her lifestyle to reduce the risk of developing T2D.

Key Words: Predictive Genomics, Non-communicable diseases, Type 2 Diabetes, algorithm