

Title of the project

Towards Deciphering the Interaction between Diabetes and Cancer

Category (translational/bioengineering/biodesign): Translational

Investigators (IISc and clinical institutions)

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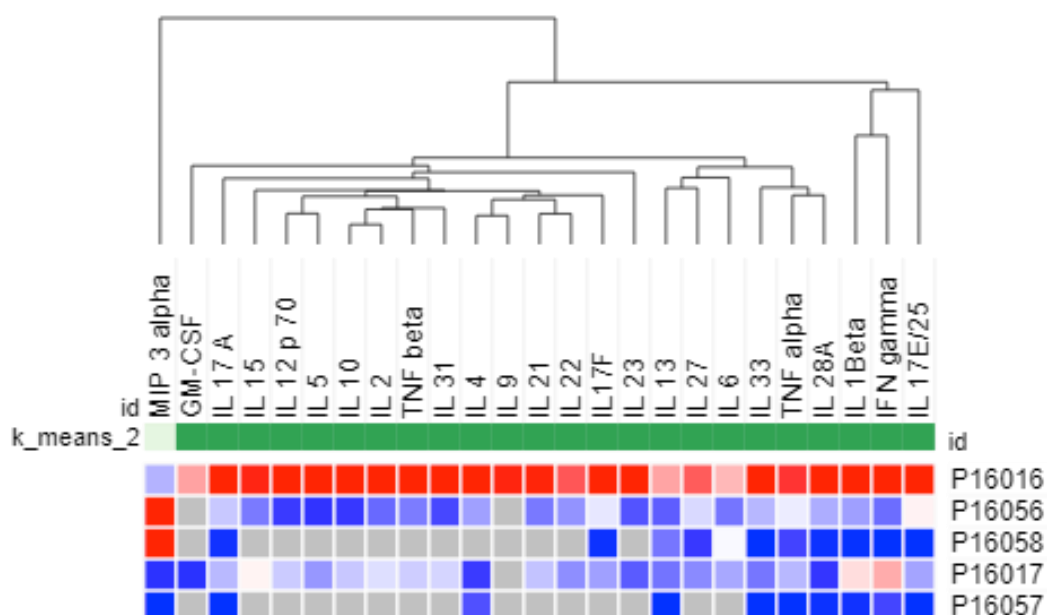
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Statement of research

Emerging evidence points towards an association between inflammation, diabetes and cancer (Demaria et al 2010). The association of obesity-linked inflammation with diabetes and with cancer is well known. However, in the absence of obesity, the relationship between inflammation & diabetes {Lean diabetes (Mary George et al, 2015), often the case in Indian subcontinent} and cancer remains to be characterized. To address this gap in knowledge, we propose to study the immune-metabolic profiles (Grivennikov et al 2010) of patients with cancer that either have or do not have diabetes as a co-morbidity. Such a study is likely to help in predicting a possible association of cancer risk in diabetics and will potentially result in the identification of specific immunological diagnostic markers for the progression of these diseases. An increased understanding of the **immunometabolic profiles of diabetics** is likely to help in predicting a possible association of cancer risk among them.



Representative blood cytokine analysis of cancer patients