

## Gene Panel Sequencing:

Human Gene Panels: Cancer, Diabetes, Cardiovascular, Neurodegenerative, Physical Fitness and Healthy Ageing. Custom Gene Panels. Entire coding region sequencing, assembly and data analysis.

This service is ideal for end users who are already suffering from any of the above-mentioned medical conditions and would like to make their treatment more personalised and precise with the addition of genetic information. End users with specific diagnosis can personalise their drug regime and possible interaction with hitherto unravelled medical conditions.

Similarly, end users who would like to plan their fitness regime and those who are keen to have a defined wellness management program for Healthy Ageing can also avail this service.

The major difference for this service and the above mentioned WGS/WES is that ONLY those genetic variants found in the Genes of the panel will be found and analysed. Any other related variants will not be found and may hamper a powerful personalization of precision medicine practice

Accuracy of Genetic variant annotations: 60-70%

Data output: 200-500 Mb

Data visualization: Customized Cloud based Interactive Knowledgebase accessible through Internet on Smart phone/PC/Tablet

Report: Custom report (PDF format) generation as required by Genetic consultant/Physician for a specific medical condition or wellness management.

ClinGen standard Gene panels and Custom Gene Panels covering the entire coding regions of the top 50 genes responsible for the given medical condition will be sequenced and annotated with Ethnic reference genome for Precision Medicine practice. Data will be analysed on Supercomputer with highly compute intensive algorithms in automated workflows to avoid any human errors and for faster Turn Around Time. Results to be available in a customised and dynamic knowledgebase hosted in the Cloud. Custom PDF reports can be generated for any set of genes or medical conditions as and when required.

