

Human centric digital twins services

Development of disease prevention systems by integrating multi-layered biomedical information

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Summary :

Multi-layered bio-medical information will be included into the current company-based health care system to develop a next-generation health care system.

These include -

1. Longitudinal health care information of employees in company-based cohort in Japan.
2. SNP typing information of individuals (with informed consent) to generate polygenic risk scores of various diseases.
3. Multi-omics information, such as information on the metabolome.

This project aims to integrate these multi-layered bio-medical information into a digital twin model of individuals in a middle-aged/working generation, and to develop novel algorithms to predict risk of various polygenic diseases in the Japanese population.

