

Outcome of the IHI JU Science and Innovation Panel on ideas submitted for potential IHI topics

Reference number of the idea: N° TI_001235

Advanced Health Prevention through Biomarker Measurement with Wearable Devices

Overall opinion

The idea is to develop a continuous preventive monitoring of biomarkers using wearable or implantable devices and a centralised monitoring system, allowing for A) the early detection, prevention and treatment of diseases and B) a better understanding of the determinants of health.

The submitted idea presents an interesting concept but lacks the necessary clarity and maturity at this stage. Several critical aspects require refinement before the idea can be considered viable.

Key concerns include the lack of specificity regarding the targeted preventive approach, the classification and validation of biomarkers, and the predictive value of these biomarkers in the given setting. Additionally, the idea appears to blend wearable and implantable devices without a clear distinction, raising feasibility and regulatory concerns. The concept of a centralised monitoring system also presents significant challenges in terms of implementation, sustainability, and overlap with existing initiatives (EHDS).

There is potential value in integrating learnings from previous projects (e.g. IMI) and considering a cross-sector approach to standardising remote monitoring, data collection, and visualisation. However, the current proposal needs further scoping, particularly in defining the healthcare impact, regulatory pathways, and real-world feasibility. More focus on unmet needs, early detection, and the societal and legal framework for centralised monitoring is essential.

At present, the currently formulated idea is not yet mature for obtaining a favourable opinion from the SIP.