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Thermo Fisher collaborates with Taiwan Precision Medicine initiative

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To genotype 1 million people in Taiwan



Thermo Fisher Scientific has partnered with the Taiwan Precision Medicine Initiative (TPMI) to advance the next phase of the large-scale predictive genomics study and support its goal of genotyping 1 million people in Taiwan. TPMI reached the milestone of enrolling more than 500,000 participants in July, making it the largest study of its kind outside of the United States and Europe.

Launched by Academia Sinica and a network of hospital systems throughout the country in 2019, the predictive genomics project aims to optimize the future of healthcare by enabling clinicians toward establishing future guidelines to manage patients at high risk for serious diseases such as cancer, cardiovascular, neurodegenerative and other disorders as well as provide personalized drug prescription based on pharmacogenetic factors.

TPMI initially collaborated with Thermo Fisher to design a custom genotyping research array for identifying genetic factors that may increase the risk of certain diseases. In the next phase of the project, TPMI will work with Thermo Fisher to optimize the Axiom genotyping platform with the aim of translating the results to clinical use and expanding the development of disease risk prediction algorithms for at least 20 common diseases relevant to Han Chinese people, approximately 18% of the global population.

The Axiom custom array developed for TPMI contains more than 700,000 genetic markers selected to capture variants of interest. Initial TPMI analysis revealed 83 potentially clinically relevant genes associated with disease risk or drug reactions.