

Korea University partners with US-based Seer to develop AI-driven diagnostics for cancers in young adults

June 4, 2025 | News

First-of-its-kind study will use Seer's next-generation workflow to identify early-onset cancer biomarkers



US-based Seer, Inc. and Korea University have announced the launch of a population-level study aimed at identifying novel blood-based biomarkers that could lead to cancer diagnostics for young adults in their 20s and 30s.

Relying on Seer's newly launched Proteograph® ONE Assay and SP200 Automation Instrument along with the Thermo Scientific™ Orbitrap™ Astral™ mass spectrometer, this is the first large-scale plasma proteomics initiative of its kind to leverage mass spectrometry and AI-driven analytics to enhance early cancer detection and improve patient outcomes.

Seer's latest platform advances will allow deep, unbiased proteomic analysis of 20,000 plasma samples in less time and cost than has ever before been possible. These will include samples from 15,000 cancer patients and 5,000 healthy patients that will serve as controls, sourced from Korea's leading cancer institutions: Seoul National University Hospital, the National Cancer Center, and Samsung Medical Center.

The three-year study is funded by the K-Health MIRAE initiative under the Ministry of Health and Welfare, Republic of Korea, which supports ambitious, high-impact health research.

By leveraging the power of deep proteomic analysis, this study aims to catalyse a new wave of diagnostics that are more sensitive, scalable, and personalised—ultimately driving earlier interventions and improving survival outcomes in young adult cancer patients worldwide