Thermo Fisher to advance disease biomarker validation

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Thermo Fisher and Newomics to optimize performance of high-throughput analytical workflows

Thermo Fisher Scientific, the world leader in serving science, and Newomics, a leading supplier of microfluidic emitters for liquid chromatography-mass spectrometry (LC-MS) applications, will combine their expertise and innovative technologies to develop and optimize sensitive, robust and reproducible microflow LC-MS workflows for the validation of disease biomarkers.

Unlike nanoflow chromatography, which slows the speed of analysis and can be difficult to maintain consistent performance during extended studies, microflow LC-MS provides a balance of speed, sensitivity and throughput for biomarker discovery and validation in translational proteomics laboratories. The collaboration brings together Thermo Scientific microflow LC-MS systems and Thermo Scientific Nanospray Flex ion source with Newomics' multi-nozzle emitters to achieve the benefit of nanospray flowrates, with the improved throughput and robustness of microflow LC-MS.

"Translating cutting-edge biomarker discoveries into clinically-meaningful applications requires validation workflows that allow rapid, sensitive, high-throughput analysis to run large numbers of samples," said Emily Chen, senior director, Precision Medicine Science Center, Thermo Fisher Scientific. "The goal of our collaboration with Newomics is to enable greater sensitivity and reproducibility using microflow LC-MS analyses to support the expanding need for high throughput analyses by our clinical research customers."

Daojing Wang, founder and chief executive officer, Newomics, said, "Combining our unique emitters with Thermo Fisher's microflow LC-MS expertise will improve the selectivity and sensitivity of workflows, helping scientists to detect even low-abundance analytes in clinically relevant samples, like blood and urine. We look forward to working closely with Thermo Fisher to develop and optimize microflow LC-MS solutions that we hope will advance our understanding and diagnosis of complex diseases."