Case Study

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Project Goal

In colorectal and breast cancers, we use proteomics to identify a senescence secretome to find biomarkers that could predict the efficacy of treatments.

The Solution

The TripleTOF® 5600+ System, a robust LC-MS/MS platform working at high throughput in microflow mode. It's way faster – 1 hour per sample - and more robust compared to nano flow with similar sensitivity.

We use SWATH Acquisition to get comprehensive coverage and high quality quantitation across many samples.

Biggest Challenges Right Now

- Ability to identify and quantify as many proteins as possible in our samples
- Acquisition of reproducible quantitative data
- Creation of permanent digital record of the proteome for each sample

Research Outcomes

We can work on very large cohorts (more than 150 tumor samples) to identify robust biomarkers or to better understand the cancer biology.

"SWATH Acquisition allows the creation of permanent digital record of the proteome for each cancer sample."

Type of Organization

Cancer Research Institution, Biomarkers & Omics

Goals

Identification of soluble and detectable markers of tumor progression

SCIEX PRODUCTS/ APPLICATIONS

- SWATH® Acquisition on the TripleTOF® 5600+ System
- SCIEX NanoLC™ 400 System (Microflow Mode)
- PeakView® Software
- MarkerView™ Software
- Multi-Omics Data Integration with OneOmics™

"Our activity in personalized medicine in oncology has dramatically increased."