

High-Recovery Centrifugal Concentrator Enables Sensitive Point-of-Care Diagnostic

Customer Challenge

The customer needed reliable centrifugal concentrators for processing patient samples. They had the following criteria:

- Delivers fast results and enables highly sensitive diagnostic results
- Error-proof, with the lowest possible dead volume
- Very high sample recovery

Solution Provided

Prior to contacting Sartorius, the diagnostic company tested several concentration methods during the R&D stage, and selected centrifugal concentrators as the best compromise between ease-of-use, speed, and recovery. Sartorius Vivaspin® devices with PES membrane successfully concentrated the molecular biomarker and demonstrated high recovery rate, low binding, and low dead-volume.

Further, preliminary testing ensured that the devices are biologically compatible and free of contaminants that may interfere with test performance, such as L&E, DNase, and RNase.

After the proof-of-concept phase, the company contacted a Sartorius expert via a contact form to discuss workflow, technology, quantities, market expectations, regulations, supply chain, and quality certifications.

The project involved Legal, Product Development, Product Management, Regulatory Affairs and Procurement from both parties.

After regulatory approval and before industrialization, the supply chain was secured with mid- and long-term forecasts and a Supply & Quality Agreement.

Regular follow-ups are carried out to optimize processes and discuss further improvements thus ensuring the client always has access to the latest technology.

At a Glance

- Centrifugal concentration of molecular biomarker
- High-recovery rates, low binding, and low dead-volume
- Increased sensitivity required in subsequent (semi-)quantitative tests
- Global-secured supply with regular follow-ups
- Download Application Note: [Urine Protein Concentration with Vivaspin®](#)
- Download Application Guide: [Concentration and Purification of Viruses by Ultrafiltration](#)



Case Profile

Company Type:
Global Molecular Diagnostic
Systems Manufacturer

Industry:
Diagnostic

Company Size:
1,000+ Employees

Outcome

The diagnostic manufacturer was able to gain a first-to-market advantage with a fast, sensitive, specific and decentralized point-of-care detection kit that allowed clinicians and caregivers to make immediate decisions.