



# NEXUS

The system that will be developed in the scope of Nexus will fully integrate small Extracellular Vesicles (EV) isolation from complex biological samples, their controlled enrichment and release, and simultaneous multiparametric analysis.

## ADVANTAGES:



Unprecedented specificity and sensitivity in the analysis of EVs protein markers



Minimal sample processing with in-line sample purification and analysis



Fully automated: more robust process, less hands-on and turnaround time



Clinically validated for prostate cancer stratification and prognosis



**Faster and more accurate liquid biopsy diagnosis**

## FOR THE PATIENT:

- less invasive procedures
- earlier and more accurate diagnosis
- real-time monitoring
- high precision and effective therapies

# FEATURES



## Integration

Hardware, consumables and reagents are integrated in all-in-one system, leading to seamless and smooth multi-parameter EV analysis

## High quality affinity reagents

Nexus features proprietary chemistry for configurable and multivalent DNA-Antibody tagging, to enable mass separation and capture on chip

## Automation

The platform is fully automated: this will guarantee to reduction of hands-on, turnaround time and margin for operator error, leading to optimized lab workflows

## Quality separation of EVs

Better yield, specificity and integrity of EVs with respect to conventional affinity tools and seamless release of intact EVs for downstream analytical steps

## Flexibility

The platform's flexible architecture, chemistry and operation sequence will enable user – customized and robust protocols, chips and assays, and ultimately smooth translation to clinics

## Ultra-high sensitive analysis

Better specificity, sensitivity, throughput and resolution for single EV analysis, driving clinical and diagnostic application of EV protein biomarkers

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