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Title: Nano-medical devices for liquid biopsy: our tech transfer journey

The study of circulating biomarkers through the so-called liquid biopsy has acquired relevance in recent years as they enable non-invasive monitoring of patients at different stages of the disease, from prevention and early diagnosis to therapy selection, enabling the realization of precision medicine. However, the isolation and analysis of these biomarkers is complicated and requires sophisticated sample preparation and biosensing tools.

Nano-enabled technologies possess significant advantages for superior extraction and analysis of these biomarkers. But after initial proof-of-concept and clinical demonstration, there is a long way ahead for the implementation of these technologies in clinical routine.

In this talk, I will present our journey from conceptualization in the lab to the translation in the clinic of an in vitro diagnostics device for cancer patient monitoring.