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Capitalising on Europe's research connections to tackle cancer

Across Europe, cancer researchers are collaborating more closely than ever, thanks to the EU-backed canSERV platform, which links scientists with research services and infrastructures to speed up discoveries and improve care for patients.

03 February 2026 - By HELEN MASSY-BERESFORD

For Dr Pavla Bouchalová, a cancer researcher in the department of biochemistry at Masaryk University in Brno, Czechia, answering complex questions about how colorectal tumours behave requires access to data, samples and analytical tools that go far beyond a single laboratory.

Through an EU-backed initiative called canSERV, Bouchalová's team gained access to colorectal cancer tissue samples and additional testing services that advanced their research.

"Without canSERV, we wouldn't have been able to do the DNA sequencing, RNA sequencing, or the AI-assisted analysis that we have been working on with the Netherlands," Bouchalová said. Her group is now evaluating the data before preparing their publications.

Her experience reflects a wider challenge – and opportunity – facing cancer research in Europe.

A growing need for collaboration

Around 2.7 million people in Europe are diagnosed with cancer each year, and the figure is expected to rise above 3.2 million by 2040. As the population ages and lifestyle-related risks persist, the need for better prevention, treatment and care remains urgent.

In response, cancer research in Europe is moving fast, through innovations such as RNA-based cancer treatments that target specific cancer cells, and advances in personalised medicine that promise improved outcomes.

Yet the oncology research landscape remains fragmented. Scientists often work in separate networks, with limited access to shared facilities or data, which can slow progress and limit collaboration.

To help overcome this fragmentation, canSERV was set up in 2022. The initiative connects cancer researchers and research services from nine EU countries and the UK, bringing together knowledge, technologies and expertise that might otherwise remain scattered.

Linking researchers and resources

Through canSERV, researchers can access a wide range of advanced services from partner institutions across Europe. The platform acts as a single-entry point that offers tools, technologies and data from research infrastructure in different countries, helping scientists conduct more ambitious studies and speed up discoveries.

“It’s a virtual European core facility for cancer research, where you can pick what you need for your project,” said Professor Jens Habermann, director general of BBMRI-ERIC, the pan-European infrastructure connecting biobanks and biomolecular resources and leading the canSERV collaboration.

“The idea crystallised in terms of defragmenting the European cancer research landscape,” Habermann said.

From academic research to biotech innovation

canSERV’s services are not only used by academic teams, but also by European biotech companies working on new therapies.

One example is Aptadel Therapeutics, a biotech company based in Barcelona, which is developing RNA-based cancer treatments designed to target tumour cells more precisely than traditional approaches.

Through canSERV, Aptadel’s researchers gained new insight into how specific drugs affect tumour cells at the molecular level.

They knew that the tumour cell could be killed by interfering with known oncogenic pathways. “But we didn’t have the fine molecular detail of how this was happening,” said Dr Adrian Torres, Aptadel’s chief scientific officer.

With support from canSERV partners in Czechia, Italy and Germany, the company accessed multiomics analyses, bringing together genomic and protein data to show how genes and proteins in cancer cells respond to treatment over time.

“These services allowed us to have a picture of what the cancer cell looks like at different time points, during our drug treatments, all across their genes and proteins,” Torres explained.

“The most efficient way for us to obtain these large datasets was by collaborating with expert groups that have this capacity.”

The findings are helping the team refine therapies that could be less toxic and more effective than chemotherapy. Aptadel also plans to share the data more widely to support further cancer research.

Building shared infrastructure

For Habermann, these examples – from university labs to biotech companies – show exactly what canSERV was designed to achieve.

“Reducing fragmentation is important not only for researchers, but for the benefit of European society as a whole,” he said. While some regions have made strong progress in personalised medicine, others are still catching up. Making research services widely available helps close that gap.

The platform has also been designed to be easy for research teams to use.

“We discussed with the partners the best scientific approach, prepared the samples and shipped them to the scientific facilities, where the partners processed the samples and delivered the data,” Torres said.

Habermann likens canSERV to shared transport infrastructure. “If each airline needed its own airport, it wouldn’t work. Sometimes the airport is not there, and so canSERV is building the infrastructure – or the airport – for cancer research.”

Sustaining collaboration

More than 150 researchers from 25 countries have already made use of canSERV’s support, and the organisers hope to maintain its services beyond the initiative’s planned end in August 2026.

The connections forged through the project are already laying the groundwork for new partnerships across Europe’s cancer research community.

“The canSERV programme allowed us to evaluate in much more depth key aspects related to the more fundamental science on how our compounds work,” Torres said. “We are generating new data and it’s our intention to make this data available – not just for us, but for all the scientific community.”

By making leading-edge research infrastructures accessible across borders, canSERV is helping Europe’s scientists work together more effectively – and bringing the shared goal of better cancer treatments a little closer.

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More info

- canSERV (CORDIS)
- canSERV project website
- Biobanks and biomolecular resources research infrastructure consortium (BBMRI-ERIC)
- EU support for cancer research and innovation