

Supporting cancer research in the 2025 Horizon Europe Work Programmes for Research Infrastructures, Health, and EU Missions

Introduction – EU cancer priorities and canSERV

Fighting cancer has recently become core priority for the EU policy and funding programmes in the past years, as reflected through the Horizon Europe Mission on Cancer, the EU Beating Cancer Plan with complementary research and policy actions with the funding support of Horizon Programmes. In light of this, cancer must remain a priority in the 2025 Horizon Europe Work Programmes for Research Infrastructures, Health, and EU Missions.

Life Science European Research Infrastructure Consortia (ERICs) have played a key role in addressing the challenges facing cancer research by providing both the critical mass of expertise as well as the essential services to the research community.

Recently, this role has been expedited and expanded through the **canSERV project**¹. **canSERV** bundles over 400 unique cancer research services by creating one single common access platform. By serving as the unified Transnational Access (TNA) gateway to the resources and services of all relevant Research Infrastructures (RIs) in the life science domain, **canSERV** defragments the European cancer research landscape, enabling researchers to access cutting-edge resources more easily. **canSERV**'s services address the entire spectrum of cancer research, from discovery to clinical application, thereby advancing cancer research and innovation for the benefit of patients and the public; in line with the EU Cancer Mission Board's recommendations²:

- Based on an established competitive selection process that includes an external review system, ethics checks, and a technical feasibility assessment, **canSERV** makes innovative services available to cancer researchers, and the innovation and health care ecosystem that supports the Cancer Mission and the EU Beating Cancer Plan goals.
- Funded services can be requested through **canSERV**'s unified Transnational Access (TNA) platform that bundles expertise and services from consortium partners. The data generated complies with FAIR (Findable, Accessible, Interoperable, Reusable) principles and can be re-used by the European Initiatives UNderstanding CANcer ([UNCAN.eu](https://uncan.eu)) and European Open Science Cloud ([EOSC](https://eoscloud.eu)).
- **canSERV**'s services will be adjusted to fit user needs and, under the guidance of its Scientific and Ethical Advisory Board, the project will keep pace with innovative and future developments.

¹ canSERV Consortium partners: BBMRI-ERIC, EURO-Bioimaging, ELIXIR/EMBL, Wageningen University representing IBISBA, Università degli Studi di Torino representing EuroPDX, EU-OPENSREEN, Arttic, Instruct ERIC, EORTC, IARC/WHO, INFRAFRONTIER, EMBRC, ECRIN, Fundació Privada Institut D'Investigació Oncològica De Vallhebron representing Cancer Core Europe, EATRIS, Universidade do Minho representing MIRRI, ttopstart, and University of Manchester representing ARIE.

² This includes disease models, advanced cutting-edge technologies, biomarker research and development, developments of novel therapeutics, complex clinical trial design and support, personalised oncology implementation pipelines and recommendations, and regulatory support and tools used to analyse the socioeconomic dimension of research activities. One project highlight will be the creation of an expert and multidisciplinary network, the European Molecular Tumour Board Network (EMTBN), that will be open for participation beyond the consortium partners. <https://www.canserv.eu/services/>

Current and future impact of canSERV

canSERV's services are in high demand. Since the project began, **canSERV** has received more than 110 applications in response to its published TNA calls for service access, with applicants requesting more than 250 different services. These applications originated from 20 EU Member States, including Central and Eastern European countries. 18 applications were submitted from countries outside of Europe (i.e. Türkiye, Switzerland, Norway, UK, Georgia, Japan, India, Brazil, Argentina, Colombia), underpinning the international visibility of canSERV and EU life science RIs.

Through its operation, **canSERV** has clearly demonstrated that it can provide access to cutting-edge cancer research services offered by relevant life science RIs via one single, efficient common access platform that has been composed by consortium partners. canSERV promotes collaborations and ensures that research infrastructures are utilised to their fullest potential. This approach aligns with EU objectives of advancing health research and fostering innovation for the benefit of all patients, making canSERV an integral component of future research programs and initiatives. Thus, the **canSERV** consortium proposes to make continuous use of both the operational mode and service provisions in upcoming 2025 Work Programmes for Research Infrastructures, Health, and EU Missions, as well as in the long term, in Framework Programme 10.

Complementary and synergistic roles of canSERV, UNCAN.eu and EOSC initiatives accelerate and advance cancer research

canSERV is encouraging key stakeholders and other projects operating in cancer to collaborate, thus improving data production, availability and interoperability. This approach prevents duplication of efforts and further fragmentation of the European Research Area (ERA). In this regard, **canSERV** highlights the need to support **canSERV** and EOSC4Cancer beyond their current project lifetimes, to optimise the implementation and operation of UNCAN.eu.

Therefore, to ensure sustained use of canSERV's existing rich and highly demanded service portfolio, **canSERV** underlines the necessity that UNCAN.eu long term activities are aligned with those of **canSERV**. This alignment is vital for providing future guidance to use cases envisioned to substantiate the UNCAN.eu implementation and roll out, regardless of the need for Transnational Access (TNA) calls that can be facilitated by **canSERV**. This alignment would also enable the continued FAIR accessibility of data generated at the service sites of the RIs by UNCAN.eu and EOSC. **This long-term alignment between the initiatives needs to be supported and ensured through the 2025 Work Programme calls dedicated to the UNCAN.eu implementation.**

Conclusion

We call upon the European Commission (EC) to recognise the importance of fostering long-term synergies between **canSERV**, EOSC4Cancer, and UNCAN.eu in forthcoming funding calls. This includes facilitating funding access within the planned UNCAN.eu stream for canSERV's well-established service platform and portfolio. Such strategic alignment holds the potential to significantly enhance the effectiveness of cancer research initiatives.

Moreover, it will guarantee the sustained FAIR accessibility and reuse of data generated across the Research Infrastructures' service sites by UNCAN.eu and future EOSC initiatives, thus developing a united European Research Area. This collective effort is vital for addressing the Cancer Mission's objectives and realising the EU Beating Cancer Plan.

Endorsed by all canSERV Consortium and canSERV SEAB members.

