

SPECTA

EORTC

TRANSLATIONAL RESEARCH INFRASTRUCTURE FOR EUROPE

Platform partner

The SPECTA platform is supported by Cencora.





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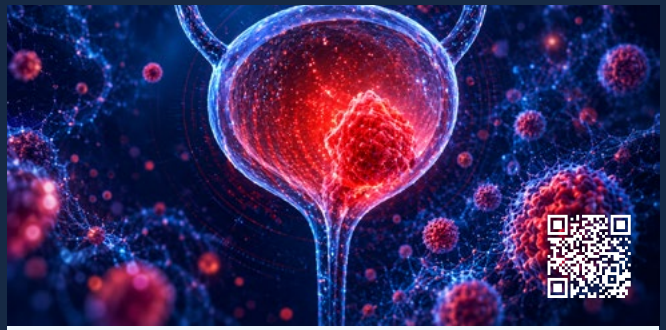
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SPECTA: overview & current projects

Advancing precision oncology through observational clinical studies

SPECTA strengths:
One platform powering multiple prospective translational research projects

- **A Europe-wide approved protocol** (NCT02834884) providing the ethical and regulatory framework for the SPECTA infrastructure
- **A broad patient consent framework** enabling the collection of biological samples, medical images, questionnaires, and clinical data for cancer research
- **A large pan-European network to promote international collaboration** of more than 160 clinicians and researchers across 20 countries, facilitating broad patient access and participation in research.



Starburst-1

Bladder Cancer Response to Neoadjuvant Therapy

The Starburst-1 study aims to identify patients who may safely benefit from bladder-sparing treatment approaches while maintaining effective cancer control.

Starburst-1 is supported by La Ligue contre le cancer as academic partner. Industry support is provided by Ferring, Veracyte and Cepheid.



MRD

Head and Neck Cancer & Melanoma Cohorts

This study evaluates circulating tumour DNA (ctDNA) as a non-invasive marker of minimal residual disease (MRD) to enable earlier detection of cancer recurrence after curative treatment and improve opportunities for salvage therapy.

MRD is supported by Guardant Health and La Ligue contre le cancer.



BioRadon

Radon exposure and molecular profiling in NSCLC

The BioRadon project will assess the correlation between the molecular profiles of NSCLC patients and radon exposure.

BioRadon has received funding from the Euratom research and training programme 2019-2020 under grant agreement No 900009 (Radonorm project), Novartis, Eli Lilly, BeiGene, Aureus Ars & Scientia and the EORTC Lung Cancer Group.

Available samples & associated clinical data

IMMUcan

A large European immuno-oncology research platform that enrolled up to 3,000 patients with head and neck, lung, kidney, colorectal, or breast cancer. Comprehensive molecular and cellular profiling was performed to better understand tumour-immune interactions and support the development of improved cancer treatments.

LATEST PUBLICATION

van der Elst A, et al. Genomic and Immune Landscape of Recurrent and/or Metastatic Squamous Cell Carcinoma of the Head and Neck Progressing on Anti–PD-1 Treatment. **Cancer Immunol Res** 2026;14:608–24.

Visit the IMMUcan website
www.immucan.eu/

AYA

A cohort of 100 adolescents and young adults with central nervous system (CNS) tumours and sarcomas, with comprehensive molecular analyses generated to improve understanding of these cancers and their underlying biology.

LATEST PUBLICATION

Morfouace M, et al. Molecular analysis of adolescent and young adult high grade gliomas in the SPECTA-AYA study: Poorly characterised tumours with frequent germline alterations. **Eur J Cancer** 2025;223:115493.

Visit the AYA project
www.spectaplatform.org/projects-aya/

The IMMUcan project has received funding from the Innovative Medicines Initiative 2 Joint Undertaking under grant agreement No 821558. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation program and EFPIA

The AYA project has been supported by The Boots Group.

Arcagen

Rare cancer cohorts comprising approximately 1,000 patients, established in collaboration with ERN EURACAN and Roche, with associated clinical data and molecular profiling available for research.

LATEST PUBLICATION

Tagliamento M, et al. EORTC-SPECTA Arcagen study, comprehensive genomic profiling and treatment adaptation of rare thoracic cancers. **NPJ Precis Oncol** 2024;8:37.

Visit the Arcagen project
www.spectaplatform.org/project-arcagen/

Looking for samples, data, or a new research opportunity?

Let's build the next project together. Available samples and associated data may support future ethically approved research projects. Contact us to explore collaboration opportunities.

Join us
www.spectaplatform.org/join-us/

Arcagen is a collaboration between EORTC and EURACAN and is funded by F. Hoffman-La Roche.

Recent publications

Morfouace M, et al. Results of screening in early and advanced thoracic malignancies in the EORTC pan-European SPECTAlung platform. **Sci Rep** 2022;12:8342.

Folprecht G, et al. European screening platform for EORTC clinical trials in advanced colorectal cancer 'SPECTAcolor.' **ESMO Gastrointestinal Oncology** 2025;8:100168.

Masson-Lecomte A, et al. Challenges in Defining Clinical Complete Response to Systemic Therapy in Muscle-invasive Bladder Cancer: Insights from the EORTC STARBURST Project. **Eur Urol Oncol** 2025;8:603–7.

Morfouace M, et al. Comprehensive molecular profiling of sarcomas in adolescent and young adult patients: Results of the EORTC SPECTA-AYA international proof-of-concept study. **Eur J Cancer** 2023;178:216–26.

de Rojas T, et al. EORTC SPECTA-AYA: A unique molecular profiling platform for adolescents and young adults with cancer in Europe. **Int J Cancer** 2020;147:1180–4.

Lamarca A, et al. Molecular profiling and precision medicine in rare gastrointestinal cancers within EURACAN in the SPECTA Arcagen study (EORTC-1843): too few patients with matched treatment in Europe. **Annals of Oncology** 2022;33:1200–2.

Hodroj K, et al. Molecular Characterization of Ovarian Yolk Sac Tumor (OYST). **Cancers** (Basel) 2021;13:220.

Visit SPECTA publications
www.spectaplatform.org/news/#_publications

Contact information

For more information or to enrol patients in SPECTA:
www.spectaplatform.org