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A selection of EATRIS institutes

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Centro di Riferimento Oncologico di Aviano (CRO Aviano), Aviano, Italy

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Institute of Molecular and Translational Medicine (IMTM), Olomouc, Czech Republic

Instituto de Investigación Sanitaria - INCLIVA, Valencia, Spain

BioDonostia Health Research Institute, San Sebastian, Spain

SNP&SEQ Technology platform, National Genomics Infrastructure/Science for Life Laboratory at Uppsala University, Uppsala, Sweden

Access leading academic expertise

- DNA/RNA sequence analysis for diagnostic purposes;
- Patient stratification by DNA/RNA sequence analysis;
- Patient stratification by transcript/ncRNA/miRNA assessment;
- Pan-European population analyses;
- Transcriptomics;
- Identification and validation of candidate biomarkers (i.e. miRNA) for disease diagnostics, monitoring of heterogeneity, and progression;
- Identification and validation of markers of drug resistance/sensitivity/toxicity/efficacy; and
- Epigenetics testing for chemotherapy resistance.

How does EATRIS add value to your portfolio?

- Single point of access - from marker identification, collection to analytical testing, assay development; and validation;
- Expert advice at the highest scientific level for the development of biomarkers and clinical expertise – cooperative design of development plan;
- Consulting experts for the optimal use of available biosamples;
- Fast access to clinical samples and well annotated clinical data;
- Access to multisite clinical trials;
- Access multiple sites for clinical validation of your diagnostic (panel);
- Biomarker identification, validation, ready for qualification;
- Data stewardship;
- Reference diagnostics; and
- Inter-laboratory comparisons

Key technologies

ACCESS TO HIGH-QUALITY SEQUENCING AND PROFILING TECHNOLOGIES

- Expression Analysis (transcripts, mRNA, microRNA, ncRNA)
- Next Generation Sequencing and Mapping
- Microarray
- PCR, Heat Pulse Extension – PCR, droplet PCR, high-throughput automated qPCR
- Sequence Analysis
- Sequencing, Pyrosequencing Next Generation Sequencing
- Real Time PCR, droplet digital PCR (ddPCR), high-throughput automated qPCR genotyping
- HRM followed by sanger sequencing
- Epigenetics
- Bisulfite sequencing
- Methylation Specific PCR (MSP)
- Telomere length determination

BIOINFORMATICS

- Alignment, assembly and polymorphism detection
- Detection of structural variants
- Gene expression quantification
- Detrimental effect analysis

Regulatory/QA aspects of the services and infrastructure

- Access to biological samples adhering to current regulatory and QA requirements;
- Compliance with regulatory and industry standards;
- Standardised protocols by core technical labs;
- Clinical and technological excellence;
- Implementation of new emerging technologies and methodologies;
- Involvement of medical laboratories with ISO 15189 quality management systems; and
- Regulatory expertise for in vitro medical devices CE marking procedures (CE IVD).