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EACR-AstraZenca Conference: Circulating Nucleic Acids (cfDNA/ ctDNA): In use, in view and on the horizon

Virtual Event, Worldwide :

[« Back](#)

Abstract detail

Employing widening EU funds to train the next generation of liquid biopsy researchers - example of the STEPUPIORS collaborative rectal cancer project

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Introduction: A consortium dedicated to rectal cancer research was formed within the framework of the STEPUPIORS Horizon Europe project to explore predictive biomarkers to neoadjuvant chemoradiotherapy (ncRT) in locally advanced rectal cancer (LARC). This study evaluated whether employing collaborative widening funds might lead to sustainable strategies for liquid biopsy (LB) approaches, with a focus on countries with limited resources as Serbia, using a pilot rectal cancer project.

Materials and Methods: The analysis was performed from Oct 01, 2022, to Oct 01, 2024, with a Serbian coordinating institution (Institute for Oncology and Radiology of Serbia, IORS) and partners from Spain, Greece, and the Netherlands as expert twinning centers. A comprehensive approach towards building human capacities on LB was developed through intensive training, expert visits and writing new project applications.

Results: Twenty-one IORS researchers (81% female), were trained in LB through 5 visits to partner institutions, 2 expert visits, 5 trainings, and 2 dedicated workshops on omics and LB technologies (ctDNA and CTCs) in Athens, Greece. IORS also joined the European Liquid Biopsy Society as a new member in 2024. This led to 6 publications and 2 successful grant applications (1 COST Network, 1 HE Staff Exchange project – EXPAND-EV, 101182851) enabling the continuance of the training for another 4 years.

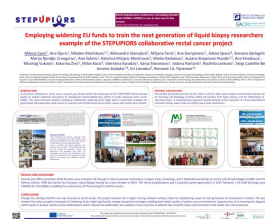
Conclusion: Though the starting scientific aim was focused on rectal cancer, the project evolved into a larger training network setting a basis for establishing a pool of next generation LB researchers in Serbia. This example showed that when properly employed, EU widening funds might significantly change educational strategies enabling both better quality of patient care and researcher opportunities, thus lowering the disparities in health equity in Europe. Similar active collaborations within relevant LB stakeholders are needed in more countries to advance the scientific output and translation of LB results into clinical practice.

Acknowledgements: Horizon Europe Twinning Project STEPUPIORS (101079217).

[« Back](#)

Poster

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Poster #: 2

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INTRODUCTION

A consortium dedicated to rectal cancer research was formed within the framework of the STEPUPIORS Horizon Europe project to explore predictive biomarkers to neoadjuvant chemoradiotherapy (nCRT) in locally advanced rectal cancer (LARC). This study evaluated whether employing collaborative widening funds might lead to sustainable strategies for liquid biopsy (LB) approaches, with a focus on countries with limited resources as Serbia, using a pilot rectal cancer project.

MATERIAL AND METHODS

The analysis was performed from Oct 01, 2022, to Oct 01, 2024, with a Serbian coordinating institution (Institute for Oncology and Radiology of Serbia, IORS) and partners from Spain, Greece, and the Netherlands as expert twinning centers. A comprehensive approach towards building human capacities on LB was developed through intensive training, expert visits and writing new project applications.

Sixteen clinicians and researchers of the Institute for Oncology and Radiology of Serbia (IORS) attended the four-day summer school "Liquid biopsy technologies" within work packages 2 and 3 (WP2 and WP3) that was held at Analysis of Circulating Tumor Cells Laboratory (ACTC) lab, Dept. of Chemistry, National and Kapodistrian University of Athens (NKUA), Athens, Greece. The course on liquid biopsies was organized in the form of lectures that were held on the first day of the course and "hands-on" demonstrations of liquid biopsy techniques that were held in a laboratory settings for the next 3 days. Participants were divided into three groups of 6 to 7 researchers. During the fifth day of the course, the participants attended lectures at the One day Conference "LIQUID BIOPSY: Latest advances and applications in oncology" which was organized by the Hellenic Society of Liquid Biopsy. The course covered the theoretical and practical knowledge of the applications of liquid biopsies in oncology, isolation of circulating tumor DNA (ctDNA) and circulating tumor cell (CTC), characterization and enumeration of CTCs, detection of mutations in ctDNA, ctDNA methylation analyses, digital droplet PCR and preanalytical aspects and quality control in liquid biopsies.

STEPUPIORS • hsiib
STEPUPIORS SUMMER SCHOOL
"LIQUID BIOPSY TECHNOLOGIES"
ATHENS, SEPT 30 - OCT 04, 2024



Participant feedback:

"The workshops and lectures, especially those related to circulating tumor DNA (ctDNA), were extremely comprehensive and informative, tailored to participants of various knowledge levels."
"From a scientific and clinical standpoint, this program was successful. It encouraged teamwork and the sharing of knowledge, insights, and experiences with colleagues from Spain, the Netherlands, and Greece. My participation in this school has stimulated creative ideas for upcoming projects and scientific and diagnostic research development."

STEPUPIORS
ATHENS, JUNE 01-02, 2023
STEPUPIORS workshop
Omics data generation and integration with clinical information

General description
The workshop on omics approaches will introduce the main principles of proteomics, transcriptomics and genomics along with computational tools for integrating omics datasets and for establishing connections with clinical information. This workshop will also highlight the statistical and bioinformatics tools available for analysis of omics and clinical data.
Teaching objectives
1. Obtain a global view of omics approaches and their potential use in the clinical setting
2. Develop critical thinking by thorough evaluation of omics datasets and their limitations for clinical applications.



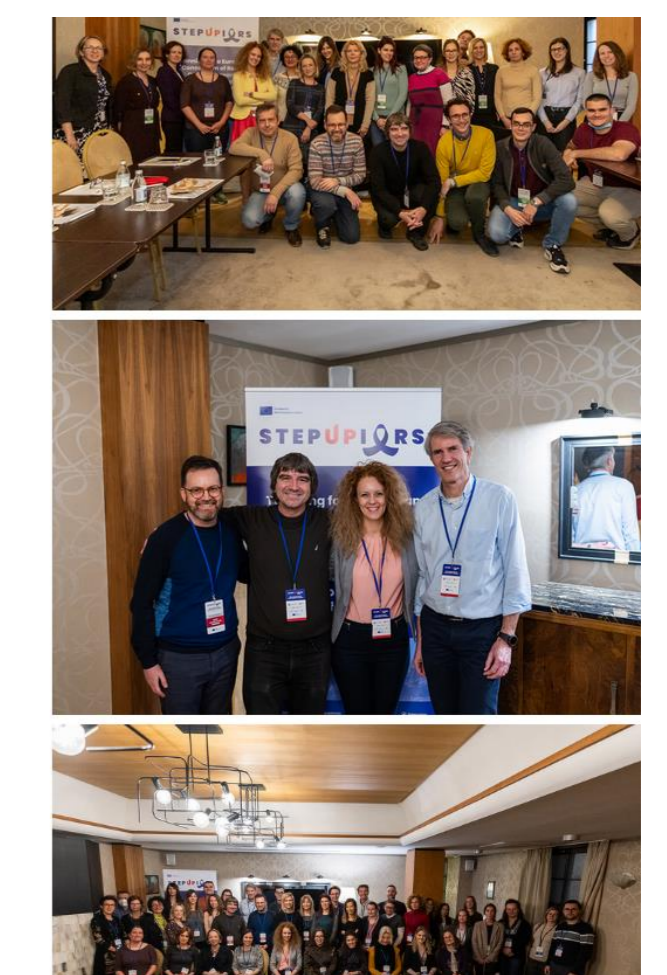
Med Uni Graz

HOW TO BUILD A BIOBANK (BASIC)

This interactive course has been designed for all those who are involved in setting up a new biobank, who look to collaborate with a biobank or research institute, who face the challenges of a growing biobank or who try to overcome the challenges of maintaining a large biobank.



TUESDAY, NOVEMBER 29, 2023, 10-18 h CET
PRE-AWARD GRANT MANAGEMENT TRAINING
WEDNESDAY, OCTOBER 4, 2023
POST-AWARD GRANT MANAGEMENT TRAINING



RESULTS AND DISCUSSION

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CONCLUSIONS

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