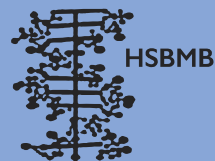


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ABSTRACTS BOOK



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Importance of Biobanks for Translational Cancer Research in Serbia

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Introduction: Implementing good biobanking practice (GBP) and promoting interdisciplinary collaborations between healthcare professionals, scientists, patients, and industry stakeholders might play a pivotal role in the rapid translation of cutting-edge scientific discoveries into clinical practice. Following the GBP principles, we aimed to establish a workflow for the first Rectal Cancer Biobank (RCB) at the Institute for Oncology and Radiology of Serbia (IORS) within the framework of the Horizon Europe STEPUPIORS project.

Material and Methods: The workflow for the RCB was set up according to guidelines provided by relevant international authorities and national and EU regulations and monitored by higher partner institutions from Spain, the Netherlands and Greece. Biobank equipment and Laboratory Information Management Software (LIMS) were procured to ensure infrastructural, storage and data protection requirements. Human capacities were built through relevant training and expert visits to partner institutions. All decisions were approved by a consensus of the partner consortium.

Results: Within the first year, the STEPUPIORS team established the procedures for the first RCB of around 100 patients with locally advanced rectal cancer. Fifteen IORS personnel (5 physicians, 3 biochemists, 4 molecular biologists, 3 pharmacists) were successfully trained in biobanking. Thirteen standard operating procedures (SOPs) were implemented to comply with GBP. Scientific and management oversight committees comprised of members of all participating institutions were formed. A strengths, weaknesses, opportunities and threats (SWOT) analysis was performed as a starting point for developing sustainable biobanks at IORS and Serbia in the future. The IORS RCB was fully operational on October 01, 2023, when the prospective collection of tissue, plasma and sample derivatives was initiated for the current and three new planned projects.

Conclusions: Implementing the principles of GBP and promoting interdisciplinary collaborations is expected to ensure that innovative diagnostic tools and therapies reach patients more rapidly, contributing to the principles of circular bioeconomy.

Key words: biobank, rectal cancer, translational cancer research.

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