



EUROPE BIOBANK WEEK CONGRESS 19-22 MAY 2026

ORAL PRESENTATIONS

Abstracts

Produced by the Europe Biobank Week Programme Committee and BBMRI-ERIC's
Department of Outreach, Education and Communications

Flexibility in Biobanking: Balancing Collections on Demand and Retrospective Use

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Abstract ID: 605

Topic: 11A: Inside the Biobank: Organisational Structures, Strategies, and Success Stories

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Keywords: clinical research, flexible, innovative, on demand, retrospective, samples

Introduction

Biobanking has evolved from a static model of sample collection and storage into a dynamic framework that addresses specific research needs. We compare two distinct biobanking projects and their respective options, the innovative "Biobanking on Demand" approach utilized in the DIOPTRA project (<https://dioptra-project.eu/>) and the retrospective sample collection from the Multiplex project. This comparison aims to highlight the advancements and challenges in biobanking methodologies, particularly in relation to specific research requirements and sample availability.

Material & Methods

We compared Biobanking on Demand, as seen in the DIOPTRA project and the retrospective use of samples from the Multiplex project. The Multiplex initiative involved 399 breast cancer patients, resulting in 3528 FFPE blocks, supported by extensive clinical and pathological data. For the DIOPTRA project, so far 55 fresh frozen tissue samples and 120 serum and plasma samples have been provided.

Results

The DIOPTRA project underscored the necessity for flexible sample availability, while the Multiplex project demonstrated successful integration of retrospective sample retrieval and use to enhance research outcomes. Collaborative efforts with Biobank Graz (BBMRI.at partner) played a key role in both projects.

Discussion and Conclusion

This work advocates for biobanks to adopt a flexible structure that accommodates both immediate and retrospective research needs. By balancing these approaches, biobanks can significantly enhance their utility in clinical research, ultimately facilitating advancements in personalized medicine.