

Tumour biobank@UZA for advancing translational research in oncology

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Background

Indication

Prevention, treatment and care of cancer patients largely depend upon improvements in scientific research.

Tumorbank@UZA

Integration into a multidisciplinary cancer care programme with linkage to medical and clinical data.

Funding

Development and enhancement of cancer research networks was recommended in the Belgian National Cancer Plan, which was launched in 2008 by the **Belgian Federal Ministry of Health**. The objective is to create a virtual inter-institutional tumour biobank to promote translational research and to create a network for future academic, medical and/or industrial collaborations.

Procedure

Standard Procedures

Sample processing and storage of **fresh and paraffin-embedded tissue samples**.

Good collaboration and communication between the oncologists, the surgery room and the pathology department : ↓ ischemia

High-qualitative samples

Quality Control

Annually 1% of the collected samples.

Focus on several parameters: sample identity, location, diagnosis, sample data, RNA integrity and concentration.

RNA integrity
(Agilent 2100 Bioanalyzer)



RNA concentration
(Nanodrop 2000)

Integration/Implementation

Data Management

The samples are registered in a **software tool** for content reception, management and distribution. A visual overview is given for any individual sample and its related derivatives. This allows users and/or researchers to query for samples with certain specifications that they want to use in their research projects. The software system has full tracking features needed for auditing.

Guidelines

International Society for Biological and Environmental Repositories (ISBER)

Organisation for Economic Co-operation and Development (OECD)

National Cancer Institute (NCI)

World Health Organisation (WHO)

Collaboration

With surrounding hospitals for sample collection

With the Belgian Cancer Registry in the development of a virtual tumour biobank.