

In March 2008, the nationwide virtual tumourbank project was launched by the Belgian Minister of Health, Ms. Laurette Onkelinx (initiative 27 of the Belgian Cancer Plan). The Belgian Virtual Tumourbank (BVT network) encompasses the tumour biobanks from eleven Belgian university hospitals ([click here](#) for the list) that collect and store residual human tumour samples locally. In order to facilitate the search for tumour samples scattered among different Belgian institutions, data collected at sample level is made available for researchers via the online BVT catalogue (BVTc) application. A high quality of the data on the tumour samples requested by scientists for research in oncology is guaranteed by automatic and manual controls performed by the BVT project team at the Belgian Cancer Registry.

WORD OF THE RESEARCHERS

Previous newsletters focused on the availability of certain types of tumour samples in the BVT catalogue. Within this newsletter we leave the word to three researchers who have experienced the services of the BVT network, either by having access to the BVT catalogue or by performing a sample availability request (SAR) via the BVT website. In addition, three biobanks from the BVT network were interviewed about the procedure for researchers for requesting samples of human body material.

MARC VAN DEN EYNDE

“All researchers must be convinced to contact BVT if they want to perform research on tumour samples”



WHO? GI oncologist, MD, PhD, Cliniques Universitaires Saint-Luc - UCLouvain

PROJECT? Characterization of the microbiome inside the primary and metastatic colorectal tumour samples

WHAT? Sample Availability Request (SAR) and BVT catalogue

I first contacted the biobank within my own institution and the head of the pathology department informed me about the existence of the BVT. With the sample availability request, I was quickly informed about the possible number of samples of interest available in the different tumourbanks. Based on the provided number, our project was submitted to the ethical committee and after approval access to the BVT catalogue was requested. We contacted all involved biobanks. Our project required a very sterile and aseptic procedure to cut the slides of the samples to avoid contamination. The biobanks were helpful and allowed my PhD student to be present at the biobank to assist with the preparation of the slides. In total, 391 frozen samples with associated clinical data were collected from 125 patients, including primary tumour samples, associated colorectal cancer metastasis samples, corresponding normal tissue and a control group with hepatocellular carcinoma and cholangiocarcinoma.

DAVID SCHRÖDER

“I was really impressed how many samples were available in the biobanks”



WHO? Medical Oncologist at Grand Hôpital de Charleroi and researcher at de Duve institute

PROJECT? Analysing tumour samples for expression of GARP, a protein that is expressed by regulatory T-cells that suppress tumour responses.

WHAT? Sample Availability Request (SAR)

We were looking for 5 different tumour type samples and I was advised by the biobank manager within my own institution to look at the BVT catalogue. It seemed to take more time to ask for access to the catalogue, therefore I performed a SAR. For each tumour type, there were samples from at least 4 local biobanks available. Impressive! We have contacted one biobank. Another biobank spontaneously reached out to me with the exact number of samples they can send. This was very kind and helpful in case the other biobank wouldn't have enough samples. Given our limited experience with requesting samples, it took us 3 months to get everything right: material transfer agreement (MTA), ethical committee approval etc. The biobank was very supportive during this process. We will start with 10-20 frozen samples of urothelial carcinoma and extend from there to more samples based on the first analysed samples.

MAXIME TARABICHI

“The sample availability request was easy and smooth”



WHO? Junior Group Leader at IRIBHM, Université Libre de Bruxelles

PROJECT? Evolution from differentiated to anaplastic thyroid carcinoma

WHAT? Sample Availability Request (SAR)

I performed a sample availability request (SAR) since I was writing a project on thyroid cancer to apply for a grant. There was no immediate intention to use samples, but I was interested to know the number of available samples, preferably frozen but also some Formalin-Fixed Paraffin-Embedded (FFPE). After completing the document, someone of the BVT team called me in order to refine the specifications. The results of the request showed a large number of common thyroid cancer samples in almost all biobanks and a few rare cancer samples. The biobank I am in contact with is very open to research and quick in responding. The average time to get the samples, once the MTA and approval of the ethical committee are in place, is within a week. I have already performed tests on some samples from this biobank. How many samples I will need in the end depends on the outcome of the study.

AT THE BIOBANK.....

For the occasion of this newsletter, three biobanks from the BVT network were interviewed about the procedure for requesting samples of human body material:



Main steps for requesting samples are comparable in the (three) biobanks:

- Contact the biobank(s).
- Fill in a sample request form with all the details and criteria of the needed samples and patients.
- Biobank checks whether the requested samples (and associated data, if needed) are available.
- If the requested samples are available, provide the biobank your research project and Ethical Committee (EC) approval (if applicable, also the approval of a scientific committee).
- Biobank (board) decides if the samples can be provided for this specific research project.
- After biobank approval, agree on which samples will be exchanged (final sample selection).
- Read and sign the Material Transfer Agreement (MTA) document provided by the biobank.
- In case also corresponding clinical data is exchanged, sign the Data Transfer Agreement (DTA) document provided by the biobank.
- Biobank prepares the samples (and clinical data, if applicable).
- Transfer of the samples: take the samples with you directly from the biobank or let the biobank send the samples to you via special package delivery.

When all goes well and all necessary information and documents are provided as requested, the process from the moment of contacting the biobank until transfer of the samples could be completed within two weeks.

Tips for the researchers who want to request samples:

- You can ask the biobank (without obligation) for the availability of certain samples before having an EC approval.
- The process for sample exchange, will be facilitated if you already have an approval of an EC at the moment of the sample request.
- Think very well about what you want exactly for your research project before requesting samples: inclusion criteria, exclusion criteria, which conservation mode of the samples is best for the experiments you have planned, how many samples, which clinical data, ...).
- Although the main steps for requesting samples are comparable between biobanks, keep in mind that each biobank has its own specific procedure and documents for requesting samples.

SAMPLE AVAILABILITY REQUEST versus BVT CATALOGUE (BVTc)

“Quick search” versus “Full access”

WHO	Any researcher active in the broad field of oncology (both from non-profit and profit research organisations).	WHO	Belgian researchers active in the broad field of oncology (both from non-profit and profit research organisations).
WHAT	Easily verify the number of samples of interest registered in the BVTc and the contact info of the local biobanks hosting these samples.	WHAT	Full access to the online BVTc, to obtain detailed sample level information.
HOW	Go to www.virtualltumourbank.be >> catalogue of biobanked samples >> sample availability request form → Complete the form and click on “send”.	HOW	Go to www.virtualltumourbank.be >> catalogue of biobanked samples >> access to the catalogue → Fill in the catalogue application form → Send (with requested attachments) to biobank@kankerregister.org .

For information on sample availability in the 11 biobanks of the BVT network, [click here](#).

To gain full access to the online BVT catalogue, please follow the procedure indicated [here](#).

To end this newsletter, we would like to gratefully thank the researchers and the contacted biobank collaborators for agreeing with this interview and for taking the time to explain the procedure for requesting samples at their biobank.

For further information: www.virtualltumourbank.be
biobank@kankerregister.org or biobank@registreducancer.org

Do you wish to be kept informed in the future? Do you wish not to receive our information any longer?

Send an email to biobank@kankerregister.org

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