THE BELGIAN VIRTUAL TUMOURBANK

Belgian Cancer Registry

Newsletter / December 2020

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.

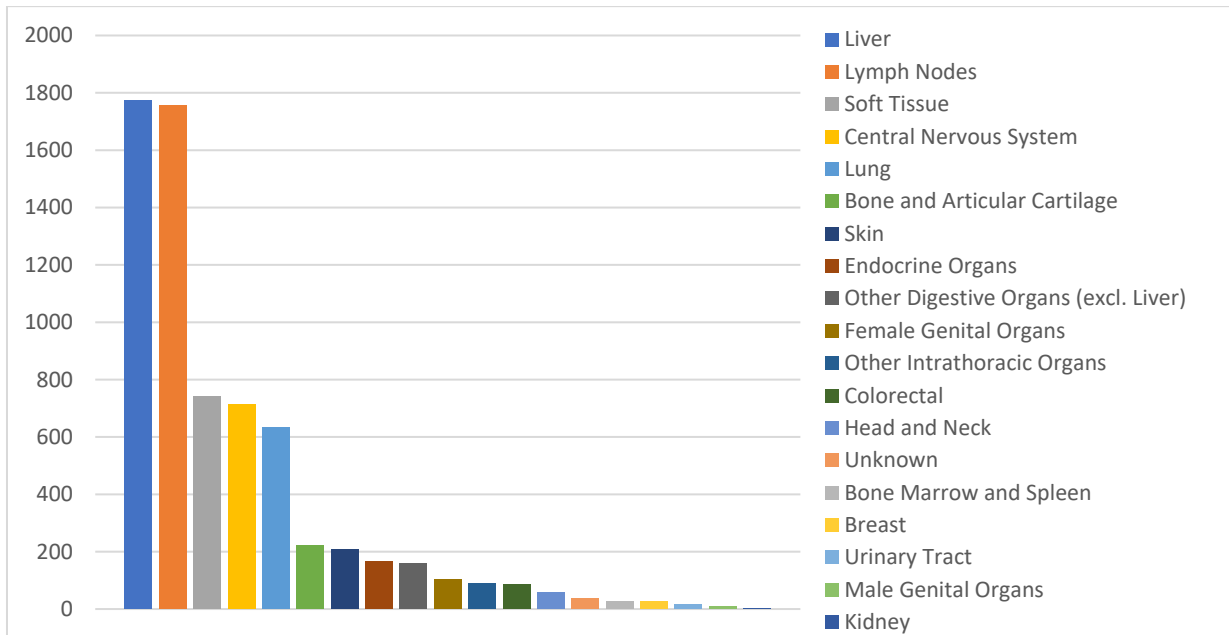## METASTASIS SAMPLES IN THE BVT CATALOGUE

In 2018 about one in five cancers in Belgium for which the TNM classification is applicable, were already metastasised on the moment of diagnosis (cM1 or pM)[1]. The BVT catalogue can facilitate the search for tumour samples scattered among different local biobanks, especially for less common sample types such as metastasis samples. If you want to know if the specific samples for your research are available in our catalogue, please request full access so you can browse freely through all available sample data and locate the matching samples for your study, or fill in a Sample Availability Request form on our website!

WHICH METASTASIS SAMPLES ARE AVAILABLE?

In total, 107,935 registrations were available in the BVT catalogue on the moment of selection (October 2020), of which **13,235** registrations from metastasis samples from **6,814** patients. The BVT catalogue contains slightly more registrations from metastasis samples that originate from male patients (50.8%) than from female patients (49.2%).

The most common sample localisations of the metastasis samples in the BVT catalogue are liver (26.0%) and lymph nodes (25.8%). Soft tissue completes the top three of sample localisations with 10.9%, followed by central nervous system (10.5%) and lung (9.3%) (see figure 1).

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[1] Belgian Cancer Registry, 09/12/2020

Figure 1: Overview of the number of patients per localisation of metastasis samples in the BVTc

FROM WHICH PRIMARY TUMOUR LOCALISATIONS DO THE METASTASES ORIGINATE?

The metastasis samples most commonly originate from primary tumours of colon and rectum (18.5%), lung (7.9%), breast (7.8%) and skin (7.4%) (see figure 2). For 34.6% of the patients the localisation of the corresponding primary tumour is unknown.
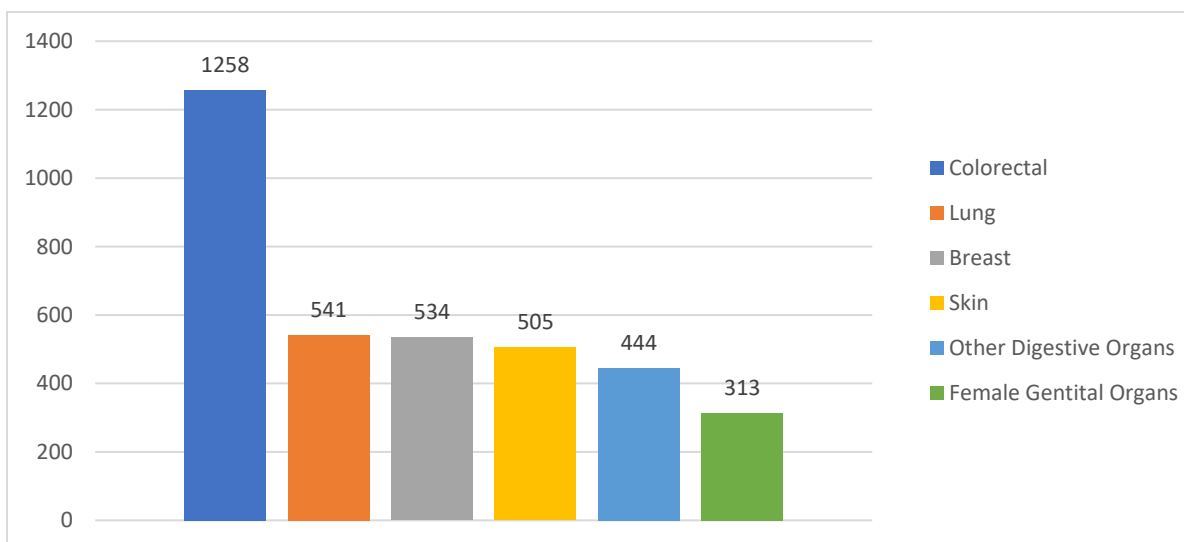
Figure 2: Overview of the most common primary tumour localisations of metastases in the BVTc

For approximately 10% of the patients with metastasis samples registered in the BVTc also a corresponding primary tumour tissue sample is available.

WHICH MATERIAL TYPES ARE STORED BESIDES TISSUE OF THE METASTASIS?

For 68.9% of the registrations, only residual tumour tissue is stored. For some patients, also additional types of material are stored at the local biobanks and registered in the BVT catalogue. The most common types are corresponding normal tissue (21.7%) and blood (9.2%). Plasma (6.8%), serum (5.2%), buffy coat (1.8%) and DNA (1.6%) are also available in some local biobanks.

As far as the conservation is concerned, 74.1% of the metastasis samples is stored at -80°C, while 25.9% is included in paraffin blocks.

SPREAD THE WORD….

Over the past year, the Belgian Virtual Tumourbank team presented a poster at the BACR annual meeting (7th February 2020, Brussels) and two posters at the Europe Biobank Week (17-20th November 2020, online).
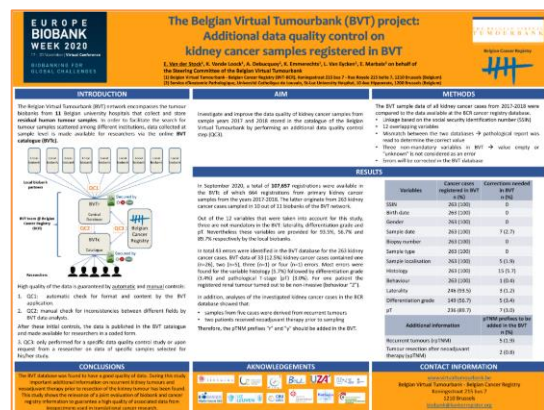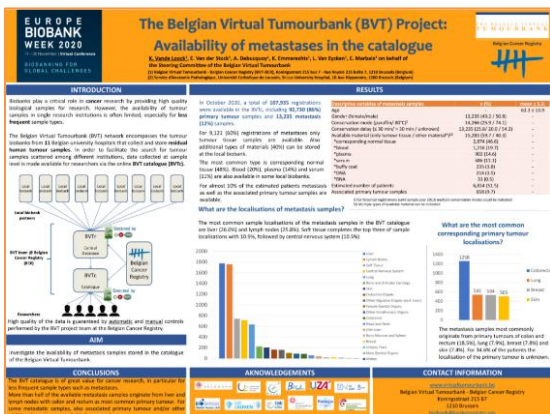
Flyers on the BVT project have been distributed in 2020 at the BACR annual meeting (7th February 2020, Brussels), the BSMO annual meeting (14-15th February, Ghent) and the Belgian Week of Gastroenterology (4-6th March, Antwerp).

Please let us know if you are aware of upcoming meetings where
the BVT project can be presented or if you would like to receive
BVT flyers for distribution in your institution.

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**.

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