The Belgian Virtual Tumourbank (BVT) Project: Availability of rare cancers in the catalogue

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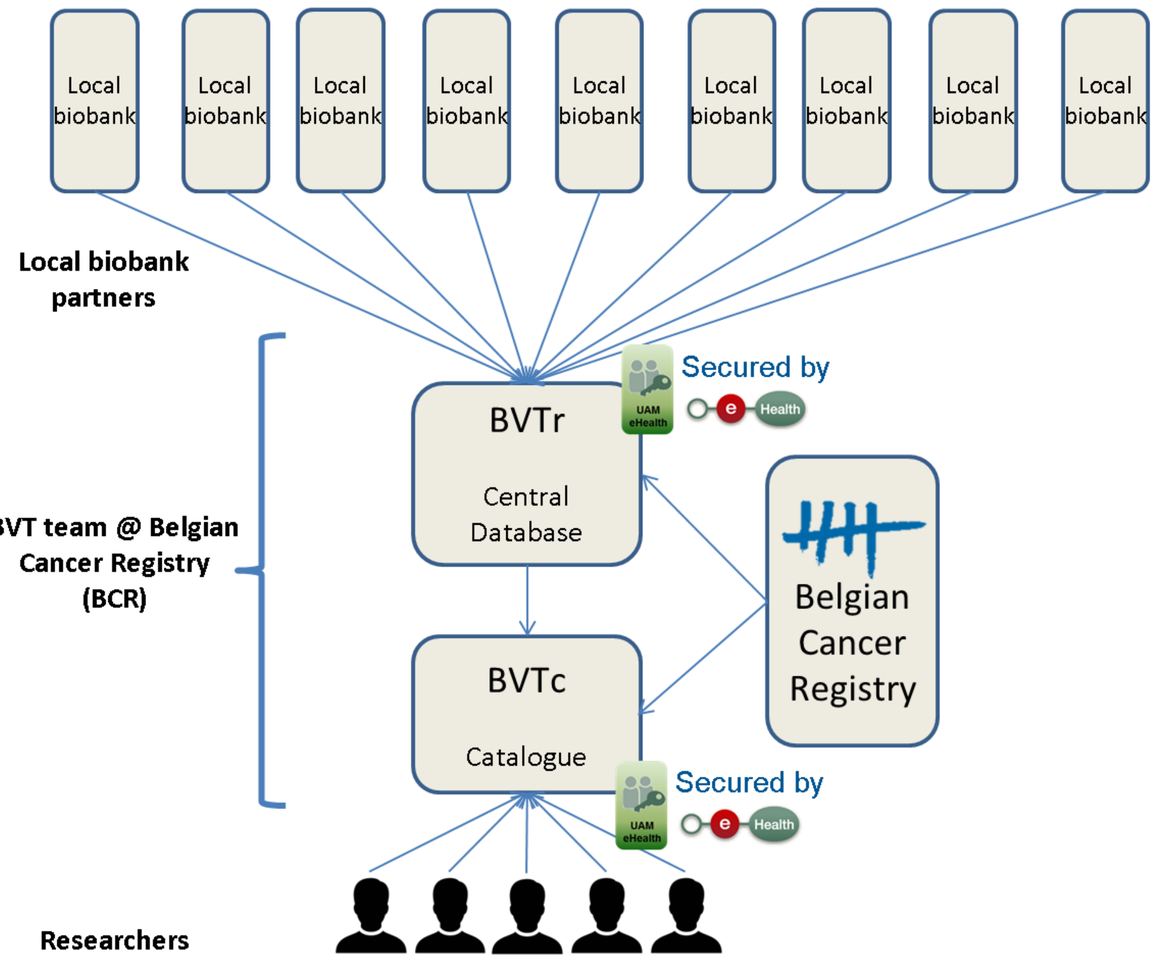


Biobanks play a critical role in cancer research by providing high quality biological samples for research. However, the availability of tumour samples in single research institutions is often limited, especially for rare cancers.

The Belgian Virtual Tumourbank (BVT) network encompasses the tumour biobanks from eleven Belgian university hospitals that collect and store residual human tumour samples locally. In order to facilitate the search for tumour samples scattered among different institutions, data collected at sample level is made available for researchers via the online BVT catalogue (BVTc).

High quality of the data is guaranteed by automatic and manual controls performed by the BVT project team at the Belgian Cancer Registry. .

In January 2019, a total of **92,164** registrations were available in the BVTc, including **78,664 primary tumour** samples and **11,102 metastasis** samples.

What are RARE CANCERS?

→ Cancers with an incidence rate **< 6 per 100,000** per year for both sexes (see RARECARE project http://www.rarecare.eu/)

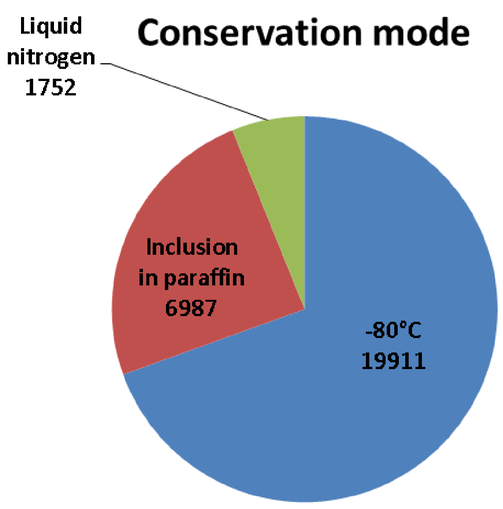
→ **26,410** registrations from **12,641** patients, including 5789 female and 6852 male patients, retrieved in the BVT catalogue based on the RARECANCER list.

How are the samples stored?

The majority of the rare cancer samples (70%) are conserved at -80°C.

Almost one fourth (24%) of the rare cancer samples are included in paraffin.

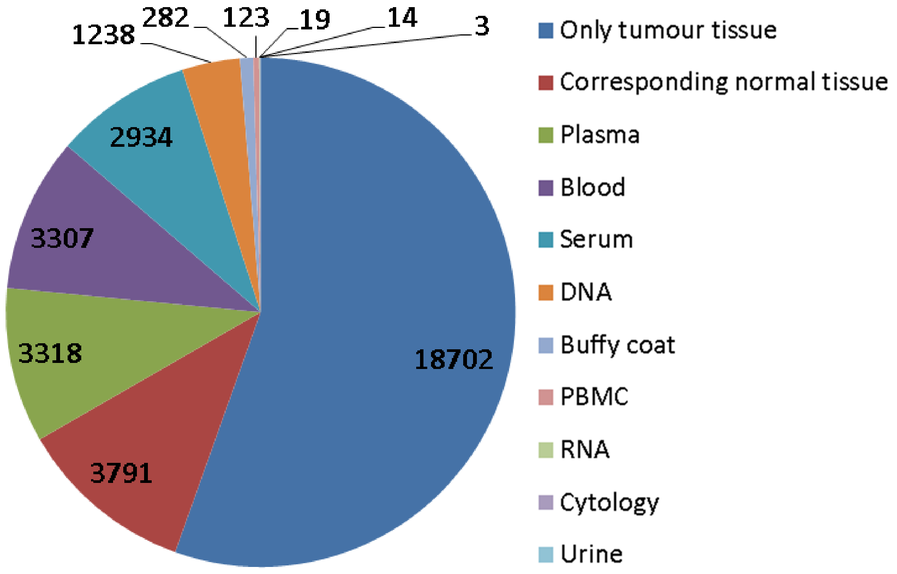
17% of the rare cancer samples are stored in less than 30 min after resection.



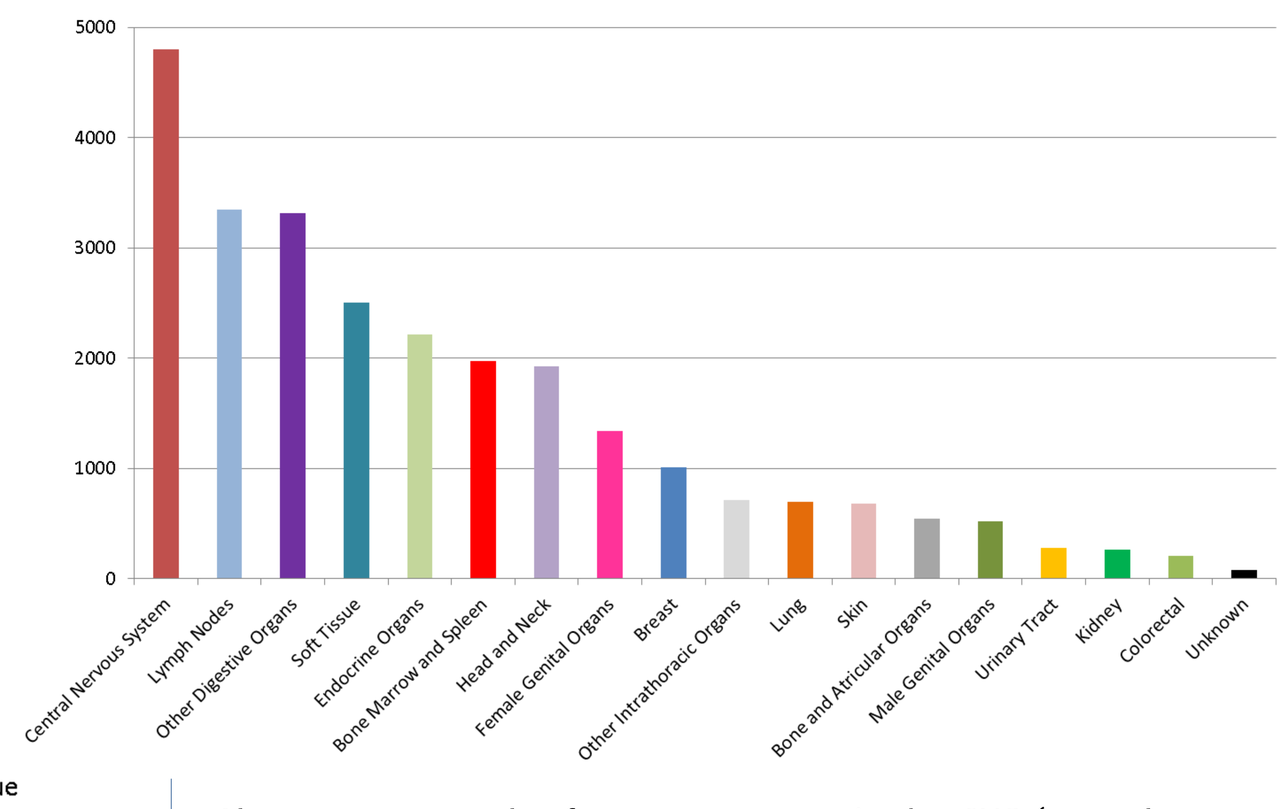
What other materials are available?

For 18,623 (57%) registrations of rare cancers only tumour tissue samples are available. However, also other residual materials can be stored at the local biobank and thus be registered in the BVT catalogue.

The most common type of other residual material is corresponding normal tissue (12%). Other available materials are plasma, blood, serum, DNA and buffy coat. Even PBMCs, RNA, cytology and urine are available in some cases!



What rare cancer topology groups are available?



Almost 5000 samples from rare cancers in the CNS (central nervous system)! More than 3000 samples from rare cancers in lymph nodes and other digestive organs (like stomach, liver and pancreas but excluding colon and rectum). As expected, rare cancers from the head and neck region are numerously present in the BVT catalogue.

Conclusion

The BVT catalogue is a great value for cancer research, in particular for rare cancers, by localising tumour samples stored in eleven biobanks.

For further information: www.virtualtumourbank.be

Partner Biobanks