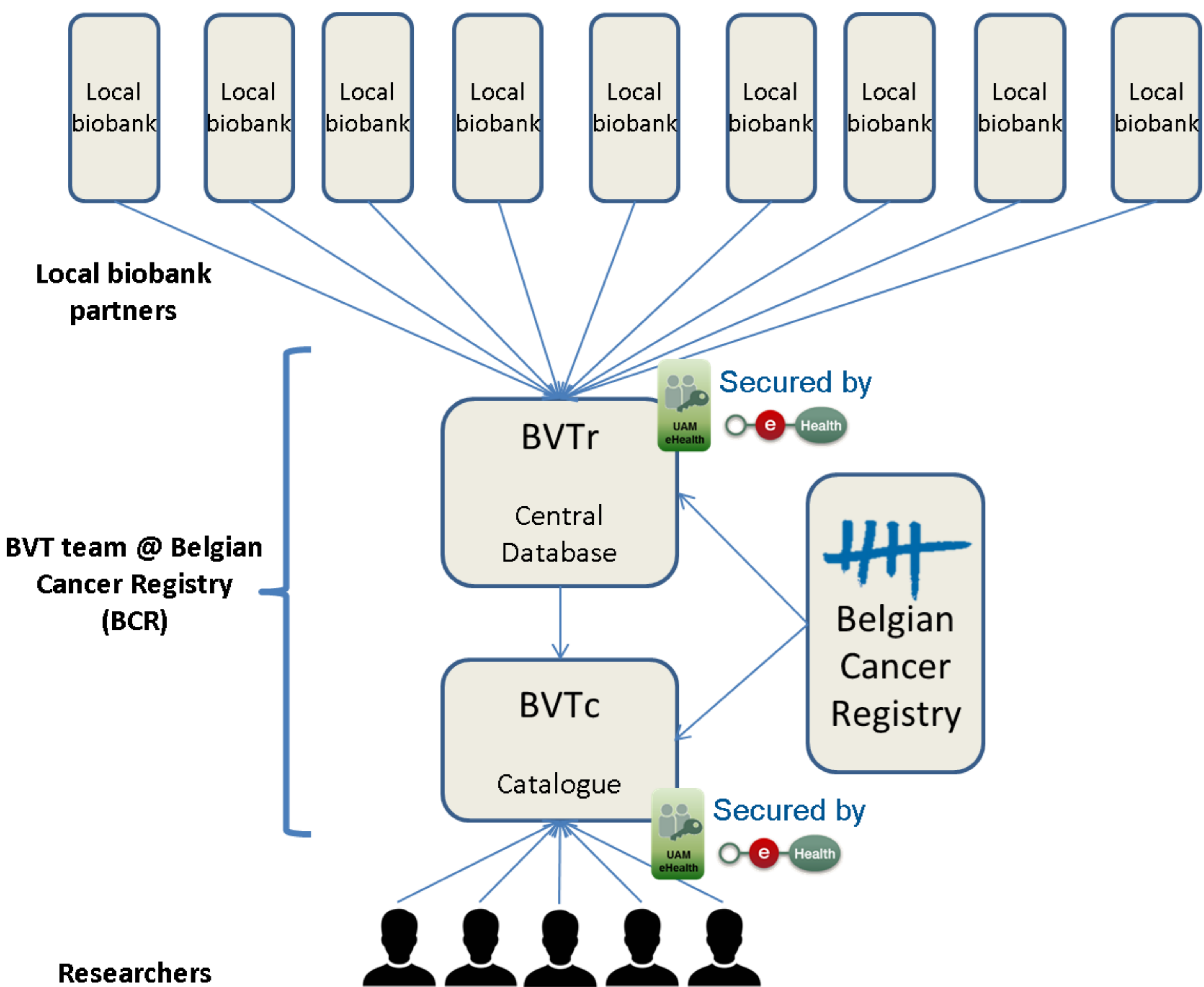


The Belgian Virtual Tumourbank (BVT) Project: An overview of samples available in the catalogue



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The Belgian Virtual Tumourbank catalogue is a custom-made web application that aims at facilitating the search for residual human tumour samples scattered among different institutions by collecting data from these samples and associated material in one central database. The samples themselves however, remain physically located at eleven Belgian university hospital biobanks (see partner biobanks below).

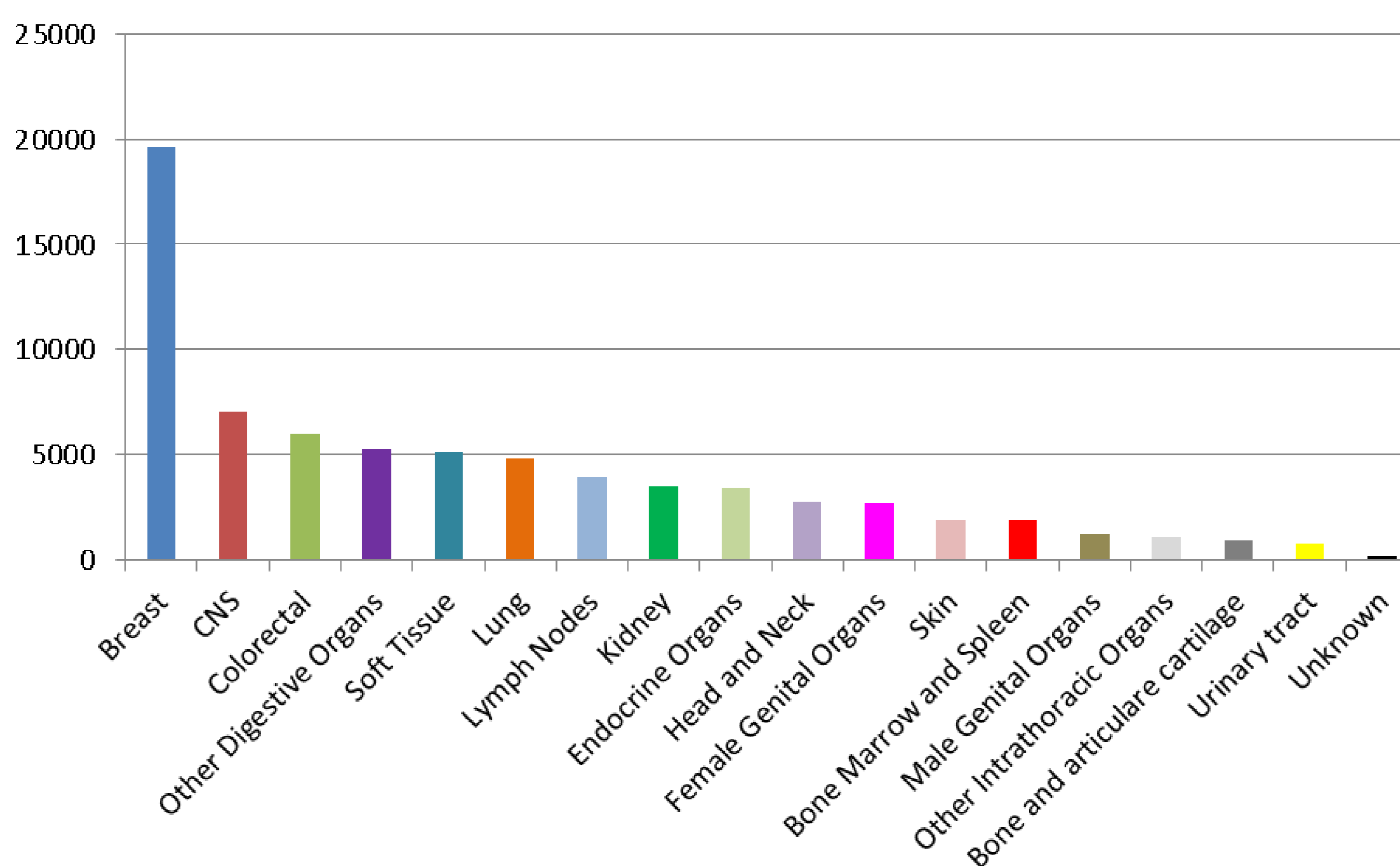
The online BVT catalogue contains patient, medical and technical data, but excludes identifying information to ensure privacy of individuals. High quality of the data on the tumour samples requested by scientists for research in oncology is guaranteed by automatic and manual quality controls performed by the BVT team at the Belgian Cancer Registry.

In July 2018, a total of **84,854** registrations were available in the BVTc, including **72,314 primary tumour** samples and **10,142 metastasis** samples.

What is available?*

- More than 19,000 breast tumour samples !
 About 5000 samples from tumours in:
- Central nervous system
 - Colorectal
 - Other digestive organs (stomach, liver, pancreas, ...)
 - Soft tissue

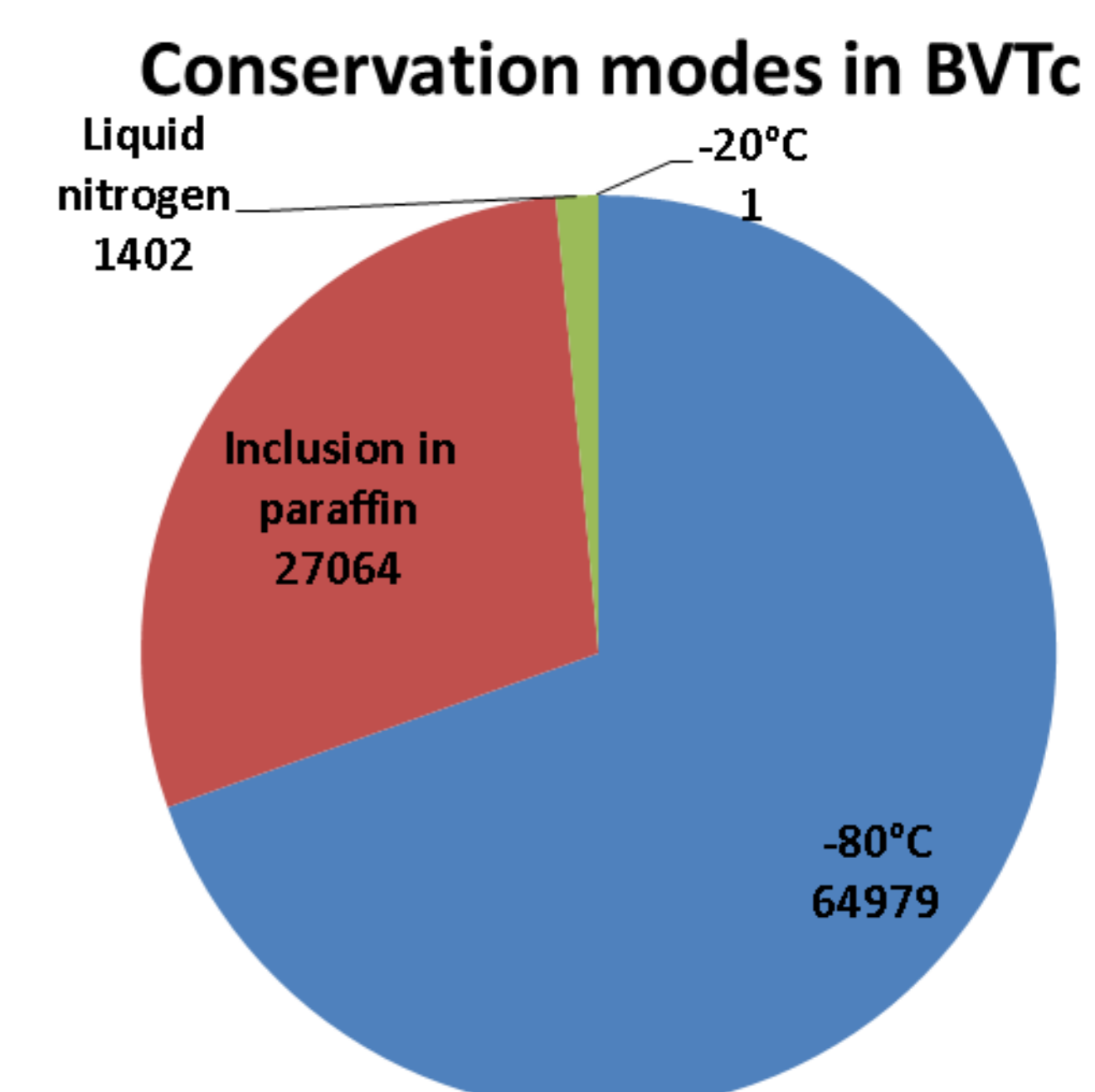
- Also less frequent tumours are available:
- Head and neck
 - Female genital organs
 - Skin
 - Bone marrow and spleen
 - Male genital organs
 - Other intrathoracic organs
 - Bone and articular cartilage
 - Urinary tract



* Samples from primary tumours

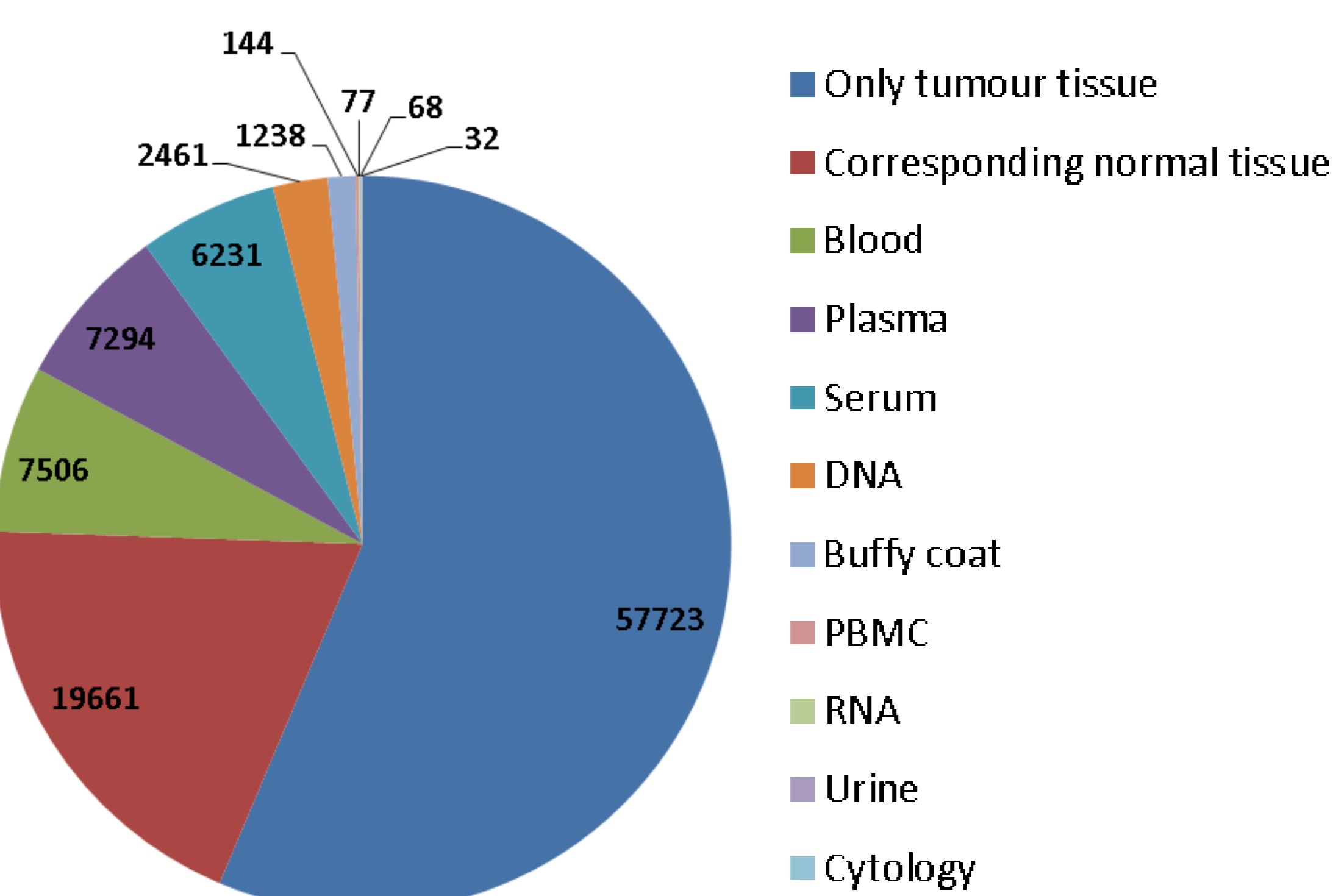
How are the samples stored?

The majority of the tumour samples (70%) are conserved at -80°C. More than one fourth (29%) of the tumour samples are included in paraffin.



What other materials are available?

For 57,723 (56%) registrations 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 (19%). Other available materials are plasma, blood, serum, DNA and buffy coat. Even PBMCs, RNA, cytology and urine are available in some cases!



Top 10 sample localisation + others	Number of patients
Colorectal	1781
CNS	1774
Other Digestive Organs	1711
Lung	1612
Lymph Nodes	1445
Soft Tissue	1376
Kidney	1241
Head & Neck	1036
Male Genital Organs	748
- of which prostate	436
Endocrine Organs	716
Others	2716
Total	15440



Top 10 sample localisation + others	Number of patients
Breast	13241
CNS	1750
Endocrine Organs	1506
Colorectal	1479
Female Genital Organs	1220
Soft Tissue	1199
Other Digestive Organs	1150
Lymph Nodes	1029
Lung	819
Kidney	671
Others	1800
Total	25864

What about gender?

In the BVT catalogue 49,341 (58,1%) residual tumour samples come from female patients and 35,513 (41,9%) from male patients.

The orange marked organs in the figure above are the top three most frequent tumour localisations for primary tumours in Belgium: prostate, lung and colorectal for male patients and breast, colorectal and lung for female patients.