

Development of RWTH cBMB sample types and numbers

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Development of Sample Numbers

The centralized Biomaterialbank of the RWTH Aachen (RWTH cBMB) started its establishment in 2011. Several clinical departments within the University Hospital Aachen participate with RWTH cBMB by transferring different types of biomaterials, which are stored either as single or multiple aliquots in our central biospecimen storage unit. The total storage capacity of the biobank amounts to appr. 350,000 samples, depending on the biomaterial type (liquid, solid). Currently, more than 16,500 samples have been cryo-preserved with a strong development over time (Figure 1).

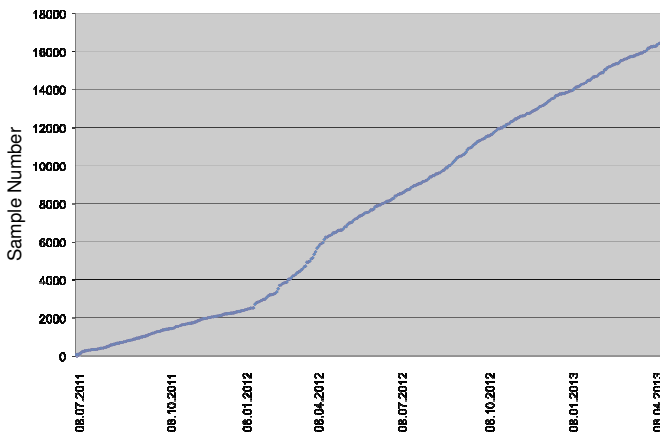


Figure 1. Development of stored sample numbers at RWTH cBMB since 2011. (effective date: 15.04.2013)

Stored Biomaterials

From the transferred biomaterials EDTA-blood and urine, different derivatives are generated and stored, such as blood serum, blood plasma and buffy coats, as well as urine supernatants and urine sediments. Depending on the project, the participating clinic, and the biomaterial type, different numbers of aliquots are prepared and stored, for instance two to five aliquots in the case of blood serum. Solid tissue samples are stored, if available, as tumor and normal tissue sample separately. Figure 2 gives an overview of the currently stored biomaterial types in RWTH cBMB.

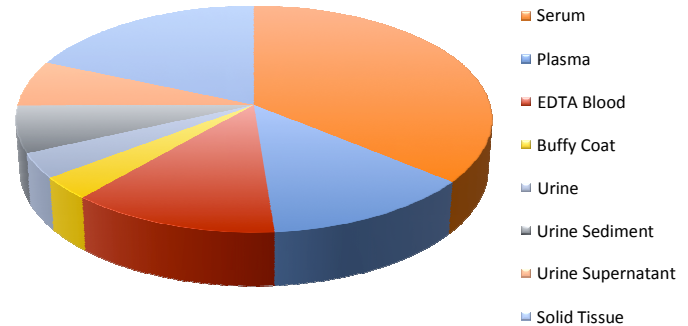


Figure 2. Distribution of the currently stored biomaterial types in RWTH cBMB (effective date:15.04.2013)

Participating Clinics & Projects

So far, surgically active clinical departments are the main participants of RWTH cBMB, but also further medical clinics, such as the department of Cardiology, contribute. Participants are offered the possibility to collect samples specifically pre-defined for one certain research project, which is currently being employed by the departments of Cardiology (CardioBB) and Gynaecology (TOC, FEK-FK). In addition, participants are also offered to collect samples for more broadly defined research projects. Figure 3 gives an overview of the actively participating clinics.

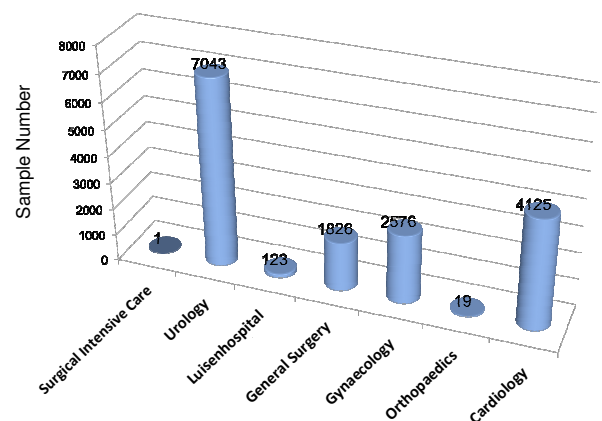


Figure 3. Overview of the sample numbers from actively participating clinical departments (effective date:15.04.2013)