VETERINARY DATASET
LIQUID & TISSUE SAMPLES

SAMPLE RELATED DATASET
FOR BIOBANKING
OF VETERINARY SPECIMEN

An important aim of Swiss Biobanking Platform is to promote the exchange and use of biological samples. Researchers need to be able to assess the suitability of samples for their planned application. Relevant sample data thus need to be documented by the biobanks in a standardized way. Defining the essential data linked to samples supports the goal of improving the quality of samples, making samples from different biobanks comparable and searchable (interoperability), promoting their exchange and enhancing visibility.

The SBP Working Groups (WG) Liquid and Tissue developed two preanalytical data-sets (DS) for human samples that went through public consultation at the beginning of 2018. These DS are based on (i) the CEN/TS specifications developed by the European Commission for Standardization with respect to the new ISO standard for biobanks (ISO 20387) and (ii) the Standard PRE-analytical Code (SPREC) released by the International Society of Biological and Environmental Repositories (ISBER). Both WG emphasize the essential need of documenting all relevant environmental and biological factors as well as all pre-analytical variables that are expected to have an influence on the sample composition. To guarantee the interoperability among different biobanks it is indeed crucial that the documentation of sample history follows common standards. Harmonizing the terminology and defining the minimum of common overlapping information is a prerequisite for the exchange of samples. This applies also to veterinary biobanks. Therefore, the WG Veterinary decided - in line with the strategy of the WG Liquid/Tissue - to develop two DS for veterinary samples (Vet-DS). A common DS will also be required, if the different collections at various clinics and institutes of the Vetsuisse Faculty shall be managed with one common biobank information management system (BIMS) in the future.

Based on the DS Liquid and Tissue, the Vet-DS was adapted to meet veterinary needs. It contains variables related to the animal and the specimen covering all biobanking processes from collection to distribution. To avoid free text, a dropdown list for the variables is proposed (if applicable) or reference is made to external databases. Each field is tagged either as mandatory or recommended in accordance with its relevance. In addition, some fields are specified as external, which means that they are visible in a future e-catalog. Finally, the Vet-DS is sample specific and excludes information on the biobank or biobank infrastructure. The latter information can be specified and recorded centrally at SBP since it is common to all specimen types.