

Abstract

With the astounding progresses in the development of precision medicine, patients' samples are highly valuable and to be cautiously treated. To ensure reliable data and better outcomes, pre-analytical bias must be controlled. Better samples, better data, better science is our motto at the Integrated Biobank of Luxembourg (IBBL). Our activities are managed under a strict quality management system, which enables us to keep traceability of every single step of the sample journey from collection to distribution. IBBL provides investigators with standardized kits to collect a wide variety of biospecimen and organize the transportation. Upon reception, samples are registered in our laboratory information management system. Samples can be stored at different temperatures (room temperature, +4°C, -20°C, -80°C and -196°C) depending on sample type and foreseen downstream applications. Each storage equipment and its environment (i.e temperature, humidity) are monitored 24/7. Samples can be processed immediately after reception or after storage retrieval. Our laboratory methods include aliquoting and derivative production and are designed to ensure that samples are fit-for-purpose. IBBL guarantees the compliance of its methods with international standards by providing and participating in a proficiency testing programs. IBBL also takes care of sample distribution to the customer or any third party in charge of further analysis. To summarize, IBBL has developed a fully traceable and standardized sample process flow to keep supporting and driving translational medicine research.