



BBMRI.at

Biobanking and
BioMolecular resources
Research Infrastructure
Austria



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An IT-supported Evaluation Tool for Biobanks based on International Guidelines to improve Biosample Quality

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Background

- high quality samples are a quality indicator for (bio-) medical research outcomes
- sample quality relies on specimen collection, transportation, pre-analytical processes, (long-term) storage conditions
- Standard Operating Procedures (SOPs) provide a strong standardization
- CEN Technical Specifications for pre-examination processes
 - tissue (snap frozen, FFPE)
 - fluids (venous whole blood, serum, plasma, urine)
- **AIM:**
IT-tool to assess the compliance of SOPs with CEN Technical Specifications

Material and Methods



1. analysis of the CEN technical specification
2. extraction of recommendations for each material sub-type
3. development and discussion of extracted recommendations
4. implementation of evaluation/survey based on **REDCap**
5. testing and pilot evaluation (BBMRI.at partners)
6. improvement of the pilot version according to feedback

Results

Affiliation	Medical University of Innsbruck			
Department / Institute	Testdata			
Material type	<input type="radio"/> Tissue <input checked="" type="radio"/> Fluid			
Fluid type	<input checked="" type="radio"/> Venous whole blood <input type="radio"/> Serum <input type="radio"/> Plasma <input type="radio"/> Urine			
Venous whole blood is collected	<input checked="" type="radio"/> Yes <input type="radio"/> No			
OUTSIDE THE LABORATORY =====				
1 PRIMARY SPECIMEN COLLECTION MANUAL				
1.1 Information about the primary sample donor documented				
	fulfilled	partly fulfilled	not fulfilled	not applicable
1.1.1 Primary donor / patient ID	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.1.2 Health status of sample donor	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.1.3 Medical treatment prior to sample collection	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.1.4 Type and purpose of proposed analytical test	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.1.5 Instructions for the preparation of the patient for the blood draw procedure (e.g. fasting status)	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information completely available.				

Discussion



- user-friendly tool
- web-based
- allows to assess the compliance of SOPs with international guidelines
- extension for biomolecules and cells needed
- meanwhile: tool was used for national survey amongst BBMRI.at partners
- report on results will be available soon



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