APPLIEDx: Integrated point-of-care platform for infectious diseases diagnosis

A Data Management Plan created using DMPonline.be

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Project abstract:

In vitro diagnostic (IVD) technologies have undoubtfully revolutionized healthcare over the past decades. However, with dominance of laboratory-confined technologies, the IVD market critically lags behind a healthcare paradigm shift towards decentralized diagnostic approaches (so called, point-of-care, POC). Lab-on-chip (LOC) technologies have long promised to address this need and bring lab-quality assays to the POC, but largely failed because of complex instrumentation, difficult operation with too many manual steps and high cost. Therefore, in the absence of a better solution, the decades-old lateral flow (LF) assays keep dominating the POC market despite the pre-requisite for sample preparation, lack of multiplexing capacity and incompatibility with different types of assays. In this context, the overall scientific goal of the APPLIEDx project is to develop POC patch unique in its capacity for (1) painless sampling of capillary blood through hollow microneedles (HMN), (2) direct analysis of this sample on the very same patch, (3) accommodating multiplex immunological and high sensitivity molecular assays on an integrated LF strip and (4) activation by simply positioning this patch on the upper arm of a user. The APPLIEDx patch will be validated through a retrospective sample set and/or prospective small scale evaluation in a controlled clinical setting for 2 highly socioeconomic relevant cases: (1) simultaneous diagnosis of HIV and syphilis, contributing to sexually transmitted disease control, and (2) simultaneous detection of Dengue and Chikungunya, supporting prevention of tropical fever-causing viruses outbreaks. To succeed in this, the 3-partner consortium with support of extended advisory committee will significantly advance in the fields of self-powered microfluidics, materials science and HMN microfabrication next to development and on-chip implementation of complex assays for their patient validation.

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APPLIEDx: Integrated point-of-care platform for infectious diseases diagnosis Application DMP

Questionnaire

Describe the datatypes (surveys, sequences, manuscripts, objects …) the research will collect and/or generate and /or (re)use. (use up to 700 characters)

The following datatypes will be generated: chip designs (.svg); microfluidic optimization (.mp4); on-chip heating system characterization (.seq); microscope images/images in general (.jpg, .tiff, .png); data analysis, piercing force measurements and working with pressure pumps (.xlsx); µCT scanning (.m files for result analysis in Matlab and .tif and.stl files for 3D renders); HMN fabrication (.dwg, .stp and. dxf files for AutoCAD). Existing/new protocols, research reports and manuscripts will be generated (.docx, .xlsx). Clinical validation is performed according to a standardized protocol, including informed consent, usability feedback and laboratory diagnostic accuracy assessments (.csv, docx, .xlsx).

Specify in which way the following provisions are in place in order to preserve the data during and at least 5 years after the end of the research? Motivate your answer. (use up to 700 characters)

1. Designation of responsible person: Prof. Jeroen Lammertyn
2. Storage capacity/repository
    1. At KUL, all staff working on the project (under supervision of project PI, J. Lammertyn) will follow KUL Research DMP (in accordance with FWO requirements), save all the data on the shared KUL J: Drive during the project and transfer them to K: Drive for long-term storage. Storage capacity/staff member is 200 Gb, with KUL ICT responsible for all the servers. At ITM, all data are saved in a protected folder (restricted access) on the ITM L:Drive (39.5 Gb) under supervision of laboratory responsible (D. Van den Bossche). Data will be collected and stored in accordance with ITM Research DMP. Servers are managed and secured by ITM ICT.

What's the reason why you wish to deviate from the principle of preservation of data and of the minimum preservation term of 5 years? (max. 700 characters)

N.A.

Are there issues concerning research data indicated in the ethics questionnaire of this application form? Which specific security measures do those data require? (use up to 700 characters)

Information about study participants will be handled confidentially, and a unique study code (pseudonymization) will be assigned to each participant. Data collected in ITMs biobank (SLIMS software) is pseudonymized to minimize the risk of re-identification. The key and personal identifiers are only accessible to the authorized project staff in a password protected .xlsx document. Only pseudonymized data will be processed for study data management and analysis/reporting will only be done by means of aggregated or fully anonymous data. Data management will be done in compliance with Good Clinical Practice guidelines, GDPR, and a study specific data management plan will be developed.

Which other issues related to the data management are relevant to mention? (use up to 700 characters)

For overview of protocols/research progress, electronic notebook will be used in the Biosensors group (eLABJOURNAL, Bio-ITech) and ITM (Zenya, SLIMS, RedCAP) with indication of date/subject/responsible person. Research DMP will be followed strictly: data (with the exception of research participant identifiers) will be made available on request to the KUL/ITM at any time during the research, and stored for a minimum of 10 years after the publication of the results/the end of the period of the project funding. Data collected throughout the project, saved in the general file of the project, will be bundled in manuscripts, in which graphs, tables and images will summarize the results and conclusions.

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DPIA

DPIA

Have you performed a DPIA for the personal data processing activities for this project?

- Not applicable

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GDPR

GDPR

Have you registered personal data processing activities for this project?

- Not applicable

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FWO DMP (Flemish Standard DMP)

1. Research Data Summary

List and describe all datasets or research materials that you plan to generate/collect or reuse during your research project. For each dataset or data type (observational, experimental etc.), provide a short name & description (sufficient for yourself to know what data it is about), indicate whether the data are newly generated/collected or reused, digital or physical, also indicate the type of the data (the kind of content), its technical format (file extension), and an estimate of the upper limit of the volume of the data.

All datasets listed in table below will be shared under CC-BY-NC license.

				Only for digital data	Only for digital data	Only for digital data	Only for physical data
Dataset Name	Description	New or reused	Digital or Physical	Digital Data Type	Digital Data format	Digital data volume (MB/GB/TB)	Physical volume
CAD design	Design of microfluidic modules and chips (WP1)	Generate new data	Digital	Experimental	.svg	< 2GB	
Video recording	Visualization of microfluidic chip operations during design optimization: video recordings with camera/webcam (WP1)	Generate new data	Digital	Experimental	.mp4, .avi	< 1TB	
Microscopy images	Visualization and quantification of the number of red blood cells in the separated plasma samples (Task 1.2)	Generate new data	Digital	Experimental	.tiff, .JPEG	< 25GB	
Spectrophotometer data	Collection and processing of primary numerical data (spectrophotometer) for the characterization of the dilution accuracy are processed in standard software (Task 1.1)	Generate new data	Digital	Experimental	.csv	<1GB	
Experiment parameters	Laser machining parameters, material parameters, scanning strategy and injection moulding parameters for experiments (WP2)	Generate new data	Digital	Experimental	.csv	<1GB	
µCT	Characterisation of lasered samples with µCT (WP2)	Generate new data	Digital	Experimental	.tiff	<1 TB	
Injection moulding simulations	Injection moulding simulation results, mesh information and CAD file (WP2)	Generate new data	Digital	Experimental	m3j and .ans	<1 TB	
CAD files	CAD files of the mould and needle designs (WP2)	Generate new data	Digital	Experimental	.stp	< 100 GB	
Microscopy data	Microscopy data of microneedles and mould inserts for mechanical behaviour tests and fluidic characterization (WP2)	Generate new data	Digital	Experimental	.tiff ; .pdf, .plux	< 100 GB	
Mechanical behaviour tests	Force and displacement information from mechanical tests (WP2)	Generate new data	Digital	Experimental	.csv	< 1GB	
CAD design flow splitting system	Design of microfluidic flow splitting system (Task 2.3)	Generate new data	Digital	Experimental	.svg	< 500MB	
Video recording flow splitting system	Visualization of microfluidic flow splitting system operations (Task 2.3)	Generate new data	Digital	Experimental	.mp4, .avi	< 500GBB	Video recording
CAD design skin model	Design of PDMS based in vitro skin model for sampling module validation (Task 3.1)	Generate new data	Digital	Experimental	.svg	< 500MB	
Video recording sampling module	Visualization of microfluidic chip operations during sampling module operation (Task 3.1 and 3.2)	Generate new data	Digital	Experimental	.mp4, .avi	< 500GB	
Sampling module_validation_ usability	Task 3.3 After Scenario Questionnaire Anonymized pictures of the device handling	Generate new data	Digital	Experimental Observational	.csv .tif	<100MB <100MB (per picture)	
Sampling module_validation_ acceptability	Task 3.3 Acceptability scores (grades)	Generate new data	Digital	Experimental	.csv	<100MB	
Sampling module_validation_robustness	Task 3.3 Success rate Volume collected	Generate new data	Digital	Experimental	.csv	<100MB	
Bioassays development	WP4 and WP5 -Collection and processing of primary numerical data (ELISA, RT-PCR)	Generate new data	Digital	Experimental	.csv	<5GB	
CAD design bioassay modules	Design of APPLIEDx bioassay modules (WP4-5)	Generate new data	Digital	Experimental	.svg	< 1GB	

Video recording	Visualization of microfluidic chip operations during assay implementation video recordings (WP4-5)	Generate new data	Digital	Experimental	.mp4, .avi	< 500GB	
Assay module validation	Task 6.1 Retrospective sample validation (DENV and CHIKV module)	Generate new data Reuse existing data	Digital Physical	Experimental	.csv	<100MB	
Assay module validation	Task 6.2 Retrospective sample validation	Generate new data Reuse existing data	Digital Physical	Experimental	.csv	<100MB	
Integrated patch_diagnostic accuracy	Task 6.3 Prospective validation	Generate new data	Digital	Experimental	.csv	<100MB	
Integrated patch_usability, acceptability, robustness	Task 6.3 After Scenario questionnaire, Acceptability scores, etc (as for sampling module) Anonymized pictures of the device handling	Generate new data	Digital	Experimental Observational	.csv .tif	<100MB <100MB (per picture)	
Observational Data	Reports and notes written down in electronic lab notebook (eLABJournal, Bio-ITech – cloud-based storage)	Generate new data	Digital	Observational	Cloud based file		
Reporting	Meeting reports and update presentations	Generate new data	Digital	Experimental &Observational	.docx, .pptx	<5GB	
Scientific outcomes	Scientific publications and doctoral dissertations	Generate new data	Digital	Experimental &Observational	.docx, .pdf	< 15GB	

If you reuse existing data, please specify the source, preferably by using a persistent identifier (e.g. DOI, Handle, URL etc.) per dataset or data type:

As a source for existing data (Task 6.1 and 6.2: analytical and clinical validations with a retrospective sample set), the clinical reference laboratory information system (LAB400) will be used as well as the electronic biobank system (SLIMS). The retracted data will contain information on infection status (HIV, syphilis, DENV, CHIKV positive and/or negative), and sample biobank location.

Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? Describe these issues in the comment section. Please refer to specific datasets or data types when appropriate.

- Yes, human subject data
- Yes, animal data

As the project includes prospective inclusion of both healthy and sick study participants, we will comply with the Belgian law on experiments (2004), the Declaration of Helsinki (2013), the Belgian biobank law and the GDPR.

Personal data processing considerations: clinical validation is performed according to a standardized protocol, including informed consent, usability feedback and laboratory diagnostic accuracy assessments (.csv, docx, .xlsx). At ITM, all data are saved in a protected folder (restricted access) on the ITM L:Drive (39,5 Gb) under supervision of laboratory responsible (D. Van den Bossche). Data will be collected and stored in accordance with the ITM Research Data Management Plan. Servers are managed and secured by ITM ICT. We will adhere to a minimum preservation term of 10 years after the publication of the results or the end of the period of the project funding. Information of study participants will be handled confidentially, and a unique study code (pseudonymization) will be assigned to each participant at the earliest opportunity. Data collected in ITM's biobank (SLIMS software) and data collection tool (RedCAP) is pseudonymized. Pictures taken during the user testing will be anonymous, taking into account specific participant characteristics (eg tattoos). Since personal data is collected and processed, we will comply with the EU GDPR 2016/679. The key and personal identifiers are only accessible to selected study staff in contact with participants and retained in a password protected .xlsx document. Pseudonymization is done appropriately to minimize the risk of re-identification. Only pseudonymized data will be processed for study data management and analysis and reporting will only be done by means of aggregated or fully anonymous data. Data management will be done in compliance with Good Clinical Practice (GCP) guidelines andGDPR,. ITM adheres to the European FAIR principles and recognizes that data should be "as open as possible and as closed as necessary". As such, ITM's data sharing policy will be followed according to which the data supporting the findings of this study will be retained at the ITM and will not be made openly accessible due to ethical and privacy concerns. Data can however be made available after approval of a motivated and written request to the Data Access Committee of the ITM at ITMresearchdataaccess@itg.be.

Will you process personal data? If so, briefly describe the kind of personal data you will use in the comment section. Please refer to specific datasets or data types when appropriate.

- Yes

The following personal data of patients will be processed for the retrospective analysis of biobanked lab samples:
Reference laboratory results and demographic data (gender, age) for the assay module validation dataset
The following personal data of patients will be processed for prospective part:
Questionnaire answers/ Likert scale grade will be collected for study participants, as well as some demographic data (age, gender, education level, …). Data will be collected pseudonymously through a RedCAP online questionnaire and extracted to an .csv or .xlsx format for further analysis. This applies to the following datasets:
Sampling module_validation_ usability
Sampling module_validation_ acceptability
Integrated patch_usability, acceptability, robustness
Reference laboratory results will be processed for the Integrated patch_diagnostic accuracy

Does your work have potential for commercial valorization (e.g. tech transfer, for example spin-offs, commercial exploitation, …)? If so, please comment per dataset or data type where appropriate.

- Yes

The FWO APPLIEDx has 4 main valorization routes:

1. Development and licensing of RDT for STDs
2. Development and licensing molecular assays for ID
3. Creation of a knowledge centre for transdisciplinary development of IVD devices
4. Creation of a manufacturing centre for microfluidic chip technology

To support these valorization routes, IP generation and protection is key. We do expect new IP generation in the field of microfluidics for both point-of-care microsampling, sample processing and *in vitro* diagnostics (e.g. flow-splitting system, reagent mixing and dilution, plasma separation, molecular assay integration in WP1-3-4-5) as well as in the field of microfabrication (e.g. mold solutions for creating the fluidic connection in WP 2-3).
When there is concrete potential for tech transfer, the IP related to these research data will be protected, with the support of KU Leuven LRD and the IOF manager supporting this project (Dr. F. Dal Dosso).

Do existing 3rd party agreements restrict exploitation or dissemination of the data you (re)use (e.g. Material/Data transfer agreements/ research collaboration agreements)? If so, please explain in the comment section to what data they relate and what restrictions are in place.

- No

Currently, there are no 3rd party agreements in place regarding this project that can restrict exploitation or dissemination of the data.

Are there any other legal issues, such as intellectual property rights and ownership, to be managed related to the data you (re)use? If so, please explain in the comment section to what data they relate and which restrictions will be asserted.

- No

2. Documentation and Metadata

Clearly describe what approach will be followed to capture the accompanying information necessary to keep data understandable and usable, for yourself and others, now and in the future (e.g., in terms of documentation levels and types required, procedures used, Electronic Lab Notebooks, README.txt files, Codebook.tsv etc. where this information is recorded).

- For overview of protocols/research progress, electronic notebook will be used at KUL (eLABJOURNAL, Bio-ITech) and ITM (Zenya, SLIMS, RedCAP) with indication of date/subject/responsible person. Here, folders will be provided for all subtasks of the project. In each folder, a new file will be made for each experiment, named with the date and subject, and including information about the responsible person (i.e., the person who created the file) as well as version tracking. Each experimental file will contain a section on the objective, protocol, results (a description of results and observations rather than all raw and analyzed data) and conclusions.
- Research DMP will be followed strictly: data (with the exception of research participant personal data) will be made available on request to the KUL/ITM at any time during the research. Data will be stored for a minimum of 10 years after the publication of the results/the end of the period of the project funding.
- Most important (raw)data which lead to publications (e.g. conference proceedings, journal paper) and/or to patents filings, will be stored on the shared folder created on the shared drive (J:\SET-MEBIOS-BIOSENSORS-SHAREDPROJ-DI0494\SBO-APPLIEDx-0004). This folder is secured and backed-up by the ICTS service of KU Leuven. This folder will contain also all the administrative items (e.g. project proposal, project reports, update presentations, contracts).

Will a metadata standard be used to make it easier to find and reuse the data? If so, please specify (where appropriate per dataset or data type) which metadata standard will be used. If not, please specify (where appropriate per dataset or data type) which metadata will be created to make the data easier to find and reuse.

- No

- Being a highly interdisciplinary project, it is not possible to use a standard metadata system.
- Being a highly interdisciplinary project, it is not possible to use a standard metadata system.
- KUL and ITM partners will use the electronic lab notebook in which a number of predetermined topics have to be described for each experiment (objective, protocol, results, and conclusion). The electronic lab notebook facilitates searching for particular metadata through a search engine. By mimicking the folder structure of the electronic lab notebook in the server-based folder with the experimental data, linking of the metadata to the actual data will be facilitated.
- As a general rule, datasets will be made openly accessible, whenever possible via existing platforms that support FAIR data sharing (www.fairsharing.org). When depositing data in a local or public repository, the final dataset will be accompanied by this information in a README.txt document, following the Dublin Core Metadata standard if no other meta-standard is available yet. This file will be located in the top-level directory of the dataset and will also list the contents of the other files and outline the file-naming convention used. This will allow the data to be understood by other members of the laboratory and add contextual value to the dataset for future reuse. Participant level data will not be made openly accessible due to privacy restrictions.
- For each peer-reviewed article, a separate folder will be made on the server, containing the latest Word version and all raw and processed data used in the article.

3. Data storage & back-up during the research project

Where will the data be stored?

- The time-stamped digital data will be stored in an already created project folder on the shared drive (J:) of KU Leuven. The time-stamped digital metadata will be stored on the server of the electronic labbook. The folder is open for all the project partners that will be working on this project and is secured and backed-up by the ICTS service of KU Leuven. Copies can be made and kept on KUL managed personal laptops (e.g., OneDrive personal folder).
- At ITM, all data are saved in a protected folder (restricted access) on the ITM L:Drive (39.5 Gb) under supervision of laboratory responsible (D. Van den Bossche). Data will be collected and stored in accordance with ITMs Research Data Management Policy. Servers are managed and secured by ITM ICT. Copies can be made and kept on O365 Onedrive personal location.

How will the data be backed up?

- For both KUL and ITM, the digital data will be stored on the central servers with automatic daily back-up procedures

Is there currently sufficient storage & backup capacity during the project? If yes, specify concisely.
If no or insufficient storage or backup capacities are available, then explain how this will be taken care of.

- Yes
- KU Leuven as well as ITM provide sufficient storage and back-up capacity during and after the project. A dedicated folder will be made for the project on which the collaborators will work jointly and store data files.

How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?

- KUL:
  - The network drive for the project shared folder and the large volume storage folder are secured by the ICTS service of KU Leuven with a mirror copy. Confidential data can and will be protected with a password (available only for PI Jeroen Lammertyn).
  - Visitors, MSc thesis students and internship students in the groups as well as other unauthorized persons will not have access to the data on the shared folder.
  - Data storage in the cloud will be avoided, unless for temporary use only, e.g., to transfer large files between the researchers involved in the project.
- ITM:
  - Servers are protected by firewall and antivirus software. Access is only possible with ITM password, 2-factor authentication and assigned user access to the concerned server folders. Access to project files is restricted to project staff. Any data stored on ITM laptops is encrypted.

What are the expected costs for data storage and backup during the research project? How will these costs be covered?

- KUL Type 1 server back-end storage with mirror backup for the project share folder will cost 519 Euro per Tb per year. Costs will be covered by the project consumables budget.

4. Data preservation after the end of the research project

Which data will be retained for at least five years (or longer, in agreement with other retention policies that are applicable) after the end of the project? In case some data cannot be preserved, clearly state the reasons for this (e.g. legal or contractual restrictions, storage/budget issues, institutional policies...).

- The data to be retained during 10 years after the project's end are dissemination data (source files of publications and presentations), documentation on measurements set-ups, and the most relevant measurement data.

Where will these data be archived (stored and curated for the long-term)?

A distinction is made between research data and dissemination data.

- The research data, namely microscopy images, video recordings and measurement results, will be stored on an external hard drive after the end of the project.
- For dissemination data
  - At KUL, all staff working on the project (under supervision of project PI, J. Lammertyn) will follow KUL Research DMP (in accordance with FWO requirements), save all the data on the shared KUL J: Drive during the project and transfer them to K: Drive for long-term storage. Storage capacity/staff member is 200 Gb, with KUL ICT responsible for all the servers.
  - At ITM, all data are archived saved in a protected folder (restricted access) on the ITM L:Drive (39.5 Gb) under supervision of laboratory responsible (D. Van den Bossche). Data will be collected and stored in accordance with ITMs Research Data Management Policy. Servers are managed and secured by ITM ICT.

What are the expected costs for data preservation during the expected retention period? How will these costs be covered?

- The volume corresponding to dissemination data is expected to be relatively low (<10 GB), and therefore can be seamlessly embedded in the PI's allocation on the departmental server. The costs (1000 EUR/year) will be covered by other on-going projects at that point in time.
- The research data will be stored on an external hard disk. As the lifetime of such external hard disk may not be adequate, the data to be preserved will be moved to a new hard disk, purchased on the budget of a follow-up project, when needed. This is adequate, as the volume of such external hard disks is expanding considerably over time.

5. Data sharing and reuse

Will the data (or part of the data) be made available for reuse after/during the project? In the comment section please explain per dataset or data type which data will be made available.

- Yes, in a restricted access repository (after approval, institutional access only, …)
- Other, please specify:

New data generated from the below tasks will be made available according to ITM's guidelines on 'secondary sharing of (sensitive) personal data' (see below).

Sampling module_validation_ usability	Task 3.3 After Scenario Questionnaire
Sampling module_validation_ acceptability	Task 3.3 Acceptability scores (grades)
Sampling module_validation_robustness	Task 3.3 Succes rate Volume collected
Assay module validation	Task 6.1 Retrospective sample validation (DENV and CHIKV module)
Assay module validation	Task 6.2 Retrospective sample validation
Integrated patch_diagnostic accuracy	Task 6.3 Prospective validation
Intergrated patch_usability, acceptability, robustness	Task 6.3 After Scenario questionnaire, Acceptability scores, etc (as for sampling module)

Other:

- Relevant digital data will be published and made available after the end of the project.
- Data with valuable IP will be protected prior to publication.
- We will comply with open access regulations of KU Leuven.

If access is restricted, please specify who will be able to access the data and under what conditions.

All project collaborators will be authorized to have access to all obtained digital and physical data after the project. In case the question originates by researchers outside the project, the data can be made available upon e-mail request, and on condition that the users agree to give proper credit, such as co-authorship on their papers building on these data. Usage for commercial purposes will require obtaining a license, or equivalent arrangement.

Are there any factors that restrict or prevent the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)? Please explain in the comment section per dataset or data type where appropriate.

- Yes, Ethical aspects
- Yes, Privacy aspects
- ITM: Secondary sharing of (sensitive) personal data will only occur if full anonymization can be assured and after review and approval of ITMs Data Access Committee and signature of a Data Sharing Agreement.

Where will the data be made available? If already known, please provide a repository per dataset or data type.

- We will deposit all peer reviewed versions of these contributions in the trusted repositories, e.g. for KUL Lirias (OpenAIRE compliant) and for ITM Pure (ITM's research portal, developed by Atira; OpenAIRE compliant)
- We will upload, describe, and share our research data (according to the FAIR principles), by making use of general data repositories (such as Zenodo) for properly documenting and managing project data during and after the project. In addition, where relevant, we will consider also publishing data, available in data repositories, in Data journals (e.g. General data journal Scientific Data (Nature) or those Data journals covering STEM and Medicine fields).

When will the data be made available?

- As soon as the research results have been published and any related patents secured, the data can be made available to other researchers.

Which data usage licenses are you going to provide? If none, please explain why.

- To guarantee reusable aspect of data, sufficient documentation and methods information will be provided, whereas CC-BY-NC license will be attached to data through data repositories

Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, you have the option to provide it in the comment section.

- Yes
- To make sure that all research data are findable, data will be deposited in trusted data repositories, such as KUL Lirias, ITM Pure or Zenodo and data will be assigned with DOIs to create trustworthy and persistent links for online content.

What are the expected costs for data sharing? How will these costs be covered?

- A restricted access repository can be implemented on a free tool, such as Dropbox or OneDrive, up to a certain volume. If this volume does not suffice, time-limited storage will be considered, thus limited to the time needed to download the data.

6. Responsibilities

Who will manage data documentation and metadata during the research project?

Study nurses, lab technicians, scientific collaborators, PhD students and post-doctoral researchers working on this project will be responsible for the data collection, documentation and metadata. They will be trained in data management at the beginning of their contract. Supervisors will manage the data storage facilities.

Who will manage data storage and backup during the research project?

Study nurses, lab technicians, scientific collaborators, PhD students and post-doctoral researchers working on this project will be responsible to store the data on the appropriate accommodation provided by KU Leuven/ITM. The ICTS service of KU Leuven/ITM is responsible for the back-up of the network drives at KU Leuven/ITM. The folders will be managed by the supervisors.

Who will manage data preservation and sharing?

The PIs will be responsible for the data preservation and eventual reuse of obtained data.

Who will update and implement this DMP?

Dr. Francesco Dal Dosso, IOF manager at the Biosensors Group