

The platelet lipidome, a key regulator of platelet inflammatory and procoagulant functions during sepsis

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.

Dataset name / ID	Description	New or reuse	Digital or Physical data	Data Type	File format	Data volume	Physical volume
		<i>Indicate: N(ew data) or E(xisting data)</i>	<i>Indicate: D(igital) or P(hysical)</i>	Indicate: Audiovisual Images Sound Numerical Textual Model SOftware Other (specify)		Indicate: <1GB <100GB <1TB <5TB >5TB NA	
WP 1.1 Lipidomics	WP will be performed at UCL (joint PhD project) and stored according to their DMP.						
WP 1.2 Bioenergetics	Performed at UCL, see 1.1						
WP 2.1 Analysis of the platelet secretome.	Performed at UCL, see 1.1						
WP 2.2 Endothelial cells studies.	Performed at UCL, see 1.1						
WP 3.1 Procoagulant platelet formation upon ACC1 modulation	Murine blood: flow cytometry assays, aPTT assay on plasma. Hemostatic plug assay: SEM analysis.	N	D	N, SO, I, T	.xlsx, .fcs, .jpeg, .dzi, .docx	<100GB	Tissue on microscopy slides, n=30; plasma aliquots, n=30
WP 3.2 Protein acetylation modified by ACC	Murine platelet lysate western blot. (Acetyl proteomics will be performed at UCL)	N	D	N, I, T	.xlsx, .jpeg, .docx	<1GB	NA
WP 4.1 Ex vivo platelet analysis	Murine blood: flow cytometry assays, aPTT assay on plasma, western blot on platelet lysate.	N	D	N, SO, I, T	.xlsx, .fcs, .jpeg, .docx	<100GB	NA
WP 4.2 Analysis of procoagulant parameters	ELISAs on murine plasma, histology on organ sections.	N	D	N, I, T	.xlsx, .jpeg, .docx	<1GB	Plasma aliquots, n=40; tissue on microscopy slides, n=20
WP 4.3 Analysis of multiple organ failure	ELISAs on murine plasma.	N	D	N, T	.xlsx, .doc	<1GB	Plasma aliquots, n=80

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:

NA

Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? If so, refer to specific datasets or data types when appropriate and provide the relevant ethical approval number.

- Yes, animal data (Provide ECD reference number below)

Not yet applied for ECD approval yet, as the related experiments will not start before October 2025.

Will you process personal data? If so, please refer to specific datasets or data types when appropriate and provide the KU Leuven or UZ Leuven privacy register number (G or S number).

- No

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.

- No

Do existing 3rd party agreements restrict exploitation or dissemination of the data you (re)use (e.g. Material or 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

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

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).

Digital data:

We will maintain a record of the following for every WP (where applicable):

Electronic lab book in Excel (.xlsx file) containing:

- Experimental design and protocol
- Sampling protocol
- Steps involved in data analysis
- Analyzed data
- Overview of used materials
- Overview of stored electronic raw data files including name and location of folders

-Overview of stored tissue and plasma samples

The Excel files will be stored in the folder of the specific WP, named by the date and the experiment title.

Other:

-Raw data (specific file format according to data type)

Word document (.docx file):

-Overview and summary of the overall findings for the specific WP.

Physical data:

Samples taken from mice (plasma, tissue) will be stored for up to ten years after the end of the project. Organs will be fixed or embedded in paraffin, plasma will be stored in a -80 freezer.

Will a metadata standard be used to make it easier to find and reuse the data ?

If so, please specify which metadata standard will be used.

If not, please specify which metadata will be created to make the data easier to find and reuse.

- No

In an electronic lab book (using Excel), all data related to the specific experiments will be kept. This includes an overview of all raw data and physical samples that are stored.

Data Storage & Back-up during the Research Project

Where will the data be stored?

- Shared network drive (J-drive)
- Large Volume Storage

J-drive: storage of electronic lab books and raw data.

Large volume storage (K-drive) will be used for the storage of microscopy images.

How will the data be backed up?

- Standard back-up provided by KU Leuven ICTS for my storage solution

Is there currently sufficient storage & backup capacity during the project?

If no or insufficient storage or backup capacities are available, explain how this will be taken care of.

- Yes

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

Each PhD student gets a folder on the J-drive for his/her electronic lab book. This folder is only accessible by authorized persons (PhD student, technician, PI). Raw data is stored in J-drive that is only accessible by personnel within the Laboratory for Thrombosis Research.

Physical data will be stored within the IRF at the Kulak, which is only accessible with badge access.

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

Costs foreseen in the bench fee for this project should be enough. Kulak campus offers good deals for campus members and researchers.

Data Preservation after the end of the Research Project

Which data will be retained for 10 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...).

- All data will be preserved for 10 years according to KU Leuven RDM policy

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

- Large Volume Storage (longterm for large volumes)

K-drive on the server of Kulak will be used as archive drive for long-term storage of data.

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

Costs for data preservation on the K-drive is shared between 3 PI's within the Laboratory for Thrombosis Research. My part will be paid depending on the at that time available budget (e.g. project funding, consultancy income).

Data Sharing and Reuse

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

- Yes, as open data

Published data will be made available. Unpublished results will be made available after an embargo period (3 years; exceptionally 5 years after the project).

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

NA

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 per dataset or data type where appropriate.

- No

Where will the data be made available?

If already known, please provide a repository per dataset or data type.

- KU Leuven RDR (Research Data Repository)

Published data will be made available. Unpublished results will be made available after an embargo period (3 years; exceptionally 5 years after the project).

When will the data be made available?

- Upon publication of research results

Which data usage licenses are you going to provide?

If none, please explain why.

- CC-BY 4.0 (data)

Do you intend to add a persistent identifier (PID) to your dataset(s), e.g. a DOI or accession number? If already available, please provide it here.

- Yes, a PID will be added upon deposit in a data repository

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

No expected costs for public data repositories.

Responsibilities

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

PI (prof. Claudia Tersteeg) and PhD Student (Gabriele Muscia)

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

Storage: PI (prof. Claudia Tersteeg) and PhD Student (Gabriele Muscia).

Backup: Kulak ICT

Who will manage data preservation and sharing?

PI (prof. Claudia Tersteeg)

Who will update and implement this DMP?

PI (prof. Claudia Tersteeg)