

Aalto University

Non-invasive measurements of blood pressure using transabdominal pulse decay (TAPD) technique:

Privacy Notice

This privacy notice describes how your personal data will be used in the research study as a participating individual. You have also been provided with document called "Participant Information Sheet", which explains in more detail how the study is carried out.

1. What is being studied in this research study and the purpose of processing personal data

The aim of the study is to investigate blood pressure can be reliably estimated from the combination of electromagnetic (ECG), optical (PPG), and mechanical (displacement, acceleration) measurements of the cardiovascular activity.

This research is funded by Business Finland Research to Business project BodyWatch.

2. What personal data is processed in the research study

The following personal data will be processed

1. Name
2. Contact information (email)
3. Age
4. Gender

Special categories of personal data (sensitive personal data)

In addition, the following special categories of personal data are processed:

☒ Racial or ethnic origin

1. Skin tone (Fitzpatrick scale I-IV)

☒ Data concerning health

Research personal data concerning health collected during this study will comprise:

2. Height, weight, body mass index, waist circumference
3. Screening information about the absence of diagnosed cardiovascular disease will be asked orally
4. Electrocardiogram (ECG)
5. Photoplethysmogram (PPG)
6. Kinematic information including respiration rate.
7. Reference Blood pressure (BP) data.

Personal research data will be pseudonymized upon collection by encrypting the participant's identities with a code.

Personal data is collected from the following sources:

From the participant: age, gender, height, weight, waist circumference, skin tone (Fitzpatrick scale), screening and contact information (email).

Other: ECG, PPG, reference blood pressure, and kinematic measurements are collected using measurement equipment.

The research methods are described to you more in detail in the "Participant Information Sheet" -document.

3. Processing of necessary personal data and removal of the direct identifiers from the data

The research study only processes personal data that is necessary for the purpose and execution of the study. The research data is processed during analysis phase of the research in a manner, that you are not directly identifiable to the researchers. Your direct identifiers, such as your name has been replaced with a random identifier.

The tests have not been designed to provide any clinical information. Nonetheless, in case of these tests happen to reveal a markedly nontypical unexpected finding, which the data subject is not aware of, a specialist doctor from the HUS heart and Lung clinic will be consulted about the finding. Based on his/her evaluation, the data subject may be recommended, if necessary, to seek appropriate further examinations.

Identity of the individual research participant will not be disclosed in a scientific publication or other research results to be published.

4. Legal basis for the processing of personal data

The legal basis is scientific research, a task in the public interest.

5. Sharing personal data

Personal data processed in the study will not be shared with third parties.

6. International data transfers

Research data containing personal data will not be transferred outside the European Union/ European Economic Area or to international organizations.

7. Storage and protection of personal data

Protection of manual material: Signed Informed consent forms are stored in a locked and monitored space at the project PI's (prof. Lauri Parkkonen) office in locked cabinet.

Information processed in IT systems: Your personal data is processed and preserved in secure IT systems, which are approved by Aalto University and suitable for personal data. Access to all computers and IT systems are protected by username and strong personal password. Access to IT systems containing personal data is technically restricted in a manner, that only researchers participating in the study and persons necessary for the implementation of the study have access to your personal data.

8. Retention and deletion of personal data

Deletion during and after the study

Personal data (age, gender) and research data concerning health (height, weight, BMI, waist circumference, ECG, PPG, BP and kinematic measurements) as well as other special categories of data (Fitzpatrick scale) will be stored in a pseudonymized form for 5 years (from 01.01.2026 until 01.01.2031) to provide sufficient time for data analysis (and/or possible reanalysis), publishing and replication of the study results. After that research data will be deleted.

Names and contact information of the study subjects will be stored for one year (from 01.01.2026 until 01.01.2027) for communication with the participants regarding e.g., incidental findings. The contact information of the study subjects will be deleted after one year on 01.01.2027.

9. Rights of the research participant

According to the General Data Protection Regulation (GDPR), a data subject has the right to:

- receive information on the processing of their personal data
- right to access the personal data collected and processed
- right to rectification of inaccurate personal data
- request that the processing of personal data be restricted
- object the processing of personal data
- right to erasure of personal data if the conditions of Article 17(1) of the Data Protection Regulation are met and processing is no longer necessary for archiving purposes in the public interest or for scientific research or statistical purposes in accordance with Article 89(1)

If the research purpose does not require, or no longer requires the identification of the data subject, the controller shall not be obliged to obtain further information so that the data or the data subject may be identified only for purposes to enable the data subject to exercise his/her rights. If the controller is unable to link the data to a particular data subject, the data subject does not have the right to access or correct the personal data, object the processing, or delete the personal data. However, if the data subject provides additional information that allows their identification from the research data, the rights will not be restricted.

10. Contact details of the controller

The controller of this research study is Aalto University Foundation sr., operating as Aalto University.

Person in charge of the research study

Questions regarding the conduct of the research study may be addressed to the person in charge of the study: prof. Lauri Parkkonen (tel: +358405089712, email: lauri.parkkonen@aalto.fi).

Data Protection Officer

If the research participant has questions or requests related to data protection or the processing of personal data, the research participant should contact the Data Protection Officer of Aalto University: tel. +358 9 47001 (exchange), dpo@aalto.fi .

In this data request service, you can request the exercise of your rights under GDPR from Aalto University as the controller <https://datarequest.aalto.fi/en-US/>.

If a participant of the research study feels that his or her personal data has been processed in violation of data protection legislation, the participant has the right to lodge a complaint with the supervisory authority, the Data Protection Ombudsman's office (read more: <http://www.tietosuoja.fi>).