



DZHK Call on Utilization of Data and Biospecimen

## How the DZHK Data and Biospecimen Collection can Support your Next Project

The Clinical Research Platform contains data and biospecimen that are available to researchers worldwide. The data and biosamples are taken from clinical trials, registries and patient cohorts.



### New Funding Guideline on Utilization of Data and Biospecimen

The DZHK has issued a funding guideline to encourage researchers to make of data and specimen. Basic researchers or clinicians may apply for funding.

### Interview with Dr. Wesley Abplanalp



Basic scientist and physiologist Dr. Wesley Abplanalp explains how working with biobanks can accelerate your research.

During a clinical or epidemiological trial, a lot of patient data and biospecimen is collected with great effort. The German Centre for Cardiovascular Research (DZHK) has developed a sustainable concept how to make use of this data and biospecimen and provide researchers with a valuable resource for their next research project. The DZHK Data and Sample Collection is compiled in one accessible database that contains a wealth of high-quality biospecimen like

tissue, blood, saliva, urine and DNA. The samples are derived from patients that their consent for further research with their samples and their data. The idea of this valuable collection is to maximise the use of data and biospecimens that are collected from DZHK financed trials or other resources and make them available to researchers worldwide. In this brochure we explain how to obtain access to these data and biospecimen.



“DZHK sample collection can help me quickly check whether basic research findings are clinically relevant.”

Prof. Stefanie Dimmeler  
Chair of the DZHK Board of Directors



## „Biobanks can help you accelerate your career“

**Dr. Wesley Abplanalp is an American physiologist and basic scientist working on cardiovascular inflammation and regeneration. He is part of the research group of DZHK board member Prof. Stefanie Dimmeler at the Institute of Cardiovascular Regeneration at the Goethe-University Frankfurt am Main, where he is in charge of the Institute's single-cell analysis platform.**



Dr. Wesley Abplanalp  
Goethe-University Frankfurt am Main

### **How often have you worked with data and biospecimen from biobanks and especially with the DZHK biospecimen repository?**

I have much experience using data and biospecimen from biobanks. I appreciate having the opportunity to use the DZHK Data and biospecimen Collection because it is collected following standard protocols. Also, the ethical permission to use the material is already taken care of, and it is easy to access the material. The DZHK data and sample collection is of use to almost any basic scientist. What you can make with it is only limited by the researcher's creativity: looking at immune cell parameters and how these might be influencing cardiovascular

function, biomarker detection, toxicological assessments, cardiovascular physiology, and functional insights, to mention a few.

### **How has the DZHK data and biospecimen collection helped you with your research?**

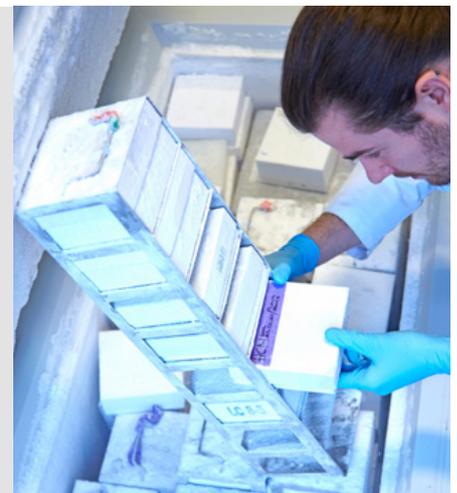
When I am starting a project, I prefer asking what the most significant changes in a human population are rather than building my research up from a signaling pathway that you hope at some point will have some human applicability. To do that, you need human biospecimen and real patient data to start with. The biobank of the DZHK collection is an excellent resource for that.

### **What are the advantages of using the DZHK collection?**

It is much cheaper and more time-efficient to use an existing resource like the DZHK collection and ask for samples and data from a specific patient population than starting your own collection. Using human biospecimen as a starting point for basic research helps young researchers publish their data more quickly. Manuscripts that use human data (likely from biobank samples) may even be published with fewer revisions, as there is clear applicability to human health. I have seen this multiple times in my career. Also, including supportive human data in grant applications can only increase your likelihood of success.

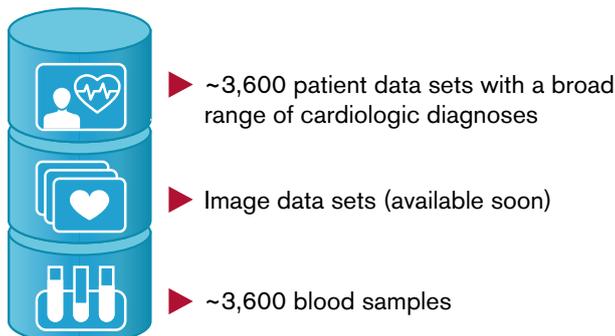
## What we offer

- ✓ high-quality biospecimen (blood, DNA, tissue for new research projects)
- ✓ associated patient data (DZHK basic data set)
- ✓ excellent documentation
- ✓ easy access
- ✓ reliable project and time management
- ✓ advice and support
- ✓ transparent decision process for use and access



# Our Data and Biospecimen Collections

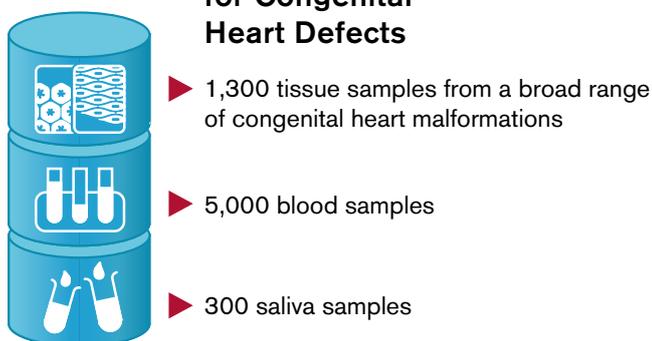
## DZHK Collection



The DZHK Collection now contains patient data, biospecimen (serum, EDTA-plasma, citrate plasma, buffy coat, urine), which are available to researchers for future research projects. Data and biospecimen are derived from DZHK funded studies in all study centres using standardised procedures.

[Find out more](#)

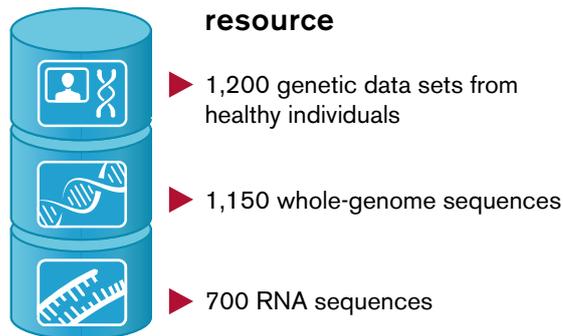
## National Register for Congenital Heart Defects



The National Register for Congenital Heart Defects is one of the largest patient databases in the field of congenital heart malformations worldwide. As of today, it contains 55,000 patient data sets. The biorepository includes DNA samples of roughly 8,000 sample donors. The Register collects samples from single patients, so-called “trios” (patient plus birth parents) and from single families with an accumulation of congenital heart disease. The National Register’s samples are available to researchers worldwide. In line with prevailing regulations as for guaranteeing data safety and patient protection, the register collects and records samples and sample data according to highest scientific standards.

[Find out more](#)

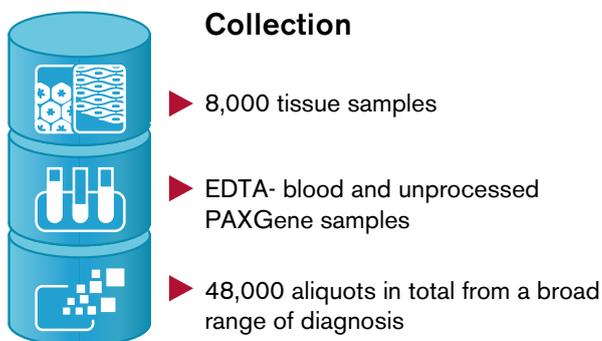
## DZHKomics resource



This healthy control resource was generated from around 1,200 healthy individuals from Germany. They serve as a comparative resource to more precisely determine the differences between healthy and sick people in Germany – not only for cardiovascular research. Approximately 1,150 whole-genome sequences comprise SNVs and indels from individuals and contain 48 million variants. Furthermore, RNA sequence data from about 700 subjects are available. Corresponding basic phenotypes are also available.

[Find out more](#)

## DZHB Tissue Collection



The DZHB Tissue Collection currently contains more than 8,000 tissue samples from patients with cardiac diagnoses that can be requested by researchers for studies. In addition, samples of EDTA- blood (plasma, whole blood, cellular blood components) and unprocessed PAXGene samples are also available. Including all aliquots, there are nearly 48,000 samples. The samples were collected in a standardized way and are mostly provided with the DZHK basic data set.

[Find out more](#)



## New Funding Guideline on Utilization of Data and Specimens

**Basic researchers or clinicians who are interested in using the biospecimen and data of the four DZHK collections may apply for funding at the DZHK.**

► **What is the new funding guideline about?**

The DZHK Data and Sample Collection contains data and specimens that derive from DZHK financed trials. The data and biospecimen are taken from all DZHK studies, registries and patient cohorts to date.

The aim of the [funding guideline](#) on the Utilization of Data and Specimens is to promote the scientific use of this DZHK collection.

► **Who can apply?**

DZHK PI's, DZHK Scientists and members of the Young DZHK are eligible to apply. Applications from members of the Young-DZHK are welcome.

► **What kind of projects can I use these data and biospecimen for?**

Funding is limited to projects that (1) replicate clinical findings or (2) are translational projects in humans. Only projects are eligible for funding in which mainly data and biospecimen from the

DZHK collection or data and specimens from the DHZB tissue collection, the National Register for Congenital Heart Defects or DZHKomics resource are used. DZHK funding is limited to € 40,000 per project. In addition, the project must be financed with at least another € 20,000 from other sources.

► **What kind of data is available?**

The current number of available data sets of the DZHK collection are shown

in the [Feasibility Explorer](#). The explorer must be used to select the collective of required data or biospecimen from the DZHK collection.

► **Who decides whether I can use data and biospecimen from the DZHK?**

Usage applications will be evaluated by the DZHK Use and Access Committee.

For members and further information [click here](#).

### How the application process works

#### How can I apply to use these data and/or biospecimen?

- Step 1** Check out our Use and Access Policy.
- Step 2** Make an availability check to get an overview of available data and biospecimens of
  - a** DZHK collection via the [Feasibility Explorer](#),
  - b** the [DZHKomics resource](#),
  - c** the [DHZB tissue biobank](#) (will be soon available in the Feasibility Explorer),
  - d** the [Registry of Competence Network for Congenital Heart Defects](#).
- Step 3** In case of using the DZHK collection use the Feasibility Explorer to compile your desired collective according to your research question.
- Step 4** Fill out the application form. Use the bookmark function of the Feasibility Explorer to specify your collective and add it to the application form. (applies to DZHK collection)
- Step 5** Submit your application via email to [use.access@dzhk.de](mailto:use.access@dzhk.de).

## FIND OUT WHAT DATA AND BIOSPECIMEN ARE AVAILABLE

[Feasibility Explorer >](#)

[Data Catalogue >](#)

### DO YOU HAVE QUESTIONS?

**Please contact:**

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