

EXE-T1D

Understanding beta-cell destruction through the study
of Extremely Early-onset Type 1 diabetes

**A research project helping scientists to
understand why some people develop
Type 1 diabetes in early life.**



Could you spare some time to help researchers better
understand how your immune system is working and
how it affects your diabetes?

Why are we doing this research?

Type 1 diabetes (T1D) results from the body's own immune system destroying the beta cells that produce insulin (autoimmunity). We do not fully understand what causes this type of diabetes and why different people develop it at different ages.

Very few people with T1D are diagnosed in the first years of life. They must have a very unusual or extreme form of autoimmunity and understanding this might help us to learn more about the disease.

Why have I been invited?

You have been invited into this study because you were diagnosed with T1D or developed autoimmunity very young and were referred to the Exeter Molecular Genetics Laboratory or to Dr Oram by your clinician or GP to investigate the cause.

What does participation involve?

We aim to collect research samples with no additional needles by taking a little extra blood when you have routine/clinical tests, or at a study visit if preferred.

Your usual doctor/clinician, diabetes nurse, or our study diabetes research nurse, will ask you questions about your autoimmunity so that we can update our records about your health.

We will collect blood and urine samples and will record your height and weight. The blood sample will be collected either as part of your usual clinic, or at a home visit or at the Exeter Clinical Research Facility / King's College London. Alternatively, we may send you a home fingerprick kit.

A small number of participants will be asked for a repeat sample to check results.

What will happen to my samples and data?

All samples and data will be stored under a unique study ID number. We will explore immune system, genetic and insulin markers in your blood and urine samples and combine this with your other data (height, weight, medical history). We will share anything relevant to your diabetes care with your clinician. We will ask your permission to gift samples and data collected during this study and as part of your diabetes referral to the Exeter Molecular Genetics Laboratory / Dr Oram, to the Peninsula Research Bank for safe storage and use in future research.

Are there any risks or benefits in taking part?

Donation of blood samples can be uncomfortable but this procedure will be carried out by an experienced nurse / researcher to minimise any discomfort. The project may confirm that you have T1D but won't change your treatment. However, if we unexpectedly identify anything that could impact on your clinical care, we will inform your clinician/GP who may then want to follow this up with you.

Do I have to take part in this study?

No. Participation is entirely voluntary. It is up to you to decide to join the study. If you agree to take part, we will ask you to sign a consent form like the one overleaf. You are free to withdraw at any point. Participation in the study will not affect your routine clinical care.

Who is organising and funding this research?

The research will be managed through the NIHR Exeter Clinical Research Facility (Exeter CRF), which is funded by the National Institute of Health Research, a part of the NHS, and a collaboration with the University of Exeter. Additional funding for the project has been provided by Diabetes UK and The Leona M. and Harry B. Helmsley Charitable Trust.

Will my participation be kept confidential?

Yes. We will follow current ethical and legal practice and all information about you will be handled in confidence. The University of Exeter / Royal Devon & Exeter NHS Foundation Trust (RD&E) are co-sponsors for this study based in the UK. We will use information collected from you and from your medical records to undertake this research and will act as the 'data controllers' for this study. This means that we are responsible for looking after your information and using it properly. The University of Exeter / Royal Devon & Exeter NHS Foundation Trust will keep identifiable information about you indefinitely after the study ends in order to link information from your medical records to your study data, unless you ask for this information to be deleted before that time. Research data will be held separately to identifiable information. For the purposes of this study, we will use consent to protect your confidentiality and allow you choice in your participation. All information collected in this study will be kept strictly confidential and stored either on a password protected computer or in a locked cabinet at the Exeter CRF, which can only be accessed by the researcher and research team. You will be allocated a unique participant number, which will ensure the information from your samples and tests cannot be identified by anyone else.

How will my identity be protected?

It is NHS policy to include three forms of identification to ensure that clinical samples and results are linked to the correct person. Your samples will be sent for testing at the Exeter Clinical Laboratories at the Royal Devon & Exeter (RD&E) Hospital with three forms of identifiable information (name, DOB, NHS/CHI/hospital number) using Exeter-specific clinical analyses request forms. The samples are processed by registered healthcare scientists and are afforded the stringent information governance as given to all clinical samples. The clinical results will be made available to your clinician and/or GP, as they may help with their ongoing medical management.

Separately, we will conduct novel analyses on research samples at King's College London and possibly other specialist research collaborators in the USA (see study website — link on pg 4) to study the function of your immune system and other factors that may play a role in the development of Type 1 diabetes. Research samples will be stored and analysed using a unique study ID — this format protects your confidentiality to prevent researchers being able to identify you.

What will happen to my data?

Your research data will be protected in the same way that we protect your research samples by using a unique ID to safeguard your research data. Your personal identifiable data will be held separately and will only be accessible to personnel with training in data protection who require this information to perform their clinical or study role. Your contact details are requested to enable the study team to communicate with you to provide you with information, to answer any queries you may have, to collect additional clinical information about your diabetes and to arrange your appointment. A unique Study ID will be allocated, under which all study data and samples will be link-anonymised and stored on a secure password-protected study database on an NHS server. Research data will be held separately to identifiable information and will be looked after in a secure way to protect your confidentiality.

What if there is a problem?

The research team will be happy to discuss any problems you may have. However, if you have concerns or complaints arising from your experience of participating in this study which you do not wish to discuss with the research team directly, the RD&E Patient Engagement and Experience team (01392 402093) will provide independent advice.

General Data Protection Regulation ('GDPR') and your rights

This information sheet gives you new information that you have a right to receive under changes in the law made by the General Data Protection Regulation ('GDPR') and Data Protection Act 2018. We have provided you with as much information as possible to help you to make an informed decision about taking part or not and your right to withdraw. The University of Exeter and RD&E's lawful basis to process personal data for the purposes of carrying out research is what is termed as a 'task in the public interest' and will endeavour to be transparent about the processing of your personal data. Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

If you do have any queries about the University's processing of your personal data that cannot be resolved by the research team, further information may be obtained from the University's Data Protection Officer by emailing: dataprotection@exeter.ac.uk or at: www.exeter.ac.uk/dataprotection. If you have any concerns about how the data is controlled and managed for this study then you can also contact the Sponsor Representative, Pam Baxter, Senior Research Governance Officer, University of Exeter, Tel: 01392 723588 or Email: P.R.Baxter2@exeter.ac.uk.

Where can I find out more?

For further information about the project, please contact a member of our study team on:

01392 408181

Additional information can be found on the study website:

<https://www.diabetesgenes.org/current-research/exe-t1d/>

Who has reviewed this study?

This project has been reviewed and approved by the NRES East Midlands — Derby Research Ethics Committee and the Health Research Authority (HRA).

Thank you for reading this leaflet, which is yours to keep. If you wish to participate in this study, you will be asked **to sign a consent form**, a copy of which you will be given to keep.

The consent form will include the following statements:

CONSENT STATEMENTS

- I have read this leaflet or had it read to me.
- I have asked all the questions I want to and my questions have been answered in a way I understand.
- I agree to take part in the project.
- I understand that I can change my mind at any time and stop being part of the project.

The next question is not essential and you can say no but still take part in the project.

- I agree for information about me and any leftover samples to be kept for use in other projects.
- I am happy to be contacted about research in the future.

We will give you and the person looking after you a copy of the form to keep.

**Thank you for reading about this project and
for thinking about helping us.**