

# Genetics of Primary Adrenal Insufficiency and Associated syndromes. Adult Family Member

Please read the information sheet and complete the consent form below.

Many thanks

QMUL Endocrinology Department

## Information sheet and consent form for adults with a family member with adrenal insufficiency Mechanisms of Adrenal Insufficiency

**Study Website :** <https://www.qmul.ac.uk/adrenal/>

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**Version 2, 01.07.2022**

**MREC: ??**

You are being invited to take part in a research study. It is important for you to understand why the research is being done and what it will involve. Please read the following information carefully, discuss it with others and ask us if anything is not clear.

### What is the purpose of this study?

This study is to find out why the adrenal glands are not working properly in some individuals. The adrenals make important hormones, including cortisol our body's natural stress hormone and hormones that maintain our body's salt balance. Adrenal insufficiency is a condition that arises when the adrenal glands are not working properly. While we can usually treat adrenal insufficiency, we are always looking to find better and more convenient types of treatment. The best way to find such new treatments is to understand better how the disease starts in the first place and how it progresses, and we are actively involved in researching adrenal diseases.

This study aims to identify biomarkers which play a part in the development and progression of adrenal gland insufficiency and conditions associated with adrenal insufficiency. We will look at information from blood, hair, saliva and urine to understand better why the adrenal glands stop working.

### Why have I been invited to participate?

You have been chosen because you have a family member with adrenal insufficiency. Sometimes the condition occurs in several members of the same family. Several genes have been discovered which may be abnormal in some families with adrenal insufficiency, but the cause is not known in more than half of cases. Investigating the genes in family groups may help us understand much more about how this condition develops, and hopefully will lead to new and better treatments. We would therefore like to look at these genes in your family to see if they are abnormal and if they are not we would like to search for other genes causing the disease by looking in more detail at your DNA (Deoxyribonucleic acid).

### **Do I have to take part?**

It is up to you to decide whether or not to take part, and participation in this study is completely voluntary. If you do agree to take part you will be given this information sheet to keep together with a copy of the signed consent form. You are under no obligation to participate in this study, and you may withdraw at any time without it affecting your normal care in any way.

### **What will happen if I take part?**

We would like to take a sample of blood, about a tablespoonful (15 ml), and from this we will remove the cells and isolate the chemicals carrying the genetic information (DNA - Deoxyribonucleic acid and RNA - Ribonucleic acid, molecules). We will then study these molecules and see if there are any abnormalities in their sequences. We may ask to take a second sample of blood (about a tablespoonful) for further biochemical / DNA (Deoxyribonucleic acid) / RNA (Ribonucleic acid) analysis, a urine sample, a faeces sample, a hair sample, saliva and in some cases a small skin biopsy to study whether there are any chemical changes that can tell us more about the condition. These samples will be compared to samples from healthy volunteers of the same age and sex.

### **What else might happen with my samples?**

DNA (Deoxyribonucleic acid) samples may be submitted for genetic analyses, including but not limited to 'next generation sequencing' (whole exome and whole genome sequencing) which simultaneously examines all the genes in a person. If you are not happy to consent to this please indicate your preferences on the consent form. In the future, it is likely that new technologies will make it more feasible to analyse a person's whole DNA (Deoxyribonucleic acid) code. We may wish to do this on your stored samples and link the results to your clinical data. This may provide some useful knowledge about how genes and medical conditions are connected in more general terms. Any such analysis would be carried out anonymously. We will use the blood, urine, saliva and hair samples for hormone measurement and to measure aspects of metabolism. In order to build effective models for these rare diseases we sometimes try to grow cells from a skin biopsy. Cells typically do not live for more than a few days, so we sometimes try to prolong their lifespan by making the cells immortal.

### **What are the risks of taking part?**

A stinging sensation may be felt when having the blood test. To minimise this, we can use numbing cream or spray. Occasionally a small bruise may develop. If you feel at any point during the procedure the perceived pain or anxiety is too great please let the doctor/ nurse know. Occasionally we will also ask for a small sample of your skin, which allows us to collect more detailed information about any genetic changes that we discover. To do this, the skin is cleaned with antiseptic and small amount of anaesthetic is applied to or injected into your skin to numb it. When the skin is numb, a small circle of skin (3---4mm, less than a quarter the size of your little fingernail) is cut using a tool similar to a hole punch. After the biopsy, a small amount of bleeding may occur but stitches are not usually required. The area should be kept dry for 24 hours and the dressing can be taken off after about 2 days. Giving a skin biopsy is optional and you will be asked on the consent form if you agree to have one if the research team requests it.

### **How will we use information about you?**

All information which is collected about you during the course of the research will be kept strictly confidential. All the data will be kept in a database for research purposes; this will be kept in a locked room and accessible only via strict password protection and therefore kept strictly confidential. If you consent to take part in the research the people conducting the study will abide by GDPR and the rights you have under this. Professor Louise Metherell and responsible individuals from Queen Mary University of London may have access to your personal information and data collected during the study. We may also share data with our collaborators but the data will be anonymised and your name will not appear on any data sent abroad.

We will need to use information from you and your doctor for this research project.

This information will include your Name / Date of Birth / Referring hospital ID and NHS number / Referring Physician and contact details / Information about your medical history in relation to adrenal conditions. People will use this information to do the research or to check your records to make sure that the research is being done properly. People who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number instead.

We will keep all information about you safe and secure.

Once we have finished the study, we will keep some of the data so we can check the results. We will write our reports in a way that no-one can work out that you took part in the study.

### Will I be told the results?

You can choose if you wish to be told of the results of your sample. If our work suggests that changes in a gene related to the disease might be present in the sample, it may be of help to you if the change is confirmed. We would discuss the benefits and possible problems of confirmatory testing with you. Please tick the box on the Consent Form if you wish to consider confirmatory testing. If we do find a change and you wish us to proceed, we shall tell the doctor who referred you and he/she will discuss with you what to do next. One option would be to be referred to a specialist Genetics doctor. The Genetics doctor will discuss the implications of genetic testing and will explain how the test results could affect you and your family members. After this discussion you will have a further opportunity to decide whether or not to let the NHS laboratory confirm our research findings.

The results of this research will be disseminated by presentations at scientific meetings and published in peer review journals. We will place copies of the papers on our website (<https://www.qmul.ac.uk/adrenal/>) for free access.

### What are the risks for my data?

There is a very small chance that you could be identified as the donor of a sample if your DNA (Deoxyribonucleic acid) code was analysed again outside our study, and the genetic codes compared, but we consider this extremely unlikely to occur without your approval. In addition, we can assure you that any analysis we perform is different from forensic testing and would not be used for such a purpose.

### What happens if there is a problem?

Complaints:

If you have any concerns about any aspect of the study you can ask to speak to the researchers who will endeavour to address these, details below.

You can also contact Patient Advisory Liaison Service (PALS) if you have any concerns regarding the care you have received, or as an initial point of contact if you have a complaint. Please telephone 020 7377 6335, minicom 020 7943 1350, or email [pals@bartsandthelondon.nhs.uk](mailto:pals@bartsandthelondon.nhs.uk), you can also visit PALS by asking at any hospital reception.

Harm:

Queen Mary University of London has agreed that if you will be compensated, provided that, on the balance of probabilities, an injury was caused as a direct result of the procedures you received during the course of the study. These special compensation arrangements apply where an injury is caused to you that would not have occurred if you were not in the trial. These arrangements do not affect your right to pursue a claim through legal action.

**Who is funding the research?**

Research is being coordinated by the team at Queen Mary University of London. Funding is being sought from proprietary clinical and scientific organisations.

**Who has reviewed the research?**

The study has been approved by a Research Ethics Committee.

**What are your choices about how your information is used, what to do if you want to withdraw from the study and contact details.**

You can stop being part of the study at any time, without giving a reason. If you wish to withdraw from the study please contact the CI - Prof Lou Metherell. Please state if you wish to withdraw and leave the samples and clinical information you have given so far for continued analysis or if you wish to withdraw and have your samples and data destroyed. If you agree to take part in this study, you will have the option to take part in future research using your data saved from this study if you decide to say yes to this your samples will be kept at Queen Mary University London, Department of Endocrinology, Chief Investigator - Professor Louise Metherell . You can find out more about how we use your information at [www.hra.nhs.uk/information-about-patients/](http://www.hra.nhs.uk/information-about-patients/), by asking one of the research team or the data protection officer ( [data-protection@qmul.ac.uk](mailto:data-protection@qmul.ac.uk)).

If you have any questions please contact us at [bartshealth.adrenal@nhs.net](mailto:bartshealth.adrenal@nhs.net)  
The Chief Investigator: Prof. Louise Metherell  
Consultant Paediatricians: Dr Rathi Prasad and Dr Li Chan  
Study Coordinator: Dr Charlotte Hall

**CONSENT FORM FOR ADULTS WITH AFFECTED FAMILY MEMBERS  
(Version 02 Dated 01.07.2022)****PLEASE INDICATE AGREEMENT BY SELECTING "I AGREE" OR REFUSAL BY SELECTING "I DO NOT AGREE". YOU MAY INDICATE AGREEMENT TO SOME SECTIONS AND REFUSAL TO SOME OTHER SECTIONS AND STILL PARTICIPATE IN THE STUDY.**

I confirm that I have read and understand the latest version of the information sheet (version number 02, date of version 01/07/2022) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I agree    I do not agree

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

I agree    I do not agree

I understand that relevant sections of any of my medical notes and data collected during the study, may be looked at by responsible individuals from regulatory authorities or from the Barts and the London/ Queen Mary University of London, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.

I agree    I do not agree

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I agree to have a small blood sample taken for DNA (Deoxyribonucleic acid) to be extracted. I understand that my DNA (genetic material) may be analysed using modern techniques that are able to analyse all the genes simultaneously (such as next generation sequencing)

I agree  I do not agree

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I agree to a second blood sample being taken for further biochemical / DNA (Deoxyribonucleic acid) / RNA (Ribonucleic acid) analysis

I agree  I do not agree

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I agree to give a saliva / hair / urine / faeces sample for biochemical analysis

I agree  I do not agree

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I agree to have a small skin biopsy taken to allow researchers to grow cells in the laboratory from this tissue.

I agree  I do not agree

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If the study finds a change in a gene suggesting increased risk of developing adrenal insufficiency, I wish to be informed of this through my hospital doctor and to discuss further confirmation of the findings. (IMPORTANT: only select "I agree" if you wish to be informed of your results. You may change your mind about this at any time. Please contact Prof Metherell if you wish to discuss this matter again.)

I agree  I do not agree

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Apart from the situation stated above, I understand that the results of the research will not be made available to anyone, including me, on an individual basis; I also understand that the research will not directly benefit my health.

I agree  I do not agree

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I agree to my GP being informed of my participation in the study.

I agree  I do not agree

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I understand that cells isolated from my tissues might be grown in the lab and longer-term cell lines may be generated from them in order to facilitate longer term research

I agree  I do not agree

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**YOU MUST AGREE TO THE FOLLOWING QUESTION TO TAKE PART IN THE STUDY.**

I agree to take part in the above study.

I agree  I do not agree

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Patient Name :

\_\_\_\_\_

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Patient date of birth:

\_\_\_\_\_  
(Date of birth (day, month, year))

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Signature of patient:

\_\_\_\_\_  
(Click "Add signature" and use your mouse (or finger on a touchscreen device) to sign.)

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Date of signature:

\_\_\_\_\_  
(Date of participant Signature)

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Consent obtained by (please enter full name and title):

\_\_\_\_\_

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Signature of person taking consent:

\_\_\_\_\_  
(Click "Add signature" and use your mouse (or finger on a touchscreen device) to sign.)

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Date and Time:

\_\_\_\_\_  
(Date and time of staff signature.)

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## **CONSENT TO DONATION AND STORAGE OF RESIDUAL TISSUE, BLOOD OR OTHER SAMPLES FOR MEDICAL RESEARCH**

**(Version 2 Dated 01.07.2022)**

Following the present research project, any residual (left-over) samples (including but not limited to tissue from a skin biopsy, blood, hair, saliva, nail cuttings, urine) may be collected, stored and used by the Barts and the London NHS Trust and / or Queen Mary University of London, for medical research in the future. Any future studies will have been independently reviewed by an ethics committee. Research conducted on these samples may contain personal information but all such information will be anonymised at the end of any project, when the results are published, and you will not receive the results of any future research project. All staff undertaking future studies will abide by the General Data Protection Regulation (GDPR) (EU) 2016/679 with any medical information relating to you being kept confidential. The sample may be given to external research organisations for approved medical research but tissue will not be sold, although costs will be recovered without any financial benefit to either you or to the researcher. Any residual tissue will be disposed of lawfully when it is no longer required.

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I understand that I have given my consent voluntarily to the storage of tissue and blood sample for future medical research and that I am free to withdraw my consent at any time.

I agree    I do not agree

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I agree that the tissue may be used for future genetic research but not for research that involves reproductive cloning, or to be tested for inherited diseases without my express consent

I agree    I do not agree

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If you have any preferences or exclusions for use of the donated tissue, or any other comments, please include them here:

\_\_\_\_\_

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Name of patient:

\_\_\_\_\_  
(First, Last)

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Signature of patient:

\_\_\_\_\_  
(Click "Add signature" and use your mouse (or  
finger on a touchscreen device) to sign.)

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Date of signature:

\_\_\_\_\_  
(Date of participant Signature)

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Signature of person taking consent:

\_\_\_\_\_  
(Click "Add signature" and use your mouse (or  
finger on a touchscreen device) to sign.)

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Consent obtained by (please enter full name and  
title):

\_\_\_\_\_

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Date and Time:

\_\_\_\_\_  
(Date and time of staff signature.)