

Participant Information Leaflet: Control

*Translating the potential of the **Urine Steroid** metabolome to stage **NAFLD** (TrUSt-NAFLD)*

You are being invited to take part in a research study as you are in the Oxford Biobank as a research volunteer and have agreed to be contacted about future research projects.

Before you decide to participate it is very important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish.

Please make sure you ask us if there is anything that is not clear or if you would like more information.

1. What is the purpose of the study?

Fat deposition in the liver (so called non-alcoholic fatty liver disease, NAFLD) is now the commonest chronic liver condition, affecting one-in-three individuals. It can lead to liver problems including cirrhosis and liver cancer, as well as increasing your risk of heart attacks and strokes.

Simple blood tests are often normal, and the current gold-standard test for assessing NAFLD severity is a liver biopsy which is an invasive procedure. We have developed a urine test that measures natural steroid hormones and we believe that this can provide an accurate reflection of how the liver is functioning in patients with NAFLD. Ultimately, in the future this test may be an alternative to performing a liver biopsy.

If successful, our urine test could be used by GPs and hospitals and reduce the need for liver biopsies.

2. Why have I been invited?

You have been invited to participate in this study, which aims to recruit 460 participants (310 with NAFLD and 150 without NAFLD), as you participate in the Oxford Biobank (<https://www.oxfordbiobank.org.uk>) and have been identified as being at very low risk of having NAFLD.

3. Do I have to take part?

No. It is up to you to decide whether or not to take part. You are free to withdraw at any time and without giving a reason. Withdrawal will not affect the standard of any medical care that you may need now or in the future.

4. What will happen to me if I decide to take part?

Once we have checked that you are happy to take part, one of the investigators running the study will go through it in detail with you again and answer any questions you may have. If you agree to take part and are happy to go ahead, you will be asked to sign a consent form.

As you have been identified as being at very low risk of having NAFLD, if you are interested in participating in this study, we will arrange an appointment for you to come to our research facility in the Oxford Centre for Diabetes, Endocrinology & Metabolism (OCDEM) at the Churchill Hospital in Oxford for you to have a blood test (5 tubes of blood, approximately 35ml or 7 teaspoons) and provide a urine sample (approximately 10ml or 2 teaspoons).

We will also undertake a special scan of the liver (called transient hepatic elastography or Fibroscan). This involves lying on an examination couch with your right arm above your head. Some cold jelly is applied to the skin a probe is gently placed on the skin over the liver. Painless ultrasound waves are then passed through the liver to produce a measure of liver stiffness which can provide an assessment of the severity of NAFLD. The investigation takes approximately 10 minutes.

5. What should I consider?

You can still participate in this study if you are involved in other research, but you can discuss this with the research team. Participation will take some of your time, on one occasion.

6. What are the possible disadvantages and risks of taking part?

Participants without NAFLD will be required to travel to the OCDEM for a study visit.

You may experience minor discomfort and a minor bruise during the taking of blood samples.

The blood that we take is a small volume and conveys no significant risk, neither does providing the urine sample. There are no risks associated with the scan.

7. What are the possible benefits of taking part?

Whilst you may not directly benefit from this study, it will hopefully allow us to develop better tests to detect and assess the severity of NAFLD that may ultimately lead to patients not needing a liver biopsy.

8. Will I receive reimbursement for taking part in this research?

As a dedicated research visit is required, we will reimburse travel costs with appropriate receipts, and we will offer £25 to cover inconvenience and loss of earnings.

9. What if there is a problem?

If you wish to complain about any aspect of the way in which you have been approached or treated during the course of this study, then please do contact the research team directly.

Chief Investigator: Professor Jeremy Tomlinson

Email Jeremy: jeremy.tomlinson@ocdem.ox.ac.uk ; Telephone: 01865 857359

Alternatively, you may contact the University of Oxford Clinical Trials and Research Governance (CTRG) office on 01865616480, or the head of CTRG, email ctrig@admin.ox.ac.uk.

The Patient Advisory Liaison Service (PALS) is a confidential NHS service that can provide you with support for any complaints or queries you may have regarding the care you receive as an NHS patient. PALS is unable to provide information about this research study. If you wish to contact the PALS team (Tel: 01865 235855; Email: PALSCH@ouh.nhs.uk). The University of Oxford, as Sponsor, has appropriate insurance in place in the unlikely event that you suffer any harm as a direct consequence of your participation in this study. NHS indemnity operates in respect of the clinical treatment which is provided.

10. How have patients and the public been involved in this study?

During the design of the study, we have presented our aims and objectives to panels of patients with NAFLD who felt there was a need to design better tests that removed the need for liver biopsies.

11. What will happen if I don't want to carry on with the study?

You can withdraw from the study at any point, you can do so by contacting the chief investigator (see section 9). If you withdraw from the study, unless you state otherwise, any samples and data collected whilst you have been in the study will be used for research as detailed above.

12. Will my taking part in this study be kept confidential?

All the information about your participation in this study will be kept confidential. None of the research data stored on computers will be directly identifiable and we will replace your name, initials and date of birth with a participant code that includes a unique number and your initials. All the information will be coded. We will keep your personal details stored securely and separately from the research data in order to contact you about your participation in the study. Any identifiable data will be stored on computers in accordance with University and NHS guidelines, including on encrypted and password protected systems. No identifiable information will be stored on laptops. Access to the clinical research unit and laboratories within Oxford Centre for Diabetes, Endocrinology and Metabolism (OCDEM) where the data and samples are stored is *via* multiple point secured swipe access. Any paper information collected will be kept securely in appropriate secured environments.

Responsible members of the University of Oxford and the [local NHS Trust] may be given access to data for monitoring and/or audit of the study to ensure that the research is complying with applicable regulations.

13. What will happen to my data?

Data protection regulation requires that we state the legal basis for processing information about you. In the case of research, this is 'a task in the public interest.' The University of Oxford is the sponsor for this study based in the United Kingdom, is the data controller and is responsible for looking after your information and using it properly. We will be using information from you and your medical records in order to undertake this study and will use the minimum personally-identifiable information possible.

We will keep identifiable information about you for 12 months after the study has finished. This excludes research documents with personal information, such as consent forms (except for those who have consented to be approached for future research), which will be held for 10 years after the end of the study. If you agree to your samples being used in further research, then your consent form will be held securely until the samples have been depleted or destroyed.

The local NHS Trust will keep your name, NHS number and contact details confidential and will not pass this information to University of Oxford. The NHS Trust will use this information as needed, to contact you about the research study, and make sure that relevant information about the study is recorded for your care, and to oversee the quality of the study. The local NHS Trust will keep identifiable information about you from this study in accordance with local policies for medical notes retention.

Data protection regulation provides you with control over your personal data and how it is used. When you agree to your information being used in research, however, some of those rights may be limited in order for the research to be reliable and accurate. Further information about your rights with respect to your personal data is available at <https://compliance.web.ox.ac.uk/individual-rights>.

You can find out more about how we use your information from:

Chief Investigator: Professor Jeremy Tomlinson,
E-mail: jeremy.tomlinson@ocdem.ox.ac.uk; Telephone: 01865 857359

The Chief Investigator (CI) for the study, Prof. Tomlinson has filed a patent related to the proposed work (GB Patent Application Number: 2001361.1; filed 31/1/20 and GB Patent Application Number 2005435.9; filed 14/4/20), and therefore due to a potential conflict of interest, he will not be involved in the recruitment process or undertake the primary analysis of the data generated by the study.

14. What will happen to the samples that I give?

The research blood and urine samples you provide will be kept secure and link-anonymised, labelled only with the study number, in freezers at the OCDEM, University of Oxford. Only investigators who are part of the study will have access to the samples. They will be analysed for hormones and other metabolites at laboratories in Universities of Oxford and Birmingham. If you agree to your samples being used in future research, your anonymised samples will be used mainly by local researchers, but ethically approved research projects may take place in hospitals, universities, non-profit institutions or commercial laboratories worldwide.

15. What if you find something unexpected?

In the unlikely event of seeing abnormal results from the scans, urine or blood tests, these will be checked by a clinical specialist. If the specialist judges that the abnormality is medically important, they will discuss the implications with you and arrange for further investigations as necessary. You will not be informed of findings that have no impact on your current or future health. It is important to note that scans and tests are not carried out for diagnostic purposes, and therefore they are not a substitute for a clinical appointment. The scans and tests are intended for research purposes only.

16. What will happen to the results of the research study?

At the end of the study, the results will be presented at regional, national and international meetings and published in medical journals. You will not be identified from any report or publication placed in the public domain. If requested, we will be able to send you a copy of the final published results of the study. Research findings will also be disseminated through dedicated departmental public engagement events and through patient support groups.

17. Who is organizing and funding the research?

Research is organised by OCDEM, University of Oxford, and is funded by the Wellcome Trust, UK.

18. Who has reviewed the study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee. This study has been reviewed and given a favourable ethical opinion by the West Midlands - Black Country Research Ethics Committee.

19. Participation in Future Research

With your consent, we may contact you thereafter about ethically approved research studies for which you may be suitable. You would not be obliged to participate in any such further studies. You can request to be removed from this register at any time. Your consent form would be held for as long as you are on the register.

Thank you for taking the time to read this leaflet. If you would like to be part of this study, or
if you would like more information then please get in contact with:

***** (Lead Research Nurse): 01865 *****; *****@codem.ox.ac.uk
Prof. Jeremy Tomlinson (Chief Investigator); jeremy.tomlinson@ocdem.ox.ac.uk