

**Diagnosis and Management of Febrile Illness using
RNA Personalised Molecular Signature Diagnosis**

Chief investigator: Prof. Michael Levin
Principal Investigator: Dr Simon Drysdale

DIAMONDS Search Participant Information Sheet - young people aged 12 -15 years

Introduction You are being invited to take part in a research study. You can take your time to decide and you should only take part if you want to. Your decision will not change your medical care. Please ask us about anything that is not clear, or if you would like more information.

Why are we doing the research? Patients come to hospitals every day with common symptoms such as fever. Although most of these patients have a virus infection, some will have bacterial infection or no infection at all – for example patients with inflammatory illnesses. At the moment, we don't have accurate tests that can quickly tell us whether a patient has an infection or something else. This means that the patient might not get the best treatment straight away.

What is the aim of the research? The aim of the research is to design new tests that can tell us quickly and accurately what illness a patient has when they come to hospital with common symptoms, such as fever. Better tests would help us give the right treatment to the right patient, at the right time – which would lead to better outcomes.

Why have I been chosen and what will happen if I take part? You have been selected as you may have an infection or an inflammatory illness. If your doctors carry out a blood test, we would like to save some extra blood (1-2 teaspoons) for this research study. We may also ask you for a throat swab, saliva, urine or stool (poo) sample. We might ask you for samples on three separate occasions. If your doctors decide that you don't need a blood test, we may ask if you don't mind having blood samples taken for research anyway. If you had a blood test before we spoke to you about the study, you may have already had samples saved for research – because we are trying to collect the samples early, before treatment starts. If you don't want to take part in this study we will dispose of these saved samples.

We will keep details about your illness and treatments in hospital. If you agree to take part, and you come back to hospital in the future, we would like to take samples and record the details of your illness on those occasions too.

What will happen to the samples we take in this study?

- We will look for germs that cause infections
- We will look for molecules that we could measure in a test.
- We will read the sequence of the genes – we will focus on genes linked to your current illness.

The research samples are precious, so if we have any leftover at the end of the study, we would like to keep them for other research studies, but only if you and your parents agree. If you and your parents do not agree we will dispose of any leftover samples at the end of the study. The samples will be stored in Austria (biobank.medunigraz.at).

Will we ask for any other information? We may invite you and/or your parents to complete a questionnaire about this illness – so we can find out if you already had medical input before you came to hospital. We may ask for a second questionnaire to be completed in 3-6 months' time. You do not have to fill in the questionnaires and the information you give will not affect any part of your medical care, and the information will be kept anonymous.

Are there any advantages or disadvantages to joining the study? There are no advantages or disadvantages for you in joining the study. However the information from the study might help treat people in the future. We are taking a teaspoon of blood, and this won't cause you any harm. If we get any results from studying your samples that are important for you to know, your doctors will let you know the results.

Who will know I'm doing this? We will record that you are taking part in your clinical notes – so your medical team will know. We will not tell anyone else, and the information we keep about you will have your personal details removed.

What will happen if I change my mind? If you and your parents wish to withdraw you from the study they don't have to give a reason and it will not affect your care. We will not collect more samples from you, or collect any more study data about you.

What will happen to the results of the research study? We may generate findings that we would like to share with the study participants, or which may lead to new avenues of research. In this case we would like your permission to contact your parents. Research results from the study will be posted on the project website www.diamonds2020.eu and on twitter (@DIAMONDS_2020) and will be published in scientific journals.

What if there is a problem? If you are unhappy about any aspect of the way you have been treated during the course of this study then you should tell us or your parents.

Who to contact for further information The Principal Investigator at St George's University Hospitals NHS Foundation Trust is Dr Drysdale. The local research team at St George's University Hospitals NHS Foundation Trust can be contacted at St George's Hospital University Hospital NHS Foundation Trust; Blackshaw Road, London SW17 0QT email: researchforchildren@sgul.ac.uk.

Thank you for reading about our study