King's College Hospital NHS Foundation Trust

Department of Immunological Medicine

Participant Information Sheet

Role of non-canonical NF kappa B in T cell independent IgA production

1. **You are being invited to take part in a student's PhD research project**.

Before you decide it is 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 this study if you wish.

2. **What is the purpose of the study?**

This is a student's PhD project that will investigate a major cell-signalling pathway in human cells. We have good evidence that this pathway has a major role in regulating how much of a specific antibody (Y shaped proteins that fight infections) gets produced by B cells (a type of immune cells specialising in antibody production). We also have evidence that patients, who have genetic mutations that affect this pathway, especially Common Variable Immunodeficiency (CVID) patients have problems producing antibodies. We want to investigate if the reason these patients have problems with producing antibodies, is because they have a defect in this pathway, and whether this is due to genetic mutations that affect the pathway.

3. **Why have I been chosen? Do I have to take part?**

We are looking to include participants who fall into three groups, those who don't produce enough antibodies, those who produce too much and those who produce normal amounts. You are invited to participate in this study because you fall into one of these three groups. Taking part in this research study is entirely voluntary. It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep, and you will be asked to sign a consent form. You are still free to withdraw from the study at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive. You will have access to the clinical care team, if you require further support or information.

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

If you agree to take part, you will be invited to donate a blood sample up to 30mL, (2-3 tablespoons) by attending the Clinical Immunology or Renal clinics at King's College Hospital, at a time convenient to you. We will use the blood samples to test for antibody production, the activity of the pathway and genetic and molecular characteristics of the pathway. If you have recently had a gut biopsy we will also include this in the analysis to help us identify how much antibody-producing cells are in the gut. No new biopsies are needed as part of this study.

5. **I am suspected of Immunodeficiency – Why should I be included and what will happen to me if I take part?**

You are invited to take part because you have been prescribed to have the Pneumovax-23 vaccine. This vaccine is known to stimulate antibody production in the blood, so we want to answer two questions.

Part A. Is the pathway involved in regulating antibody production after stimulation with this vaccine?

Part B. How soon after vaccination does the pathway gets activated in health and disease?

You have a choice to take part in **Part A or Part B.**

If you agree to take part in Part A, you will be invited to donate a single blood samples, up to 30mL, (2-3 tablespoons) by attending the Clinical Immunology clinics at King's College Hospital, at a time convenient to you.

If you agree to take part in Part B, you will be invited to donate repeated blood samples, up to maximum of 30mL each, by attending appointments on a maximum of 4 occasions, at Clinical Immunology clinics, at King's College Hospital.

6. **What if I am currently involved in research or I have been involved in research before?**

You will not be receiving any clinical interventions (medicines aimed at resolving a problem) as part of this study. So, provided you have not had a clinical intervention as part of a clinical trial in the last year or are not having one currently, you will be able to participate in this study.

7. What do I have to do?

If you agree to take part, please sign the consent form and attend the clinical appointment you have for samples to be taken. You will not need to do anything further.

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

Taking part in this study will not change your treatment or management. There are no foreseeable disadvantages. However, blood sampling can cause some discomfort. When the needle is placed in the vein and the blood is drawn, there is the possibility that a bruise may develop. A small proportion of people can also feel slightly light-headed, and in very rare cases faint.

9. What are the possible benefits of taking part?

There are no direct benefits to participants that take part in this study. However, we hope this research will help reveal the mechanisms by which the pathway regulates antibody production in humans. Common Variable Immunodeficiency (CVID) is a very diverse disease. We hope that the tests we develop in this project will help us identify new genetic mutations especially in CVID patients, who don't have a genetic diagnosis for their condition. We hope it would contribute to advancing the understanding of the disease and pave the way for new therapies.

10. What happens when the research study stops?

As your participation in this study does not change your treatment or management in any way, when the research finishes, your treatment will not be affected.

11. Will my taking part in the study be kept confidential?

All information that is collected about you during the course of the research will be kept strictly confidential. Any information about you and your disease will be coded, made anonymous, and stored securely. Your medical records may be examined, to help us understand if the results of our laboratory tests may be affected by your treatments or the course of your disease. Only researchers involved in the project, and members of the clinical NHS team, directly involved in your care and treatment will have access to your medical records. Any information about you, which leaves the hospital, will have your name and address removed and the data encrypted, so that you cannot be recognised from it.

Our procedures for handling, processing, storage and destruction of data are compliant with the Data Protection Act 1998.

12. What will happen to any samples I give?

All samples will be analysed in the Immunology laboratory, and stored in secure alarmed fridges and freezers. Any previously obtained gut biopsy samples that are reviewed for the purposes of the study will be stored in secure cabinets in the Histopathology laboratory according to established procedures. You will not be identifiable from your samples, which will be anonymised and coded. We will only do genetic tests on your samples, specifically aimed at investigating the cell-signalling pathway.

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

If you withdraw from the study, samples already collected with your consent would be retained and used in the study. You should be aware, that in the (perhaps unlikely) event of a loss of capacity, we (the research team) would retain samples, tissue and personal data already collected, and continue to use it confidentially in connection with the purposes for which this consent is being sought.

14. What if there is a problem?

Any complaints about your clinical care or treatment should be dealt with in the usual way through the NHS Complaints Procedure. If you have a concern about any aspect of this study, you should ask to speak with the researchers who will do their best to answer your questions (Contact number and address are provided in section **17**.). If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure. Details can be obtained from the hospital.

Every care will be taken in the course of this study. However in the unlikely event that you are injured by taking part, compensation may be available.

In the event that something does go wrong and you are harmed during the research and this is due to someone's negligence then you may have grounds for a legal action for compensation against King's College Hospital NHS Foundation Trust but you may have to pay your legal costs.

Regardless of this, if you wish to complain, or have any concerns about any aspect of the way you have been approached or treated by members of staff or about any side effects you may have experienced due to your participation in the study, the normal National Health Service complaints mechanisms are available to you. Please ask your study doctor if you would like more information on this.

15. **What will happen to the results of the research study?**

The results will be published in peer-reviewed journals and papers and presented at educational meetings. You will not be identified in any report. If you wish, we would provide you with a summary of our final overall results. We shall inform your General Practitioner should we discover any significant clinical findings that affect your care during the course of this study.

16. **Who has reviewed the study?**

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by London Chelsea Research Ethics Committee. It has also been approved by the Health Research Authority and each local hospital will also give confirmation that the study can go ahead.

17. **Who is organising and funding the research?**

The research has been organised by Dr Mohammad Ibrahim (Consultant Immunologist) based in the Department of Immunological Medicine at Kings College Hospital. The financial support for the study has come from the Clinical Immunology Research Fund of King's College Hospital Charitable Trust and King's College Hospital Diagnostic Immunology Laboratory (Viapath). The research is sponsored by King's College Hospital NHS Foundation Trust and is part of an educational project.

If you want more information or have any queries about anything concerning the study, please feel free to contact Dr Ibrahim through the department secretary on 020 32991556 or write to Clinical Immunology, 1st Floor Bessemer Wing, King's College Hospital, Denmark Hill, SE5 9RS.

Thank you for considering contributing to our study.

Yours sincerely

Dr Mohammad Ibrahim

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King's College Hospital NHS
NHS Foundation Trust

Department of Immunological Medicine
Participant Consent Form

Role of non-canonical NF kappa B in T cell independent IgA production

Study Reference No: 215621

Principal Investigators: Dr Mohammad Ibrahim
Address: 1st Floor, Bessemer Wing, King's College Hospital, Denmark Hill, SE5 9RS

Please initial box

1. I confirm that I have read and understood the participant information sheet for this study and have had the opportunity to ask questions. ☐
2. I confirm that I have had sufficient time to consider whether or not I want to be included in the study ☐
3. I confirm that I am not currently receiving a clinical intervention or have received a clinical intervention in a clinical trial in the last year. ☐
4. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reasons and without my medical care or my legal rights being affected. ☐
5. I understand that my samples including previously obtained gut biopsies used in this research project will be anonymised and coded and that I will not be named on my sample. ☐
6. I agree to take part in the study. **(*Non-Vaccination participants only*)** ☐
7. I agree to take part in **PART A** ☐ I agree to take part in **PART B** ☐
   (Vaccination participants only)
8. I give permission for the investigators, the sponsor and regulatory authorities, to have access to my medical records for the purposes of this study, and agree that my GP shall be informed of any significant clinical findings. ☐

Name of Patient	Date	Signature

Name of Person Taking Consent	Date	Signature