

Participant Information

**Rapamycin and Inulin for booster Vaccine response STIMulation (RIVASTIM) – Sirolimus Study**

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**Part 1 What does participation involve?**

**Introduction**

You are invited to participate in a research project that is explained below. This is because you have a kidney transplant. This research project is testing whether a change in transplant medications improves COVID-19 vaccine responses.

This Participant Information Sheet/Consent Form tells you about the research project. It explains the tests and treatments involved. Knowing what is involved will help you decide if you want to take part in the research.

Please read this information carefully. Ask questions about anything that you don’t understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with a relative, friends, or your kidney specialist.

Participation in this research is voluntary. If you do not wish to take part, you do not have to. You will receive the best possible care whether or not you take part.

If you decide you want to take part in the research project, you will be asked to sign the consent section. By signing it you are telling us that you:

* Understand what you have read
* Consent to taking part in the research project
* Consent to having the tests and treatments that are described
* Consent to the use of your personal and health information as described

You will be given a copy of this Participant Information and Consent Form to keep

**What is the research project?**  
This is a project jointly undertaken by CALHN (The Royal Adelaide Hospital and SA Pathology), The University of Adelaide, and The Royal Prince Alfred Hospital in Sydney. This project is funded by Kidney, Transplant, Diabetes Research Australia. We are interested in improving kidney transplant patients’ responses to COVID-19 vaccines.

Research suggests one common transplant medication may improve vaccine responses. We will be conducting a clinical trial to see whether substituting your immunosuppression medication mycophenolate for another similar medication called sirolimus improves responses to a booster COVID-19 vaccine dose.

The project aim is to identify strategies to improve kidney transplant patients’ responses to a booster dose of a COVID-19 vaccine (Pfizer Comirnaty)

**What has this got to do with me?**We are looking for kidney transplant recipients aged between 18 and 70 years old that have received 2 doses of a COVID-19 vaccine and take tacrolimus, mycophenolate, and prednisolone, to participate in this research.

**Who are the researchers?**The researchers are clinicians and scientists from The Royal Adelaide Hospital, SA Pathology, The University of Adelaide, and the Royal Prince Alfred Hospital who have expertise in kidney transplantation and clinical immunology.

**What would I need to do as part of this research project?**If you choose to participate in the research, you will have a blood test to see if you have responded adequately to the first 2 doses of COVID vaccines. If you did not respond, you will be randomly assigned to either continue your current transplant medications or have your immunosuppression medication changed over a period of 4 weeks. You will then receive a booster COVID-19 vaccine (Pfizer Comirnaty) and have blood tests 4-6 weeks later to see how you respond. You will also provide 2 stool samples (before and after medication changes). At the conclusion of the study, if your transplant medications were changed, you can discuss either continuing the study medication regime or switching back to your old medications with your kidney specialist. During the study we will do a minimum of 2 blood tests to assess vaccine responses (no more than 100 mL each). If your transplant medications change, we will need to do extra blood tests to ensure the levels are correct. You will need to visit the hospital on 3 occasions, and you will receive phone calls from one of the study investigators. You will need to stop any diet supplements or probiotic supplements that you normally take during the study.

**Will I benefit from this study?**You will be included in this study if you did not respond to the first 2 doses of COVID-19 vaccines (either the AstraZeneca Vaxzevria or Pfizer Comirnaty vaccines). A benefit of this study will be that you will receive an additional dose of a COVID-19 vaccine, potentially improving your protection against COVID-19.

**Is there likely to be a benefit to others in the future?**We anticipate that this research will provide information that will help kidney transplant patients in Australia and around the world, to identify strategies that protect kidney transplant patients from contracting COVID-19.

**What are the risks, side effects, and possible discomforts?**The risks in this research are related to the study medication, the vaccine, and an increased number of blood tests.

The study medication sirolimus has been used for kidney transplant patients for over 20 years. Important side effects to know about for this medication are mouth ulcers (10-19%), respiratory symptoms (4-17%), gastrointestinal symptoms (15-20%), swelling of the legs (6-12%), high cholesterol (20-46%), diabetes mellitus (20-27%), and low blood counts (11-76%). Some of these risks are similar with your current transplant medications, and the side effects are less likely with the low doses we will be using in the study.

In patients who are changing their immunosuppression medications there is a risk of developing transplant rejection. You will be monitored very closely during the study period for any of these side effects.

COVID-19 vaccines trigger an immune response and expected side effects can include fever, headache, muscle pains, joint pains, pain/swelling at the injection site, and lymph node swelling. Rarer side effects have been reported with the Pfizer Comirnaty vaccine, such as a condition called myocarditis. Myocarditis is an inflammation of the heart and can occur in 1 in 50,000 patients receiving the Pfizer Comirnaty vaccine.

The main risks of collecting blood are discomfort or bruising at the site where the needle goes in. This is usually minor and will go away shortly after the sample has been taken.

**What are the likely things that could be an inconvenience for me?**Inconveniences to you are related to attending your trial visits at the Royal Adelaide Hospital, as well as having regular blood samples and their associated discomfort. For the patients who change their immunosuppression medications, there will be additional blood tests and phone calls.

**What information about me will be used in the study?**Relevant demographic information, including your age, gender, medical history, and current medications will be recorded.

**Will my samples be kept?**Your blood samples will be deidentified and stored in locked laboratories in the Adelaide Health and Medical Sciences building, University of Adelaide. These samples will be kept securely by the study investigators for 5 years. After this time, the study investigators will discard the samples.

Your stool samples will be stored at the Charles Perkins Centre, University of Sydney. These samples will be kept securely by the study investigators for 5 years. After this time, the study investigators will discard the samples.

**What will be done to make sure the information is confidential?**We will not use your name to identify the test results. Instead, we will use an alpha-numeric code to identify each participant, which will be recorded on a separate data sheet only available to your doctors. All data from the trial will be entered into a secure research database (REDCap). The records dealing with your participation will be kept under safe storage after completion for 15 years, and these records may be inspected for purposes of data audit by authorised persons within the institution (e.g. the ethics committee) or external to it (e.g. regulatory bodies). Paper records will be scanned electronically and destroyed at the end of the study. Electronic records will be stored on shared hospital departmental drives with password protection. We hope to publish the results of our study in a scientific journal and will display results with no reference to the identity of individuals. In accordance with relevant Australian and/or South Australian privacy and other relevant laws, you have the right to request access to your information collected and stored by the research team. You also have the right to request that any information with which you disagree be corrected. Please contact the study team member named at the end of this document if you would like to access your information.

**Will I be informed of the results?**If you wish to know the overall results of the study, we will provide an information sheet to participants once the study is completed.

**Can I withdraw from the study?**

Participation is voluntary. This is a research project and you do not have to be involved. If you do not wish to participate, your medical care will not be affected in any way. Also, you may withdraw from the project at any time after you have commenced. No explanation is needed. You may like to discuss your participation with your family or your doctor. You can ask for further information before deciding if you will take part. You are welcome to have a family member or a friend with you while the project is explained to you.

**If I am injured from the study, who will pay the doctor and hospital bills?**

If you suffer any injuries or complications as a result of this research project, you should contact the study team as soon as possible and you will be assisted with arranging appropriate medical treatment. If you are eligible for Medicare, you can receive any medical treatment required to treat the injury or complications, free of charge, as a public patient in any Australian public hospital. There are legal avenues that may be available to you for seeking compensation if you suffer an injury as a result of your participation in this research project.

**This project will be carried out according to the National Statement on Ethical Conduct in Human Research (2007) incorporating all updates. This statement has been developed to protect the interests of people who agree to participate in human research studies. The study has been approved by the Central Adelaide Local Health Network Human Research Ethics Committee. If you wish to speak to someone not directly involved in the study about your rights as a volunteer, or about the conduct of the study, you may also contact the CALHN HREC Chairperson, on 7117 2229 or** [**Health.CALHNResearchethics@sa.gov.au**](mailto:Health.CALHNResearchethics@sa.gov.au)**.**

**Questions and information (RAH): Dr Matthew Tunbridge, Renal Registrar**

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