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Participant Information Form

Participant with Parkinson's disease

Project Title: Trajectory of Outcomes in Neurological Conditions (TONiC) for Parkinson's disease.

Name of Researchers: Prof. Sulev Koks, Prof. Frank Mastaglia, Prof. Soumya Ghosh, Prof. David Blacker, Prof. Samar Aoun, Dr. Srim Vajayan, Dr. Rick Stell, Dr. Wai Yan (Wayne) Yau, Dr. Rajini Rajanayagam, Dr. Abigail Pfaff, Ms Lewis Singleton, and Ms Leanne Jiang

Invitation

You are invited to take part in this research project because you have been diagnosed with Parkinson's disease (PD).

This Participant Information Sheet outlines your involvement in the research project. If any part of this sheet is not clear to you, please do not hesitate to ask for clarification prior to taking part. Before you make a decision, it is important to know what research is being done, what it will involve, your rights and responsibilities, and its impact. You will be given a copy of this form and the consent form for your own personal record.

1 What is the purpose of this research?

PD is a progressive neurodegenerative disease with an array of signs and symptoms. Genetic variants have been widely understudied in PD populations. Previous research show that genetic variants may contribute to disease progression. Secondly, little is known on the impact of progression and disease stages with quality of life. Our ultimate goal is to understand what is required to better support patient care by utilising genetic tools and quality of life indicators.

The aims of this research project are outlined below:

1. Investigate genetic variants associated with PD;
2. Understand the elements that contribute to quality of life in those with PD;
3. Identify links between genetic variants and patient reported quality of life.

We hope to better understand the factors that contribute to quality of life and disease changes in PD patients. By identifying genetic variations that contribute to PD progression, we aim to group patients with similar genetic variants and similar quality of life experiences. Ultimately, aiming to better anticipate the needs of different patients and provide better care.

Currently this study has been implemented in the United Kingdom for several years, aiming to refine services and focus on therapies provided to patients. We want to do the same in Australia, starting with Western Australian patients and families.

The research may be undertaken by a student under the supervision of the chief investigator or a senior researcher. It may provide new information on the role of genetic mutation(s) on the diseases being studied.

The research is being conducted by Professor Sulev Koks at Perron Institute for Neurological and Translational Science, QEII Medical Centre.

2 What does participation in this research involve?

PD participants will be asked to complete the TONiC questionnaire pack every 12 months. This can be done either online or a hard copy version at home. It is estimated that it will take 2.5 hours to complete in one sitting. We ask participants to complete this questionnaire within one week from starting. Lastly, we will be asking you to provide a saliva sample for us to extract DNA and RNA from. This can be done in the clinic, or at home. If you would prefer to do these questionnaires and the saliva sample at home, we will post a packet to you with a reply paid envelope.

Consent forms will be signed prior to any study assessments being performed. The research coordinator and neurologist will screen you for eligibility to participate in this project. You must be able to provide informed consent, aged over 18 years old, and diagnosed with PD. There are no costs associated with participating in this research project, nor will you be paid.

The duration of your participation will span from your consent for as long as you are willing to complete follow-up questionnaires. You may withdraw from this study at any point from your enrolment. The duration of this whole study is expected to end in December 2027.

You will be **excluded** for the following reasons:

1. Are under the age of 18;
2. Are unable to provide informed consent;
3. Have not been diagnosed with PD;
4. Have been diagnosed with frontotemporal dementia;
5. Are judged to be ineligible for study entry by the investigator, sub investigator, or a neurologist.

<u>What sorts of sample(s) are required?</u>
We will be asking you to provide a saliva sample for us to extract DNA and RNA from. This can be done in the clinic, or at home. In most circumstances we will only require a saliva sample once to collect your DNA and RNA. On rare occasions if the first sample was not viable, we will ask you to provide a second saliva sample or a blood sample collected by a trained phlebotomist or study doctor at the Perron Clinic. Your sample will be deidentified and given an identification number which will be used onwards. Your sample may be re-identified as yours by senior members of the research team where necessary as described in this information sheet.

<u>Use of sample for future unspecified research</u>
We will ask you to consent to the use of your sample for future research that may or may not be directly related to the aim of this research project. We will also ask you to consent to the inclusion of your sample into a future data or tissue bank, for the purpose of ongoing and future research that has been ethically approved.

3 What are the possible benefits of taking part?

It is unlikely that you will receive any benefits from participating in this research project. The main benefit of this study is discovering better tools to predict PD progression, understand the change in quality of life, and therefore, improving clinical and home support for patients. Lastly, we hope to identify genetic markers that may guide future directions of therapeutics.

4 What are the possible risks and disadvantages of taking part?

We predict there will be minimal hazards and/or risks in participating in this research study. Risks have been mitigated through proper safety arrangements for biospecimen collection, and availability of support staff for qualitative assessments. If you consent to the collection of a blood sample, you may experience some discomfort and bruising.

Genetic testing may raise important issues. Although few may be expected to arise, your awareness of this is important for you to think about and carefully consider before agreeing to participate. This research will only investigate PD-relevant genetic variants. If you become upset or distressed as a result of your participation in the research, the research coordinator will be able to arrange for appropriate support. Genetic testing involves the study of genetic material (typically DNA) that is shared with blood relatives. Genetic research is undertaken for many reasons, including discovering more accurate ways of predicting disease within a group of people, or in people where there is strong family history or predisposition of disease.

Learning about the results from genetic research might affect you and/or the family emotionally. In some cases, the result may give certainty that the participant does not have a disease but could also create uncertainty or be upsetting; if for instance, the test indicates an increased risk of developing a disease which has no known prevention, treatment or cure.

It is important to understand that results from genetic research will usually not indicate that you have a disease or disorder, or whether you will develop it. Research may only show that you have an increased risk of developing a disease or disorder. Even then, there is no guarantee that you will develop the condition or any indication of the likely age you might get the disease or how serious the disease might be.

You may learn information from your test result about inherited diseases or disorders that may affect others, such as your brothers or sisters. This could interfere with family relationships. You may be faced with the decision to make the family aware of the existence of genetic information. Family members may or may not wish to know this information.

Any research results that could be of significance to you or your family will need to have the tests repeated and the results verified. This will involve having a blood sample taken and having it retested in an accredited testing laboratory such as Clinipath or PathWest. This is standard practice for all patients receiving the results of genetic testing and would be provided free of charge. Counselling may also be provided free of charge if it is appropriate. Before a test is repeated to verify a research finding, you will be informed about the possible risks involved. This is especially important for individuals who are found to have a genetic mutation that is associated with an increased risk of developing a disease such as cancer or heart disease.

Statutory or contractual duties may require you to disclose results of genetic tests or analysis to third parties (for example, insurance companies, employers, financial and educational institutions), particularly where results provide information about health prospects. If the results of the participant's genetic tests are not available to you or you choose not to receive the results, any future requests for insurance will not be affected by participating in this research.
If you do obtain the results of the genetic tests, you may then be obliged to disclose this on any future application for insurance or employment should it be requested.

<u>If you agree to the use of your sample for future unspecified research or to be included in a future biobank.</u>
You will not know what ethically approved research your sample or data is being used for. This research might uncover a medical condition of which you were unaware. In that case we advise you to contact

your local doctor for proper treatment. However, this will not affect your participation in the research project. Participation in the research project might indicate a genetic predisposition for or diagnose previously unknown conditions that may affect insurance in the future. If you consent to be informed of findings that arise from the use of your sample in unspecified future research, that is information not related to the TONiC PD project, you will be asked again if you wish to be informed. A study clinician will consult with your nominated clinician to arrange a confirmation genetic test prior to you being informed. The risks associated with being informed of these results are outlined above.

5 What will happen to my test samples?

DNA and RNA extracted from your biospecimen will be stored at the Perron Institute's Genetic Epidemiology Laboratory. Disposal of biospecimens will be conducted in accordance with the Transplantation and Anatomy Act 1978 (ACT). By consenting to this study, you therefore also consent to sharing your de-identified data with collaborators of the Genetic Epidemiology Group, including some international collaborators undergoing research related to this project (such as the UK TONiC study being undertaken by Prof. CA Young at the Walton Centre, Liverpool, UK). Sharing of de-identified or anonymised data will be done so only with ethical approval. Your sample will only be re-identified for projects approved by an ethics committee.

We would like to store your samples for use in any future research studies that may or may not be related to the original research project. Further information can be found in this document's **section 10** on banking.

We are storing your samples indefinitely for future research and may include them in a bank if you consent. If you do not consent to the indefinite future use of your samples or their inclusion in a bank, the samples will be disposed of 7 years following the completion of the project or publication of results, whichever comes later (in accordance with WAUSDA research data management guidelines). We will destroy your samples once you advise us to withdraw from the study. Disposal of biospecimens will be conducted in accordance with the Transplantation and Anatomy Act 1978 (ACT).

Your identity and samples will be treated with care and respect. The samples will be given a study code to protect your identity and be re-identifiable only by the study doctor and ethically approved senior members of the research team, and the information will be stored digitally, and access will be password protected.

For collaborated research with other investigators, your samples may be sent interstate or overseas where the local Human Research Ethics Committee meets the appropriate Australian ethical and privacy standards. All samples will be sent to collaborators with a study code and without any personal information. Samples will only be re-identifiable as yours by the study clinician and only for ethically approved purposes. There may be future use of the samples, including using the samples to generate data leading to commercial products.

We may perform genetic analysis on your samples.

<u>What is genetic analysis?</u>
Variations in the DNA sequence/genetic and factors can lead to the development of disease and responses to treatment. Studying DNA therefore provides a powerful way to improve our understanding of disease. However, because each individual's genetic makeup is unique, DNA analysis can reveal more about you than other laboratory tests. The examination of DNA may provide additional information regarding your health such as the likelihood of developing particular diseases such as diabetes, Alzheimer's, cardiovascular diseases in the future and some information may be useful for your family

members as well. We are unable to predict what new tests may become available in the future and what information these tests may uncover.

If meaningful information has been obtained from the research that may influence your health or that of your family, the study doctor will only attempt to contact you through your doctor/clinician. If you wish, you may disclose the information to the family members. The study doctor will ask for your consent and appropriate methods to approach in the consent form if your relatives are to be approached. The study doctor will discuss information of potential significance to your relatives' future health with you. Some information may have the risks related to application for future insurance/employment. You are advised to seek counselling from professionals. Information on this can be found in **section 6** below on potential impact to family.

Your genetic material and information, where identified or potentially identifiable, will not be released for other uses without your prior consent, unless required by law. Information will be provided about the procedures to be followed in response to a request for access (e.g. requests by a donor, relative, other researchers, insurer or employer) to stored genetic material, or related information generated by the research.

6 What is the potential impact on my family if I take part?

You may be asked to give us health information about your relatives. Any information you give us will be kept confidential. We may discuss with you the possibility of including the relatives in the research project in the future. Genetic finding may have relevance to family members, and you may consider disclosing them (refer to section 4 about the potential risks and disadvantages).

If the participant is unavailable to receive pertinent findings from the study that may affect their family members, they have the option to nominate a next of kin to be contacted. We recommend the participant discusses this with the nominated next of kin prior to naming them (refer to section 9 about the potential risks and disadvantages).

7 Do I have to take part in this research project?

Participation in any research project is voluntary. If you do not wish to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. If you do decide to take part, you will be given this Participant Information Form and Consent Form to sign and you will be given a copy to keep.

Your decision whether to take part or not or to withdraw, will not affect your routine treatment, your relationship with those treating you or your relationship with the *Perron Institute for Neurological and Translational Science.*

You do not have to take part in this research project to receive treatment at this hospital. You can also discuss the options with your GP, friends, family, and your neurologist.

8 Will I be given the results of the research project?

You will be given your genetic test results only if the reliability and clinical impact of the results is known, as decided by the study clinician and where necessary a clinical geneticist. Your genetic test results will only be provided to you if you consent to be informed. It is your decision whether you wish to be informed of the results. Before you decide if you wish to have the genetic test results, it is important that you read the information above regarding risks carefully so that you can make an informed decision.

If you decide to see the genetic test results, where appropriate specialist clinical geneticists and genetic counsellors will speak with you and assist you through the process. This will be at no cost to you.

Genetic information is complex and can be influenced by other factors including environment and lifestyle. Because genetic information is complex and sensitive, where appropriate the results should be discussed with a clinical geneticist and genetic counsellor who can give you details that are relevant to you, answer your questions and discuss your concerns.

In the future, if during this or a future unspecified ethically approved research project, new information that is important for your health care is discovered, you will be asked whether you wish to receive the results (this may require the test to be repeated in a clinical laboratory). Study researchers may contact you if such a situation arises.

9 Will drug or biotechnology companies be able to use the participant's sample for profit in the future?

There is the possibility that this research may result in commercially viable technology or treatments. However, you will not be able to claim financial benefit from any discoveries arising from the use of your samples or data.

10 Banking (Long term storage of samples), risks of banking, and will I be informed of future research results?

"Banking" is storing health information and/or biospecimen for future research studies. A "bank" is the place where the health information and/or biospecimen is stored.

At some point in the future, your sample may be stored as individually re-identifiable specimen(s). The study team seeks your permission to include your sample and/or data in a bank for future research. The lead researcher would like you to consider consenting for your samples to eventually be included in a bank because you have a condition with limited treatment options at present and more research is needed to better understand the condition and how to treat it. In the future, other doctors and scientists at this and other medical and research centres may use your sample and/or data to learn about many different diseases and conditions. Their goal is to improve health outcomes and develop new treatments.

No specific biobank is currently planned, however any bank that your sample and/or data may be entered into in future must be ethically approved with a high level of security to protect your privacy. The purpose of storing your biospecimen in a bank is to answer questions in the future, so we expect to keep your sample for a long time. If your sample is eventually entered into a bank, we will inform you of the specific bank and relevant details in writing.

Your sample would be stored with a study code that will allow it to be re-identifiable as yours only by the study clinician, even though the bank does not know your identity. You can have it removed or destroyed by contacting the principal investigator, Professor Sulev Koks, in writing at Perron Institute, QEII Medical Centre.

If your sample is used in future research, or is entered into a bank, future research may uncover findings that are relevant to your health. Because your sample and data will be re-identifiable, you may be informed of such findings if you consent. The risks of being informed of these findings is described above in **sections 4 and 5**.

11 What if I withdraw from this research project?

You are free to withdraw at any time. If you decide to withdraw from this research project, the research coordinator will request you fill out a participant withdrawal form. You do not have to disclose a reason for your withdrawal if you do not wish to. Withdrawing from this study will not affect the care you receive.

If you withdraw, the research coordinator and Prof. Sulev Koks will not collect any additional information or samples from you. You should be aware that data collected by the study team up to the time you withdraw will form part of the research project results. You may withdraw consent in writing for the continued use and analysis of your data. However, it may not be possible to remove data that has been analysed, aggregated with other data, or permanently de-identified. If you withdraw from the study, you may request for your DNA samples to be destroyed. If this is your preference, we will destroy it according to normal practice.

12 Can I have other treatments during this research project?

Yes, you may take other treatments whilst involved in this project. We just request that you update this information on the TONiC questionnaire pack, whether those are changes to: prescribed medication, clinical trial medications, over-the-counter medications, vitamins or herbal remedies, acupuncture or other alternative treatments.

13 What happens when the research project ends?

The results of this project will be published in a series of papers in peer reviewed scientific articles. Participants will be able to access this data and information via the research coordinator. During the course of this project, we can keep you up to date on the results and progress of the research if you would like. The de-identified data from this project may be shared with collaborators directly engaged in ethically approved research related to this project (such as the TONiC UK study headed by Prof. C A Young at the Walton Centre, Liverpool, UK).

Part 2 How is the research project being conducted?

14 What will happen to information about me?

The Institute, Principal Investigators and project staff are bound to undertake this research in accordance with the Australian Privacy Principles 2014, the Australian Code of the Responsible Conduct of Research and NHMRC National Guidelines for the Ethical Conduct of Human Research (2007). All reasonable measures to protect the confidentiality of your records will be taken.

By signing the consent form, you consent to the study doctor and relevant research staff collecting and using personal information about you for the research project.
Any information obtained in connection with this research project that can identify you will remain confidential. Participant's samples will be given a study code in our database and be re-identifiable only by senior members of the research team for ethically approved purposes. All data and information will be deidentified for publication.

In the event of the death of the participant the clinician will inform the researchers.

Your information will only be used for the purpose of this research project, other ethically approved research and for future collaborations as indicated in your consent form. It will only be disclosed with your permission, except as required by law.

It is anticipated that the results of this research project will be published and/or presented in a variety of forums. In any publication and/or presentation, information will be provided without identification or as a grouped data so that the participant cannot be identified.

In accordance with relevant Australian and/or Western Australia privacy and other relevant laws, you have the right to request access to the information collected and stored by the research team about you. You also have the right to request that any information with which you disagree be corrected. Please contact the research team member named at the end of this document if you would like to access your information.

Information about participation in this research project may be recorded in your health records. Any information obtained for the purpose of this research project and for the future collaborative research that can identify you will be treated as confidential and securely stored. It will be disclosed only with your permission, or as required by law.

We would also like you to consider being contacted by the research team in the future about participating in any related research projects.

15 Complaints and compensation

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.

You will not benefit financially from your involvement in this research project even if, for example, your samples (or knowledge acquired from analysis of your samples) prove to be of commercial value to The University of Western Australia and the Perron Institute for Neurological and Translational Sciences.

16 Who is organising and funding the research?

The University of Western Australia and the Perron Institute for Neurological and Translational Sciences may benefit financially from this research project. The research is being funded in part by MSWA. No member of the research team will receive a personal financial benefit from your involvement in this research project (other than their ordinary wages).

17 Who has reviewed the research project?

This project has been reviewed and approved by the University of Western Australia's Human Research Ethics Committee (**Approval number** 2021/ET000093). In doing so, this research conforms to the principles set out by the National Statement of Ethical Conduct in Human Research and abides by the Good Clinical Practice Guidelines.

Further information and who to contact:
The person you may need to contact will depend on the nature of your query.

Study contact person

Name	*Denise Howting*
Position	*TONiC Research Coordinator*
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Approval to conduct this research has been provided by the University of Western Australia, in accordance with its ethics review and approval procedures. Any person considering participation in this research project, or agreeing to participate, may raise any questions or issues with the researchers at any time. In addition, any person not satisfied with the response of researchers may raise ethics issues or concerns, and may make any complaints about this research project by contacting the Human Ethics office at UWA on (08) 6488 4703 or by emailing to humanethics@uwa.edu.au. All research participants are entitled to retain a copy of any Participant Information Form and/or Participant Consent Form relating to this research project.