

## Participant Information Sheet/Consent Form

**Interventional Study - Adult providing own consent**

*Garvan Institute of Medical Research*

<b>Title</b>	<i>Personalised medicine in prediabetes – Towards preventing diabetes in individuals at risk</i>
<b>Short Title</b>	<i>Personalised medicine in prediabetes (PREDICT)</i>
<b>Protocol Number</b>	<i>17/080</i>
<b>Project Sponsor</b>	<i>Garvan Institute of Medical Research</i>
<b>Coordinating Principal Investigator/ Principal Investigator</b>	<i>Dr Dorit Samocha-Bonet</i>
<b>Associate Investigator(s)</b> <i>(if required by institution)</i>	<i>Prof Segal, Prof Elinav, Prof Greenfield, Dr Hng, Dr Snaith, Dr Liu, Ms Godneva</i>
<b>Location</b> <i>(where CPI/PI will recruit)</i>	<i>Garvan Institute of Medical Research, Sydney</i>

### Part 1 What does my participation involve?

#### 1 Introduction

Type 2 diabetes affects 8.5% of the world's adult population. Prediabetes is a condition developing many years before type 2 diabetes, and is diagnosed by raised glucose (sugar) in the blood stream, either when measured first thing in the morning (fasting) or when measured after a meal. Approximately 30 - 40 % of the world's adult population is affected by prediabetes. Individuals with prediabetes have a higher risk of diabetes and heart disease. Treatment with the most commonly used sugar-lowering medication metformin does not always improve blood sugar levels in individuals with prediabetes or type 2 diabetes. This means that after the treatment, blood sugar concentrations are still higher than normal and the risk of diabetes remains increased.

You are invited to take part in this research project because you either have prediabetes or you have recently been diagnosed with type 2 diabetes. The research project is testing the effect of a personalised diet combined with the medication metformin on sugar control, body weight, and other risk factors.

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, friend or your General Practitioner.

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

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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 take part in the research project
- Consent to have 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.

## 2 What is the purpose of this research?

The overall aim of the study is to improve the treatment of individuals with prediabetes or type 2 diabetes with a special nutritional intervention.

In particular, we would like to find out whether a personalised diet administered with a medication commonly used to treat diabetes named metformin will achieve better results when compared with a low fat low sugar diet (the type of diet commonly recommended to individuals with prediabetes or type 2 diabetes) administered with metformin.

We will compare the effects of the different treatments on sugar control, body weight, body fat, blood lipids, blood pressure and the amount of fat in the liver.

The medication used in this research project and listed below is approved in Australia to treat type 2 diabetes. While it is not routinely prescribed to treat prediabetes, metformin has been used to treat individuals with prediabetes in a large American trial and has been proven to be safe in individuals with prediabetes (the Diabetes Prevention Program, United States).

### The following medication/treatments will be used in the study:

1. Metformin Extended Release (XR) + Low fat low sugar diet ("healthy" diet).
2. Metformin XR + "Personalised diet" (see further details below).

In both study arms, if your weight falls in the overweight or obese category (i.e. body mass index [BMI] > 25 kg/m<sup>2</sup>), we will recommend a reduction of approximately 500 Kcal/d from the dietary energy you are currently on. This will result in moderate weight loss. If your weight is within the recommended BMI range (equals to or under 25 kg/m<sup>2</sup>), we will recommend the same level of energy intake you are currently consuming. This will result in weight maintenance.

### Method of administration of medication:

Metformin XR – Daily tablet (oral ingestion 1500 mg/d) with evening meal

### Method of administration of diet:

The diet will be delivered using a smartphone application. You will be guided and supported by an Accredited Practising Dietitian

You will be participating in a randomised research project. Sometimes we do not know which treatment is best for treating a condition. To find out, we need to compare different treatments. We put people into groups and give each group a different treatment. The results are compared to see if one is better than the other. To try to make sure the groups are the same, each participant is put into a group by chance (random).

We will administer 1 medication in combination with 2 different nutritional interventions. There is a 1 in 2 chance that you will be allocated to each study arm.

This research has been initiated by the study doctors, Dr Dorit Samocha-Bonet and Professor Jerry R Greenfield.

This research has been funded by a Foundation requesting to remain anonymous, funds from the Garvan Research Foundation and a grant from the St Vincent's Clinic Foundation.

### **3 What does participation in this research involve?**

If you agree to participate in this study, you will be asked to sign the Participant Consent Form. We will ask you to sign a separate Participant Consent Form before having blood tests at a commercial pathology.

Participation in this project will involve the following:

Initially we will ask you questions regarding your health and medical history over the telephone. If it sounds like you may be eligible for the study we will ask you to attend a commercial pathology service in your area for an oral sugar test (oral glucose tolerance test), testing your blood sugar after drinking a sugary drink, and a blood test measuring glycated haemoglobin (HbA1c, a marker of average blood sugar levels over the past 3 months). This involves having a blood sample taken prior to drinking a sugary drink (containing 75 grams of sugar), followed by blood samples taken one and two hours later.

You will be asked to remain in the blood collection centre for the duration of the test (2 hours).

Overall the commercial Pathology will collect 20 mL (about 1.5 tablespoons) of blood.

These blood tests will tell us if you have diabetes or prediabetes and will help us determine whether or not you are eligible to participate in our study. We will call you and discuss the test results and your eligibility to participate in the study within 1 week. We will provide you with a letter summarising the results which you will be able to share with your General Practitioner.

If you are eligible to participate in the study, we will invite you to a Screening / Enrolment visit. We will send you a special kit for collection of stool at home, with detailed instructions on how to collect the sample. We will ask you to bring the sample with you to your next visit.

Prior to the study we will ask you to reply to questionnaires asking about your usual eating and physical activity habits and your health. You will be asked to download a smartphone application which you will use during the study.

### Screening / Enrolment visit (approximately 1.5 hours)

- We will ask that you arrive to the Clinical Research Facility (clinic) at the Garvan Institute of Medical Research, Darlinghurst. During this visit you will have time to ask questions and if you agree to participate, you will sign the consent form. You will change into a hospital gown. The study doctor will ask you about your health and perform a physical examination. We will measure body weight and height, blood pressure, waist and hip circumferences, and body fat composition (estimated using Tanita scales).
- Blood will be drawn to assess your liver and kidney health and your blood cells count. The volume of blood that will be taken during this visit is 20 mL (about 1.5 tablespoons).
- We will attach a small device (sensor) that measures sugar levels for a period of 14 days to your arm. The size of the device is of a fifty cents coin. We will apply the sensor on to the back of the upper arm with a disposable applicator. When the sensor is applied, a thin, flexible sterile fibre is inserted just under the skin. It is held in place with a small adhesive pad. Most people feel no pain when applying the sensor. You will not have to do anything while the sensor measures sugar level. All the information will be stored in the sensor. We will also attach a physical activity sensor. Both sensors are designed to wear for up to 14 days. We will ask that you remove and send the sensors to us after 14 days in a prepaid envelop. You will have your usual diet and record what you eat in a smartphone application.

During this visit, or soon after, you will meet the dietitian (face-to-face or using a video meeting tool like Zoom or Skype). The dietitian will teach you to use the smartphone application. You will use this application to log the food that you eat, and optionally, to log your physical activity (type and duration), and the medications that you take. We will provide you with a light meal at the end of this visit.

After this visit we will randomise you to one of 2 treatment arms.

### Baseline visit (2 hours, we will ask that you fast from 10 pm the night before this visit)

The baseline visit will be performed approximately 6 – 8 weeks after the Screening / Enrolment visit. You will arrive at the clinic in the morning. The following measurements and procedures will take place,

- You will undergo dual-energy X-ray absorptiometry (DXA) at St Vincent's Hospital (next door to the Garvan). DXA will be used to evaluate the amount of fat in your body.
- Liver fibroscan, performed at St Vincent's Hospital. This measurement will provide information about the amount of fat and fibrosis (scarring) in the liver.
- A team member will measure your weight, height, waist and hip circumference and blood pressure, while wearing a hospital gown.
- We will measure how many calories you burn while resting using a plastic hood placed over your shoulders while you are resting in bed (takes 30 minutes).
- We will measure the stiffness of an artery in the wrist (radial artery) using a non-invasive device which looks like a pen. This measurement takes approximately 5 minutes and will provide information about the stiffness of your arteries.
- We will collect blood samples. Overall we will collect 20 mL (2 tablespoons) of blood during this visit.
- We will collect a sample of bacteria from the mouth by swabbing a special collection stick over the gums. We will store this sample for testing the effect of the treatment on the mouth bacteria.

At the end of the visit we will provide you with 3-months' worth of medication and medication logbooks. We will ask you to take the metformin every evening **with dinner**. You will start with taking a small dose and depending on how you feel (some people experience diarrhoea, nausea, and flatulence, mostly at the beginning of the treatment), we will gradually ask you to increase the dose until you reach the target dose. You will be guided by the study investigator / dietitian regarding using the smartphone application during the treatment period.

We will call you at a time of your convenience once a month or fortnightly to follow up on your progress with the treatment. We will ask you how you feel and whether you have any general health changes that you would like to report (whether you think they are related or unrelated to the treatment), as well as any changes to your usual medications, other than the study treatment.. Follow-up may be performed using Zoom, Skype, text, or over the phone.

#### 4-months visit (2 hours, similar to the baseline visit, we will ask that you fast from 10 pm the night before this visit)

This visit will be similar to the baseline visit (described above) and include the same procedures, except that you will not have a DXA and fibroscan. We will attach another sugar sensor to the arm, and ask you to send it back to us in a prepaid envelope after 14 days. During this visit we will also take a blood sample that will be used to measure the level of metformin in the blood. We will ask you to bring the medication log books.

#### 6.5-months visits

We will invite you to the Garvan to attach the sugar sensor and activity monitor. We will refer you again to perform a sugar challenge test, as you have done before the treatment in a commercial pathology in your area. We will provide you with a special kit for collection of stool and ask you to bring the sample with you to your next visit at the Garvan.

#### 7-months (end-of treatment, performed 6 months from the start of the treatment) visit

Identical to the baseline visit, with the exception that we will collect a blood sample to measure the concentration of the medication in the blood and will ask you to bring back the medication and the logbooks.

#### 12-months survey and blood test (includes a questionnaire and a blood test at a local commercial pathology)

6-months after the completion of the treatment, we will send you a survey and ask you to tell us what your current body weight is, whether you remained on the diet, and whether you are treated with a sugar-lowering medication (and if relevant to specify the medication and dose). We will also ask you to perform a blood test in a commercial pathology in your area. The blood test will measure sugar control and does not require you to be fasting. You will not have to visit the Garvan for this event.

In summary, you will be required to visit and maintain contact with the study team over a period of approximately 6 months, while you're treated. The overall duration of the study is approximately 13 – 14 months.

There are no costs associated with participating in this research project, nor will you be paid. All medications, dietary advice, tests, including all blood tests, some meals and medical care required as part of the research project will be provided to you free of charge.

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You will be provided a \$100 AUD retail voucher. Parking will be provided at the Garvan carpark on days of visits.

If you have a General Practitioner, we strongly recommend that you inform them of your participation in this research project.

#### **4 What do I have to do?**

During the study period, the study team will instruct you regarding what you should be doing before each of the visits/study events. For example, we may ask you to avoid drinking alcohol or to avoid vigorous physical activity before some of the visits.

During the study you will be able to continue taking your regular medications, but if you will require a sugar-lowering medication other than metformin (prescribed in the study), you will have to withdraw from the study.

We will ask you to inform us if and when you started taking a new medication, or if and when there has been a change in dose of any medication you are taking regularly.

During the study we will ask you not to donate blood or participate in another study.

We will expect you to be compliant with the study instructions and if any problem arises, we expect that you will contact us.

#### **5 Other relevant information about the research project**

We plan to enrol approximately 260 men and women to this study. All participants will be enrolled at a single site, the Garvan Institute of Medical Research, Darlinghurst, Sydney.

Some tests will be performed at the adjacent St Vincent's Hospital.

The project involves researchers from a number of academic institutes working in collaboration. The research team includes researchers and endocrinologists from the Diabetes Division at the Garvan Institute of Medical Research and St Vincent's Hospital (Sydney), researchers from the Endocrinology Department at Blacktown & Mount Druitt Hospital (Sydney), and researchers from the Immunology Department and the Computer Science Department at the Weizmann Institute of Science (Israel).

#### **6 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 and Consent Form to sign and you will be given a copy to keep.

Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your routine treatment, your relationship with those treating you or your relationship with the Garvan Institute of Medical Research or St Vincent's Hospital.

#### **7 What are the alternatives to participation?**

Other treatment options for your condition are available; these include dietary counselling and physical activity advice, and / or a sugar-lowering medication. Your study doctor will discuss

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these options with you before you decide whether or not to take part in this research project. You can also discuss the options with your General Practitioner.

### **8 What are the possible benefits of taking part?**

We cannot guarantee or promise that you will receive any benefits from this research. You will have access to a medication regulating blood sugar level that is primarily offered to type 2 diabetes patients and you may lose weight (1 – 5 kg).

We are hoping that the information generated in this study will help improve treatment of your condition.

### **9 What are the possible risks and disadvantages of taking part?**

Taking a medication may involve some risks, as detailed below. We will monitor any adverse events on a regular basis and you will have access to a clinical staff member at all time during the study.

There are potential risks relating to the procedures we will utilise in the course of the study. We have listed them below.

#### Risks related to the medication

Medical treatments often cause side effects. You may have none, some or all of the effects listed below, and they may be mild, moderate or severe. If you have any of these side effects, or are worried about them, talk with your study doctor. Your study doctor will also be looking out for side effects regularly.

In case you need to have any diagnostic procedure requiring contrast, most radiological services recommend routine withholding of metformin for 48 hours prior to and after the procedure. Please let your doctor know that you are taking metformin.

There may be side effects that the researchers do not expect and that may be serious. Tell your study doctor immediately about any new or unusual symptoms that you get.

Many side effects go away shortly in the first few weeks of the treatment or after the treatment ends. However, sometimes side effects can be serious. If a severe side effect or reaction occurs, your study doctor may need to stop your treatment. Your study doctor will discuss the best way of managing any side effects with you.

The medication we will administer in the present study, metformin, has been administered to people with type 2 diabetes over many years and has proven to be generally safe. We have listed below the potential side effects of the medication administered.

- Mild gastrointestinal symptoms such as diarrhoea, nausea, vomiting, abdominal pain and loss of appetite are the most frequent reactions to metformin, occurring in approximately 10% of individuals (10 in 100), especially during the initial treatment period. These symptoms are generally transient and resolve spontaneously during continued treatment.
- Taste disturbance may occur in 3% (3 in 100).

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- Rare adverse reactions occur in less than 0.01% (1 in 10000) of individuals include,
  - Lactic acidosis, often with mild nonspecific symptoms such as feeling of sickness, sleepiness, shortness of breath, and nonspecific abdominal distress.
  - Abnormalities of liver tests have been reported. Liver function tests will be monitored during the treatment.

#### *Risks related to the personalised nutrition*

The Personalised Nutrition Project diet (<http://newsite.personalnutrition.org/WebSite/Home.aspx>) has been trialled in various studies for over 5 years by the study co-Investigators Professors Elinav and Segal from the Weizmann Institute in Israel. The nutritional recommendation is different from person to person. This is because it is based on the individual's features and measurements, including sugar rise in response to food. Co-Investigators Elinav and Segal have reported that the individual response depends on blood markers, body measurements and different features of microorganisms in the gut. The individual food recommendation is based on "real" foods.

The effects of the personalised diet on the level of blood lipids in individuals with prediabetes and type 2 diabetes is being investigated. If we find that the baseline level of low-density lipoprotein (LDL)-cholesterol in the blood is elevated, a modified personalised diet containing less saturated fat (the type of dietary fat known to increase the level of LDL) will be prescribed.

#### *Risks relating to procedures*

##### Blood sampling

You may have pain, light-headedness, minor infection, bleeding or bruising at the sites of the blood sampling; however, the staff will use proper technique while drawing blood samples in order to reduce the risk for these unwanted effects. These effects are usually temporary, are easily treated, and are expected to resolve completely.

##### Dual-energy X-ray absorptiometry (DXA) scan

This research study involves exposure to a very small amount of radiation. As part of everyday living, everyone is exposed to naturally occurring background radiation and receives a dose of about 2 millisieverts (mSv) each year. The effective dose from this study is about 0.04 mSv. At this dose level, no harmful effects of radiation have been demonstrated as any effect is too small to measure. The risk is believed to be minimal.

##### Fibroscan test

The fibroscan is a non-invasive method of assessing liver scarring, termed fibrosis. The test is performed at the bedside in a clinic. A mechanical pulse is generated at the skin surface, which is propagated through the liver. The velocity of the wave is measured by ultrasound. The speed of this wave correlates with the stiffness of the liver, which in turn reflects the degree of fibrosis – the stiffer the liver is, the greater the degree of fibrosis. This test also estimates the amount of fat in the liver. This test utilises an ultrasound device and carries no risk.

##### Body sugar monitoring

The device we use in the study is used to monitor blood glucose levels, mostly in diabetes patients. Most people feel no pain when applying the sensor. The sensor is designed for a safe wear of up to 14 days. You can shower and exercise while wearing the sensor. Some individuals

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develop a skin reaction around the device on the arm. This typically resolves spontaneously over time; an over the counter cream may be recommended if the skin reaction persists. If you experience a skin reaction, we will likely decide to omit this measurement from the follow-up events.

#### Indirect calorimetry

A clear plastic hood is placed loosely over your head. Room air flows through the hood and the machine measures how much oxygen you are using and how much carbon-dioxide you produce. This test carries no significant risk. However, some participants may experience claustrophobia. If this occurs, the hood will be removed immediately.

#### Arterial stiffness

The stiffness of an artery in your wrist will be measured using a small device, looking like a pen, by applying light pressure to your wrist. There are no risks related to this method.

#### Tanita scales

The scales estimate how much energy your body requires based on your body fat and muscle composition. When you stand on a Tanita monitor, a very low, safe electrical signal is sent from four metal electrodes through your feet to your legs and abdomen. The electrical signal passes quickly through water that is present in muscle tissue but meets resistance when it hits fat. This resistance, known as impedance, is measured and used in validated equations to calculate body composition. This measurement will take around 20 seconds. Information from the Tanita measurement will be used to estimate your recommended daily energy intake.

People with an electronic medical implant, such as a pacemaker, should not use a body composition monitor because the electrical signal travelling through the body may interfere with its operation.

### **Pregnancy**

The effects of the medication metformin on the unborn child and on the newborn baby are not known. Because of this, it is important that study participants are not pregnant or breast-feeding and do not become pregnant during the course of the research project. You must not participate in this study if you are pregnant or trying to become pregnant, or breast-feeding. If you are female and child-bearing is a possibility, you will be required to undergo a pregnancy test prior to commencing the research project, and before each of the DXA scans.

Female participants must avoid pregnancy during the course of the research and for a period of 3 months after completion of the research project. You should discuss methods of effective contraception with your study doctor.

If you do become pregnant whilst participating in the research project, you should advise your study doctor immediately. Your study doctor will withdraw you from the research project and advise on further medical attention should this be necessary. You must not continue in the research if you become pregnant.

If you are a male, it is safe to father a child or donate sperm whilst taking the study medication.

### **10 What will happen to my test samples?**

During the study we will store blood and stool samples in -80°C freezer. In this research project, collecting blood and stool samples are mandatory.

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The blood, oral and stool samples collected are for research purposes, as specified in this document.

All the samples we will collect from you will be coded so they are not identifiable as your sample. Your identification linked to the sample code will be stored on a password protected computer and physical hardcopies in a locked filing cabinet at the Garvan Institute of Medical Research. Only staff involved in this study at the site will have access to this data to maintain privacy/confidentiality.

Some analyses in blood will be performed in commercial Laboratories or at St Vincent's Hospital. These specimens will be de-identified (coded). Your clinical information will not be sent with the specimens. The results of these analyses will be returned to the Investigators at the Garvan Institute of Medical Research. The external sites may retain your re-identifiable, analysed data in their records. After analysis of your specimen is complete, these external sites will destroy any remaining tissue or return remaining sample to us for storage.

We will store the samples we collect for 15 years.

Some samples of your blood, mouth and stool obtained for the purpose of this research project will be transferred to the Weizmann Institute of Science in Israel. These samples will be de-identified by coding. Information such as your gender, age, ethnicity, medical history, medications, food sensitivities and eating habits will be shared with researchers at the Weizmann Institute for planning your diet. This information will be de-identified.

Your samples will not be sold and the Garvan Institute of Medical Research will not knowingly transfer your samples to anyone who has expressed intent to sell the samples.

## **11 What if new information arises during this research project?**

Sometimes during the course of a research project, new information becomes available about the treatment that is being studied. If this happens, your study doctor will tell you about it and discuss with you whether you want to continue in the research project. If you decide to withdraw, your study doctor will make arrangements for your regular health care to continue. Also, on receiving new information, your study doctor might consider it to be in your best interests to withdraw you from the research project. If this happens, he / she will explain the reasons and arrange for your regular health care to continue.

When we assess your suitability to participate in the study we may uncover a medical condition of which you may be unaware. While we may decide that you are not able to participate in the study because of this new condition, we will refer you to your General Practitioner for further investigation and management.

If during the screening visit we diagnose a previously unknown condition, for example type 2 diabetes, this may affect insurance in the future.

## **12 Can I have other treatments during this research project?**

Whilst you are participating in this research project, you may not be able to take some of the medications or treatments you have been taking for your condition or for other reasons. It is important to tell your study doctor and the study staff about any treatments or medications you may be taking, including over-the-counter medications, vitamins or herbal remedies. You should also tell your study doctor about any changes to these during your participation in the research project.

## **13 What if I withdraw from this research project?**

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If you decide to withdraw from the project, please notify a member of the research team before you withdraw. This notice will allow that person or the research supervisor to discuss any health risks or special requirements linked to withdrawing.

If you do withdraw your consent during the research project, the study doctor and relevant study staff will not collect additional personal information from you, although personal information already collected will be retained to ensure that the results of the research project can be measured properly and to comply with law. You should be aware that data collected by the sponsor up to the time you withdraw will form part of the research project results. If you do not want them to do this, you must tell them before you join the research project.

#### **14 Could this research project be stopped unexpectedly?**

Sometimes research projects trialling medications need to stop prematurely because of unexpected side effects. However, this research project is unlikely to be stopped unexpectedly, because the medication administered has been studied and is routinely administered in type 2 diabetes and to a lesser degree in people with prediabetes. The medication administered here has been proven safe in type 2 diabetes patients.

#### **15 What happens when the research project ends?**

The medication administered in the present study will not be available after the research finishes through the study (but may be prescribed by your General Practitioner if required and decided). At study completion, you will be able to continue using the app and follow your study diet. We will offer you nutritional counselling on healthy lifestyle that will help you maintain a healthy body weight and decrease your risk of developing diabetes.

After you complete the study treatment (approximately 7 months from when you start), we will send you a detailed results letter, with measurements collected at baseline and after the 6 months' treatment, that will include your weight, BMI, blood pressure, fasting blood sugar, glycated haemoglobin (HbA1c), and the amount of fat in your body and liver.

After we finalise the study of all the participants and analyse the data (approximately in 2022), we will invite you to an information evening at the Garvan Institute of Medical Research (Darlinghurst, Sydney) to share with you the study findings. You will have opportunity to discuss the findings with the study Investigators.

## **Part 2 How is the research project being conducted?**

#### **16 What will happen to information about me?**

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. All the clinical information and the data that will be collected will be coded. It can be re-identified; however, your identification matching your code will be secured, accessible only by research staff. Data allowing re-identification of your data will be kept on a password protected computer and a locked filing cabinet at the Garvan Institute of Medical Research. Only staff involved in this study will have access to this data to maintain privacy/confidentiality.

All data will be stored for 15 years, after which it will be destroyed.

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Your information will only be used for the purpose of this research project and it will only be disclosed with your permission, except as required by law.

Information about you may be obtained from your health records held at this and other health services for the purpose of this research. By signing the consent form you agree to the study team accessing health records if they are relevant to your participation in this research project.

Your health records and any information obtained during the research project are subject to inspection (for the purpose of verifying the procedures and the data) by the relevant authorities and authorised representatives of the Sponsor, the Garvan Institute of Medical Research, the institution relevant to this Participant Information Sheet, St Vincent's Hospital, Sydney, or as required by law. By signing the Consent Form, you authorise release of, or access to, this confidential information to the relevant study personnel and regulatory authorities as noted above.

It is anticipated that the results of this research project will be published and presented in a variety of forums. In any publication and presentation, information will be provided in such a way that you cannot be identified. No individual data will be reported in any publication or presentation.

Data collected in the study may be made available to other researchers. The data will be coded and will not reveal your personal details. The data will be made available subject to a review of applications submitted by interested researchers performed by the study Investigators Dorit Samocha-Bonet and/or Jerry R Greenfield. Only researchers aiming to achieve the aims of the project will be considered. Upon approval, access to the de-identified data will be available for a period of 5 years after publishing the study findings.

Information about your participation in this research project may be recorded in your health records.

In accordance with relevant 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.

Any information obtained for the purpose of this research project 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.

## **17 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. If you are eligible for Medicare, you can receive any medical treatment required to treat the injury or complication, free of charge, as a public patient in any Australian public hospital.

In the event of loss or injury, the parties involved in this study have agreed to provide compensation if the participants' injury or complication is caused by the study procedures or by the negligence of any of the parties involved in the study. If you suffer any distress or psychological injury as a result of this study, you should contact the study team as soon as possible, who will assist you in arranging appropriate treatment and support.

## **18 Who is organising and funding the research?**

This research project is being conducted by Dr Samocha-Bonet and Professor Greenfield.

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Dr Samocha-Bonet, Prof Greenfield, Dr Hng, Dr Snaith, Dr Liu and Ms Godneva have no conflict of interest to disclose.

The study co-Investigators, Prof Eran Elinav and Prof Eran Segal of the Weizmann Institute of Science are paid consultants of the company DayTwo. DayTwo, established in Israel, provides personalised nutrition to individuals. The product is based on the technology arising from research conducted by Prof Elinav and Prof Segal at the Weizmann Institute of Science. The research findings were published in the journal *Cell* in 2015.

The Garvan Institute of Medical Research may benefit financially from this research project if, for example, the project assists Garvan Institute of Medical Research to obtain approval for a new treatment tool.

By taking part in this research project you agree that samples of your blood or stool (or data generated from analysis of these materials) may be provided to the Weizmann Institute of Science (Israel).

The Weizmann Institute of Science may directly or indirectly benefit financially from your samples or from knowledge acquired through analysis of your samples.

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 Garvan Institute of Medical Research.

In addition, if knowledge acquired through this research leads to discoveries that are of commercial value to the Garvan Institute of Medical Research or the Weizmann Institute of Science, the study doctors or their institutions, there will be no financial benefit to you or your family from these discoveries.

No member of the research team will receive a personal financial benefit from your involvement in this research project (other than their ordinary wages).

## **19 Who has reviewed the research project?**

All research in Australia involving humans is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this research project have been approved by the HREC of St. Vincent's Hospital Sydney (HREC reference number 17/080).

This project will be carried out according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect the interests of people who agree to participate in human research studies.

## 20 Further information and who to contact

The person you may need to contact will depend on the nature of your query.

If you want any further information concerning this project or if you have any medical problems which may be related to your involvement in the project (for example, any side effects), you can contact the principal study doctor Dr Dorit Samocha-Bonet on 02-9295 8309 or 0416-316 111.

### Clinical contact person

Name	Professor Jerry R Greenfield
Position	Associate Investigator
Telephone	SVH Switchboard 8382 1111, ask to page Prof Jerry Greenfield <b>24-hour medical contact</b>
Email	<a href="mailto:predict@garvan.org.au">predict@garvan.org.au</a>

### Research Nurse

Name	Ms Renee Richens
Position	Research Nurse
Telephone	02-92958215 (Working days: Tuesday, Wednesday, Thursday)
Email	<a href="mailto:predict@garvan.org.au">predict@garvan.org.au</a>

For matters relating to research at the site at which you are participating, the details of the local site complaints person are:

### Complaints contact person

Name	Research Office Manager
Position	Research Office Manager
Telephone	02 8382 4960
Email	SVHS.Research@svha.org.au

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about being a research participant in general, then you may contact:

### Reviewing HREC approving this research and HREC Research Officer details

Reviewing HREC name	St Vincent's Hospital HREC
HREC Research Officer	Research Officer
Telephone	02 8382 4960
Email	SVHS.Research@svha.org.au

### Research Governance Officer

Name	Ms Therese Yim
Position	Research Governance Officer
Telephone	02-9295 8173
Email	<a href="mailto:t.yim@garvan.org.au">t.yim@garvan.org.au</a>

**Consent Form - Adult providing own consent**

<b>Title</b>	<i>Personalised medicine in prediabetes – Towards preventing diabetes in individuals at risk</i>
<b>Short Title</b>	<i>Personalised medicine in prediabetes (PREDICT)</i>
<b>Protocol Number</b>	<i>17/080</i>
<b>Project Sponsor</b>	<i>Garvan Institute of Medical Research</i>
<b>Coordinating Principal Investigator/ Principal Investigator</b>	<i>Dr Dorit Samocha-Bonet</i>
<b>Associate Investigator(s)</b>	<i>Prof Segal, Prof Elinav, Prof Greenfield, Dr Hng, Dr Snaith, Dr Liu, Ms Godneva</i>
<b>Location</b>	<i>Garvan Institute of Medical Research</i>

**Declaration by Participant**

I have read the Participant Information Sheet or someone has read it to me in a language that I understand.

I understand the purposes, procedures and risks of the research described in the project.

I give permission for my doctors, other health professionals, hospitals or laboratories outside this hospital to release information to Garvan Institute of Medical Research concerning my disease and treatment for the purposes of this project. I understand that such information will remain confidential.

I have had an opportunity to ask questions and I am satisfied with the answers I have received.

I freely agree to participate in this research project as described and understand that I am free to withdraw at any time during the study without affecting my future health care.

I understand that I will be given a signed copy of this document to keep.

I consent to the storage and use of blood and tissue samples taken from me for use, as described in the relevant section of the Participant Information Sheet, for:

- This specific research project
- Other research that is closely related to this research project

I consent to sharing de-identified (coded) data collected during the study with other researchers aiming to achieve the study aims as listed, subject to approval by the study Principal Investigator Dorit Samocha-Bonet and/or Associate Investigator Jerry R Greenfield.

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Name of Participant (please print) _____	
Signature _____	Date _____

Name of Witness* to Participant's Signature (please print) _____	
Signature _____	Date _____

\* Witness is not to be the investigator, a member of the study team or their delegate. In the event that an interpreter is used, the interpreter may not act as a witness to the consent process. Witness must be 18 years or older.

### **Declaration by Study Doctor/Senior Researcher†**

I have given a verbal explanation of the research project, its procedures and risks and I believe that the participant has understood that explanation.

Name of Study Doctor/ Senior Researcher† (please print) _____	
Signature _____	Date _____

† A senior member of the research team must provide the explanation of, and information concerning, the research project.

Note: All parties signing the consent section must date their own signature.

**Form for Withdrawal of Participation - Adult providing own consent**

**Title** *Personalised medicine in prediabetes – Towards preventing diabetes in individuals at risk*

**Short Title** *Personalised medicine in prediabetes (PREDICT)*

**Protocol Number** *17/080*

**Project Sponsor** *Garvan Institute of Medical Research*

**Coordinating Principal Investigator/  
Principal Investigator** *Dr Dorit Samocha-Bonet*

**Associate Investigator(s)** *Prof Segal, Prof Elinav, Prof Greenfield, Dr Hng, Dr Snaith, Dr Liu, Ms Godneva*

**Location** *Garvan Institute of Medical Research*

**Declaration by Participant**

I wish to withdraw from participation in the above research project and understand that such withdrawal will not affect my routine treatment, my relationship with those treating me or my relationship with the Garvan Institute of Medical Research.

Name of Participant (please print) _____
Signature _____ Date _____

*In the event that the participant's decision to withdraw is communicated verbally, the Study Doctor/Senior Researcher will need to provide a description of the circumstances below.*

**Declaration by Study Doctor/Senior Researcher†**

I have given a verbal explanation of the implications of withdrawal from the research project and I believe that the participant has understood that explanation.

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Name of Study Doctor/ Senior Researcher <sup>†</sup> (please print)	
Signature _____	Date _____

<sup>†</sup> A senior member of the research team must provide the explanation of and information concerning withdrawal from the research project.

Note: All parties signing the consent section must date their own signature.