UNIVERSITY OF BIRMINGHAM

Participant Information Sheet

Title	**Does 5-HT$_4$ receptor agonism have an acute procognitive effect in young adults with psychotic-like experiences: a proof-of-concept study**
Short Title	SERENE
Ethical Approval Number	
Project Sponsor	University of Birmingham
Principal Investigator	Dr Angharad de Cates
Location	Institute for Mental Health, University of Birmingham

1 Introduction

You have been invited to take part in this study because you have been in contact with us as you may have had some unusual experiences recently. These are sometimes referred to as psychotic-like experiences (PLEs).

What do "psychotic-like experiences" (PLEs) mean?

5-10% of healthy adults experience mild, temporary, unusual experiences that do not affect their daily lives. Examples of such experiences might be hearing your name being called when alone in a house, or having an intensely strong feeling that someone in your neighbourhood may be trying to harm you, despite others telling you there is no reason to believe this.

People with PLEs usually have no problems with their day-to-day lives and are not worried by their experiences, and so don't need to see anyone from healthcare services about them. However, these experiences are similar, although much milder, to those with early psychosis. Therefore, recruiting people with recent PLEs gives us a window into whether medications may help people with early psychosis.

Why is this specific study being conducted?

We know that people with early psychosis have some problems with thinking, and these may relate to whether or not they develop full-blown psychosis. Therefore, a treatment that could help improve thinking may be beneficial in terms of improving their quality of life and reducing their risk of developing psychosis.

Our group has shown that healthy volunteers and participants with previous depression taking a type of medication called a 5-HT$_4$ receptor agonist (one example of this is called prucalopride) show some improvements in thinking, memory and the way we process emotions compared to people taking placebo. We would like to investigate if we are able to show similar changes with 5-HT$_4$ receptor agonists for people who also happen to have had PLEs recently. This will help us to consider if 5-HT$_4$ receptor agonists may be a possible treatment for people with early psychosis.

Deciding whether to take part in this research study

This Participant Information Sheet and Consent Form tells you about the research study, and explains the assessments involved. Knowing what is involved will help you decide if you want to take part in the study or not.

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 healthcare worker.

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

If you decide you want to take part in the research study, 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 study
• Consent to the tests and research that are described
• Consent to the use of your personal and health information as described.

When we say 'personal information', it also means 'personal data', which is the phrase used in some countries to refer to this type of information.

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

Once you have consented, a researcher will conduct a screening assessment to establish the level of symptoms you are experiencing. After this assessment, the study team will work out if you are eligible for the study or not. It is possible that you might consent to the study but then not be eligible to take part in it.

2 What is the purpose of this research?

The purpose of this research is to examine whether medications known as 5-HT_4 receptor agonists may have early effects on the pattern of thinking and the way the emotions are processed in people with PLEs when compared to placebo. The results from this study can then be used to design further studies as appropriate investigating whether specific 5-HT_4 receptor agonists, such as prucalopride, may be effective as a treatment for people with psychosis from the early stages.

To do this, we will recruit up to 36 participants and collect information about their unusual experiences and thinking processes (neurocognition) with computer tests and a brain scan.

3 What does participation in this research involve?

The schedule for the consent and study assessments are presented as a graphic on the next page (Table 1). The assessments are then described in items 'A to G' below. To be included in the study, we would like you to be involved in all aspects of the study.

Table 1. Overview of Study Components and Time-points

KEY

 Consent  Clinical Interview  Questionnaires  Study Medication

 Neurocognitive Tasks  Brain Scan  Blood Collection and Optional Microbiome Testing

Consent & Screening	Baseline (First assessment / starting point)	Follow-up (7-10 days after starting prucalopride or placebo)
		
1 hour	2-2.5 hours	2-2.5 hours
	 Daily, at home, for 7-10 days after Baseline	

A) Screening Assessments:

Information sent to participants before screening: If you express an interest in the study we will send you this leaflet and a set of 7 questions. These will allow you to check in your own time if you have had any of the unusual experiences we are considering for this study. If you think that you may meet inclusion criteria for the study, we will help you organise a full screening session. If online is tricky for you, we can organise a telephone call.

Full screening session: If you consent to the study, you will first be asked some general questions to determine whether you are eligible to participate. These questions relate to the presence of PLEs, other psychiatric symptoms, as well as any relevant background information such as whether anyone in your family has ever had a mental illness. We will also ask you questions about your schooling and employment, medical history, and drug and alcohol use.

It is possible that you will not be eligible for the study following the completion of the screening assessments. If that is the case, your participation in this study will end and you will not go on to complete any other assessments. This will not affect any current or future NHS or other treatment or your opportunity to take part in other studies being conducted at *the University of Birmingham.*

The full screening session can be completed remotely (via video call) or in person (at the *University of Birmingham*). It will take approximately 1 hour to complete.

B) Baseline and C) Follow-up Visit: 'Baseline' refers to the starting point from which the follow-up assessments are compared. Follow-up refers to the visit after participants have taken 7-10 days of either prucalopride or placebo. Each visit will take just around 2 and a half hours (90 to 150 minutes) at *the University of Birmingham.* Both visits have the same four components.

Clinical questionnaires: These will consist of questions about your day-to-day life and activities, your mood, thinking, emotions, and other experiences you may be having. This component will take 15 minutes.

Neurocognitive tasks: You will be asked to complete tasks that assess your 'thinking processes' - attention and memory, problem solving skills and the way you respond to different cues. These assessments will be delivered via computer. This component will take around 40 minutes to complete.

Brain imaging scan: As part of the study, you will be asked to have an MRI and MRS scan. These will take place as part of the same scanning session performed at *the Centre for Human Brain Health (CHBH), University of Birmingham.* MRI and MRS use electromagnetic fields (radio waves), but no radiation. The scanner will be used to take pictures of the anatomy of your brain and its functioning over time.

Before the MRI and MRS scans, you will be asked questions to make sure it is safe for you to have the scan. A Research Assistant will go through the procedure and safety requirements prior to scheduling the scan. You will not be able to participate in the brain scans, and therefore take part in the study, if you have any metal objects on or in your body, such as braces or metal pins or screws. We will ask you to lie on a table inside the MRI scanner and make sure you are in a comfortable position so you can keep still. The scanner is noisy and we can give you some earphones to reduce the noise. The researcher will talk to you during the scan and will let you know when you need to do an activity. They will also advise you when to relax and whether you should have your eyes open or closed. This component will take up to 40 minutes including preparation time.

Blood sample and physical observations: For this component, you will be asked to provide a blood sample. This does not need to be a fasting blood sample. The blood sample will be collected at *the University of Birmingham*. Approximately 20ml (1.25 tablespoons or 4 teaspoons) of your blood will be taken. At these time points, your vital signs including height, weight, blood pressure and temperature will also be assessed. At the baseline visit only, a urine sample will be taken to exclude pregnancy (if this is relevant to you). The urine sample will be analysed using a rapid point-of-care pregnancy test, which detects the presence of human chorionic gonadotropin (hCG), a hormone produced during pregnancy. This test provides results within a few minutes. Once the analysis is completed and the results are recorded, the urine sample will be disposed of immediately. This component will take approximately 10 minutes to complete.

Optional microbiome analysis: As prucalopride has actions on our digestive system, it may impact on the human microbiome (the levels of good and bad bacteria in our intestines). This part of the study is optional. If you are interested in taking part, we would give or send you a specific collection box and explain how to collect a small faecal sample. You would take a sample before and after taking the study medication. You can then either post these back to us immediately, or bring it to us at a study visit.

D) Taking study medication: At the baseline visit, you will receive your medication for the study. This will either be prucalopride or placebo. The decision of which medication you will be given is decided at random, and is not known to the research team, or to participants. To minimise any side effects, participants receiving prucalopride will receive 1mg for 2 days and then this will be increased to 2mg (2 tablets of 1mg) for at least 5-8 days. Participants receiving placebo will receive the same tablet (sugar pill) throughout the study.

To ensure that neither you or the researchers know which tablets you are taking, you will receive the same number of identical capsules regardless of which group you are in (prucalopride or placebo). You will receive text reminders to help you remember to take the medication at roughly the same time each day. A researcher will contact you on day 2 to check that you are feeling well, and will recommend if you should start taking two capsules per day. A researcher will also contact you on day 4, and on day 7 (if you are not attending in person for testing that day).

As you may feel tired after taking prucalopride, we would advise you not to drink alcohol or to carry out activities requiring full alertness for the first 24 hours after the first dose of either prucalopride / placebo. We would not expect tiredness to continue after the first 24 hours; if this does happen we would advise you to use your judgement in terms of drinking alcohol or activities requiring full alertness.

Other potential side effects include reduced appetite and gastrointestinal symptoms, such as increased frequency of bowel movements, tummy pain, nausea and vomiting.

Serious adverse reactions to prucalopride, such as bleeding from the back passage, fever, palpitations and tremor are extremely rare. However, if they occur, we will discuss with you to ensure that you receive appropriate medical support and your wellbeing is maintained. We will also report these using the Yellow Card Scheme. www.mhra.gov.uk/yellowcard.

You will have the 24-hour contact number of a member of the study team and be encouraged to get in contact if you have any concerns or queries.

E) Permission to contact a nominated person: We would like you to nominate at least one person who we may contact to obtain your latest contact details if we are unable to contact you. We would also use this contact in case of an emergency during the study. You can decide not to provide these details if you would prefer us not to contact a nominated person.

F) Health Provider / General Practitioner (GP): In order to participate in this study, we would ask that you provide the details of a GP or other health professional so that the study team can advise them of your participation in the study. You can decide not to provide these details if you would prefer us not to contact a health provider.

G) Reimbursements:

There are no costs associated with participating in the research project. As an acknowledgement of the time and effort involved in participating in the study, you will be reimbursed £100 for completing the study.

People who are found to not be eligible for the study at screening or who withdraw before the end of the study will receive £10 reimbursement.

Additionally, we will reimburse all transportation (taxis, buses, parking) up to £25.

4 Will I be eligible for the study?

A participant will be considered eligible for inclusion in this study if they:

[1] Are aged 18-40 years inclusive
[2] Are able to consent to the study
[3] Have recent psychotic-like experiences

[4] Are fluent in English

If any of the following apply you would not be able to take part in the study:
[1] Current antipsychotic medication
[2] Current antidepressant medication
[3] Documented history of intellectual disability
[4] Past or current clinically relevant central nervous system disorder
[5] Current significant medical disorder
[6] Current or past treated or untreated psychotic episode
[7] Pregnancy, breastfeeding, or actively trying to become pregnant. Participants will be asked to avoid becoming pregnant during the study.
[8] Individuals with contraindications for MRI, including those with non-MRI-safe metallic or electronic implants, incompatible medical devices, severe claustrophobia, or exceeding scanner size limits
[9] Recent (in last 3 months) involvement in a study that uses an experimental drug or device
[10] Recent (in last 6 months) involvement in a study using similar thinking or emotional tasks

Pregnancy and Breastfeeding: If you are pregnant or breastfeeding, we do not recommend that you participate in this project. Although there are no known risks of prucalopride in pregnancy, there is limited literature available and so its effects remain unclear. We would therefore advise participants not to discontinue any current use of contraception during the study. Similarly, there are no published studies on the use of prucalopride while breastfeeding, though the manufacturer has reported an unpublished study indicating a relatively low amount of prucalopride is passed into breast milk. For these reasons, prucalopride is not currently recommended during pregnancy or breastfeeding. If you become pregnant during the project, it is important that you let the research team know.

The course of action will depend on your stage in the experiment.

- **If you are undergoing the 7–10-day course of prucalopride or placebo,** you will be asked to stop taking the tablets immediately.
- **If you have already completed the 7–10-day course of prucalopride or placebo**, no further action regarding the medication will be necessary.

You will be advised to seek guidance from your healthcare provider or general practitioner. Unfortunately, participation in the study cannot continue if pregnancy occurs, and you will be withdrawn from the study.

5 What do I have to do?

Participation in this study means that you will be asked to participate in the assessments described above and follow instructions about the assessments provided by the research staff. You are also responsible for letting the research staff know if you no longer want to participate in the study, if you have been hospitalised during the study, if you become pregnant, or if your contact information changes.

Please also let the research staff know if you are currently participating in any other studies or join any other studies while you are taking part in this one.

Participation in this research will not result in restriction of your diet, lifestyle or treatment options.

6 Where will I need to go to complete the various components for this study?

The screening assessment can be done remotely in a private location of your choosing or at the University of Birmingham. The Research Assistant will discuss the options and help you to pick what is best for you based on your preference and the timing of the components. The baseline and follow-up assessments will take place at *the University of Birmingham*.

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

Participation in any research project is entirely 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 Sheet and Consent Form to sign and you will be given a copy to keep. Your decision whether 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 healthcare organisations or *the University of Birmingham*.

8 What are the possible benefits of taking part?

This research study may help us to understand whether 5-HT_4 receptor agonists (such as prucalopride and similar medications) may affect the pattern of thinking for those with psychotic-like experiences, and therefore may have the potential to help people with psychosis.

The results of this research project will be used for research purposes and will not provide you with any direct benefit nor are they intended to be used as part of clinical examinations. Results will not be used to help diagnose, treat or manage a particular condition. However, a clinician or appropriately trained individual will review all blood and structural MRI results. While we do not expect your MRI scan or blood samples to indicate any abnormalities that may be of clinical significance, there is a small chance that this could occur. If it does, your mental health provider or GP will be informed. They, or an appropriately qualified (medically trained) study team member, will contact you to let you know that a potential clinically relevant finding has been identified and ask you if you would like to know about the results. If you do, the clinical team and/or study team will discuss the results with you and will assist you to organise any follow up assessments that may be required.

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

The interview materials and the types of questions asked in this project have been used in projects in the past without causing undue distress. You can choose not to answer any questions that make you feel uncomfortable. If you feel uncomfortable or distressed during any of the procedures in this study, please tell the interviewer and you can request to stop at any time. The research team will be able to arrange appropriate support for you. Any support will be provided by staff who are not members of the research team. Please also see section 18, “Clinical/mental health support contact person”.

An MRI or MRS scan does not produce or expose you to any radiation. However, as the imaging machine produces a magnetic field (like a ‘giant magnet’) it is important that you do not take metal objects into the scanner. You must tell the researcher if you have metal implanted in your body, if you have been involved in an accident in which metal may have got into your body, or if you are pregnant. Prior to the scan at *the Centre for Human Brain Health (CHBH), University of Birmingham* you will be asked to fill out a medical history form which the radiographers will discuss with you, to make sure there is no reason for you not to have the scan.

MRI and MRS are considered as safe procedures when performed at an experienced centre with appropriate guidelines. The space inside the MRI scanner is small and can be quite noisy. Feelings of mild anxiety or claustrophobia are normal in the first few minutes. If these feelings persist or become distressing, testing will stop until you have recovered.

The risks of the blood sample collection are the same as those of ordinary blood tests. When your blood is drawn there may be some small discomfort, pain and/or bruising. Infection, swelling, excess bleeding, clotting or fainting are also possible, although less common. If this happens, it can be easily treated.

10 What if new information arises during this research project?

During the research project, new information about the risks and benefits of the project may become known to researchers. If this occurs, you will be told about this new information and the researchers will discuss whether this new information affects you.

11 What if I withdraw from this research project?

You are free to withdraw from this research project at any point during the study. If you decide to withdraw from the project, please notify a member of the research team. This can be done in person (for example, at an appointment), or via a phone call or text message. This notice will allow a research staff member or supervisor to further discuss with you any concerns linked to withdrawing from the research project. Your decision to withdraw from the research project will not affect any clinical care or your relationship with *the University of Birmingham*.

If you withdraw during the research project, the study team will not contact you to collect any additional personal information. This is sufficient to withdraw all of your clinical data from the study. However, your details will be retained as a withdrawn participant to comply with relevant laws. You may withdraw your data from the study any time up until analysis of the study data is complete.

12 Could this research project be stopped unexpectedly?

This research project may be stopped unexpectedly for a variety of reasons. These may include reasons such as:

- Decisions made by the investigators
- Loss of funding

However, the chance of either of these happening is very low.

13 What happens when the research project ends?

Once the study is complete and the results are known, a written plain language summary of the overall results of the study can be sent to you. To obtain this please record your email address at the end of this document. You may also contact one of the investigators listed in Section 19.

14 What will happen to information about me?

In this research study we will use information from you. We will only use information that we need for the research study. We will let very few people know your name or contact details, and only if they really need it for this study. Everyone involved in this study will keep your data safe and secure. We will also follow all privacy rules. At the end of the study, we will save some of the data for future research, but this data will be completely anonymised. We will make sure no-one can work out who you are from the reports we write.

By signing the consent form you consent to the relevant research staff collecting and using personal information about you for the research project in the way described. Your personal information will remain confidential, be securely stored and will only be used for the purposes stated in this document.

You can find out more about how we use your information by emailing the study's sponsor Data Protection Officer dataprotection@contacts.bham.ac.uk.

How is my privacy protected?

First, your identity and contact details (your name, date of birth, address, email address and phone number) are removed from the other records, and replaced with a unique code. The code is your 'participant number'.Your other data, health records and samples, including images (i.e. MRI), will then be identified only by your participant number. This is known as 'coded data'.

The research team at *the University of Birmingham* will have the link between your identity and contact details and your participant number. The principal investigator of this project, and local study team, will keep the identity and contact details that matches your participant number in a securely protected database.

The participant number can be used to single out and combine your data from different records, without re-identifying you.

Your participant number will allow researchers to see if you have been involved in more than one research study or database. For example, if you have participated in more than one study or database, this participant number will help connect information across studies. This participant number will also allow your coded data to be combined with data from other research studies to increase the likelihood of meaningful analysis. Only this participant number will be accessible to other investigators. This participant number may make it possible for a study team member to re-identify you if the same participant number was used for another study that you took part in. All data will be handled in compliance with UK confidentiality and data protection laws: The General Data Protection Regulation (GDPR), Data Protection Act, 2018.

We aim to keep all the information that we collect in the assessments strictly confidential. However, there are some exceptions to this: 1) if we are concerned about risk to yourself or to someone else, we may need to discuss this with a clinician; 2) if during the interview you provide information around current or past trauma and we believe someone else may be at risk. In these situations, information gathered by researchers is passed to a clinician and the appropriate clinical procedures are implemented. We will try to the best of our ability to discuss this with you first.

Test Samples / Biospecimens

By participating in this study, you consent to the collection, storage and use of blood test samples/biospecimens.

Blood samples will be collected by a trained staff member at two separate study time points (baseline and follow-up). Your blood will be transferred from the *University of Birmingham* School of Psychology Clinical Research Facilities (CRF) for immediate pre-processing. Analysis of biospecimens including

blood usually takes place toward the end of the study so your samples will be stored in a secure facility until an appropriate point in time. All samples obtained for the purpose of this research project will be processed by Professor Nicholas Barnes' team, University of Birmingham. The cellular part of your blood will be transferred and stored in a secure facility (the *University of Birmingham* Human Biomaterials Resource Centre (HBRC). The parts of your blood that do not include cells will be stored by Professor Nicholas Barnes' team. Your samples will be stored using your Participant ID only. Short term storage of any cellular material will not exceed one week before being processed to acellular material; if cellular material exceeds one week, this will be reported, and cellular material will be destroyed.

Data Storage

Electronic copies of personal information will be stored on secure servers of *the University of Birmingham* and will be password protected and accessed only by researchers involved in this project. As mentioned above, your data will be identified only by a unique code (your participant ID).

Data Sharing

At the end of the study, we will also share anonymised data to data repositories. This allows other researchers and clinicians to use the data to make the most out of the data, and to minimise duplication. You will not be able to be identified from this shared data, as it will not contain any identifying information.

Freedom of Information

In accordance with relevant privacy and confidentiality 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. *You can also request for your data and test samples to be deleted or destroyed provided they have not already been used in analyses. Data entered into the secure database cannot be permanently deleted (an audit trail is retained) but it will not be included in analyses if you let us know prior to analyses taking place.* You can contact the study team member named at the end of this document if you would like to access your information or if you would like to know more about your rights about your information.

Publication

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 in such a way that you cannot be identified, except with your permission.

A research study team member or a representative of *the University of Birmingham* may contact you asking for your thoughts on the research project or your lived experience of mental health. You are free to say no to their requests, or to provide comments anonymously (i.e., your name will not be used in any media releases). Your comments may be used to promote the research study's findings on social media, in a news article or other communications materials. If you do not wish to be contacted for communications purposes, please let a member of the study team know.

Future Research

All data collected from you will be kept for up to 10 years after the end of the study.

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 they will be assisted with arranging appropriate medical treatment.

In the unlikely event of anything-untoward happening, insurance has been taken out to cover this study. *The University of Birmingham* has in force a Public Liability Policy and/or Clinical Trial policy which provides cover for claims for "negligent harm" and the activities here are included within that coverage.

16 Who is organising and funding the research?

This research has been initiated by the study Principal Investigator, Dr Angharad de Cates.

This study has received funding from the NIHR Mental Health Translational Research Collaboration – Mental Health Mission.

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

You will not benefit financially from your involvement in this research project even if, for example, your data (or knowledge acquired from analysis of your data) prove to be of commercial value to *the University of Birmingham.*

In addition, if knowledge acquired through this research leads to discoveries that are of commercial value to the *the University of Birmingham,* there will be no financial benefit to you or your family from these discoveries.

17 Who has reviewed the research project?

All research in the *the University of Birmingham* that involves healthy volunteers is reviewed by the University of Birmingham ethics committee (REC). The ethical aspects of this research project have been reviewed and given favourable opinion by this committee.

18 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 for matters relating to research at the site at which you are participating including complaints, in the first instance please contact the Principal Investigator (PI) for this study or the Supervising Medical Investigators. These contacts are medical doctors and will also be able to support you if you have any medical concerns relating to your involvement in the project (for example, side effects).

Principal Investigator

Name	Dr Angharad de Cates
Position	Principal Investigator and Clinical Lecturer
Email	a.n.decates@bham.ac.uk

Supervising Medical Investigator

Name	Professor Matthew Broome / Professor Rachel Upthegrove
Position	Professor
Email	m.r.broome@bham.ac.uk / r.upthegrove@bham.ac.uk

In case of emergency, please call *999*. People of all ages in England are able to access 24/7 local mental health crisis services directly by calling 111 and selecting the mental health option.
Those seeking advice and information for people experiencing mental health difficulties, and not a mental health crisis, are encouraged to call the Birmingham Mind Mental Health Helpline (0121 262 3555; Freephone 0800 915 9292) between 9am and 11pm.

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 the researchers (contact details above) or the University of Birmingham Research Governance team by email: researchgovernance@contacts.bham.ac.uk, who will do their best to answer your questions. .

Reviewing REC approving this research and REC Executive Officer details

Reviewing REC name	*UoB STEM ethics committee*
REC Executive Officer	*Susan Cottam*
Telephone	
Email	*ADM-researchgov@adf.bham.ac.uk*

Data Protection Officer details

Data Protection Officer name	*Nicola Cárdenas Blanco, Director of Legal Services*
Telephone	*legalservices@contacts.bham.ac.uk*
Email	*+44(0)121 414 3916.*

Glossary

Term	Definition
5-HT$_4$ Receptor (Fourth Serotonin Receptor)	A type of “pick-up point” for the body chemical serotonin.

Agonist	A chemical substance that binds to a receptor inside a cell and causes the same action as the substance that normally binds to the receptor.
MRI (Magnetic Resonance Imaging)	A type of scan which uses magnetic fields and radio waves to produce an image of the brain/body.
MRS (Magnetic Resonance Spectroscopy)	A type of MRI scan that is used to detect chemical changes in the brain.
Neurocognition	Thinking and brain processes.
Placebo	An inactive substance or intervention that is administered to the participant to compare its effects to that of the active treatment.
Prucalopride	A highly selective, safe 5-HT4R agonist licensed for constipation.
Psychotic-like experiences	Mild, temporary, unusual experiences which do not affect our daily lives or functioning and are not distressing. An example of this is hearing your name when alone in the house.
Unusual experiences	Another name for psychotic-like experiences.