

**Informed Consent Form**

**Official Title:** Neurocomputational Mechanisms of Mood Improvement

**NCT Number:** NCT04276259

**Document Date:** 6/17/2025



**UPMC** | University of Pittsburgh  
Medical Center

## **CONSENT TO BE PART OF A RESEARCH STUDY**

### **TITLE:**

Neurocomputational Mechanisms of Antidepressant Responses  
RAISE Study

### **PRINCIPAL INVESTIGATOR:**

Marta Peciña Iturbe, M.D., Ph.D.,  
Associate Professor of Psychiatry,  
University of Pittsburgh  
412-246-5831

### **CO-INVESTIGATORS:**

Alex Dombrowski, MD.  
Associate Professor of Psychiatry

Rebecca Price, Ph.D.  
Associate Professor of Psychiatry and Psychology

Fabio Ferrarelli, MD.  
Assistant Professor of Psychiatry

Helmet Karim, Ph.D.  
Research Assistant Professor of Psychiatry

### **SOURCE OF SUPPORT:**

National Institute of Mental Health



**UPMC** | University of Pittsburgh  
Medical Center

## **CONSENT TO BE PART OF A RESEARCH STUDY**

### **TITLE:**

Neurocomputational Mechanisms of Antidepressant Responses  
RAISE Study

### **PRINCIPAL INVESTIGATOR:**

Marta Peciña Iturbe, M.D., Ph.D.,  
Associate Professor of Psychiatry,  
University of Pittsburgh  
412-246-5831

### **CO-INVESTIGATORS:**

Alex Dombrowski, MD.  
Associate Professor of Psychiatry

Rebecca Price, Ph.D.  
Associate Professor of Psychiatry and Psychology

Fabio Ferrarelli, MD.  
Assistant Professor of Psychiatry

Helmet Karim, Ph.D.  
Research Assistant Professor of Psychiatry

### **SOURCE OF SUPPORT:**

National Institute of Mental Health

## OVERVIEW: KEY INFORMATION

This form gives you important information about the study. It describes the purpose of the study, and the risks and possible benefits of participating in the study. *Taking part in this study is completely **voluntary**.* You do not have to participate if you don't want to, and you may leave the study at any time without penalty. Signing this form gives the researchers your permission to obtain, use, and share information about you for this study, and it is required in order for you to take part in the study.

**Study Purpose:** The present study is designed to understand the brain mechanisms involved in recovery from depression.

**Study Duration:** Study participation will include 4 visits (1 screening visit and 3 experimental visits) and will be completed in approximately 4 weeks. Each visit will occur about 5-10 days apart. The in-person screening visit and the first experimental study visit may take place on the same date. In some instances, additional visits might be required.

### Study Procedures:

#### ○ Screening Procedures:

- The in-person screening visit will take approximately 3 hours and will involve:
  - The review and signing of this consent form.
  - A clinical interview to confirm eligibility.
  - The completion of personality & lifestyle questionnaires

#### ○ Experimental Procedures:

- Experimental Visits 1, 2, 3 will take about 4 hours and will involve:
  - A drug & pregnancy test
  - The placement of an intravenous line (IV)
  - The completion of brief pre-scan questionnaires
  - Taking one-dose of naltrexone, buprenorphine or placebo
  - A Transcranial Magnetic Stimulation session
  - The fMRI scanning session
  - The completion of brief post-scan questionnaires
  - You will remain in observation for additional ~30 minutes for safety.

**Possible Risks:** *IV placement and blood draw* risks include pain or bruising at the site of puncture, fainting, infection, nerve damage and hematoma. The most common side effect of Buprenorphine is sedation. Other less frequent adverse reactions occurring in 5-10% of the patients are nausea, dizziness, and vertigo. Side effects associated with Naltrexone include nausea, and less frequently headaches, dizziness, fatigue, insomnia, anxiety or depressive mood, and sleepiness. *In the unlikely event of an allergic reaction to buprenorphine or naltrexone, the CTRC nurses are thoroughly trained in emergency intervention and first aid.* The risks of Transcranial Magnetic Stimulation (TMS) involve mainly minimal-mild side effects such as discomfort in the vicinity of the coil and headaches. Finally, risks of Magnetic Resonance Imaging (MRI) include sensitivity to the loudness of the machine, claustrophobia, lightheadedness, discomfort from lying still, incidental finding of brain abnormality, and peripheral nerve stimulation.

**Possible Benefits:** You may not receive any personal benefits from being in this study and you will not be notified of any individual research results. However, your participation will help improve our understanding recovery from depression, which could lead to better treatments.

**Alternative Treatment Options:** You will need to understand that this will not cure your depression and that you might continue to need conventional antidepressant treatments. You should discuss with your primary care physician the different treatment options for depression.

## 1. INFORMATION ABOUT THIS FORM

You may be eligible to take part in a research study. This form gives you important information about the study. It describes the purpose of the study, and the risks and possible benefits of participating in the study.

Please take time to review this information carefully. After you have finished, you should talk to the researchers about the study and ask them any questions you have. You may also wish to talk to others (for example, your friends, family, or other doctors) about your participation in this study. If you decide to take part in the study, you will be asked to sign this form. Before you sign this form, be sure you understand what the study is about, including the risks and possible benefits to you.

## 2. PURPOSE OF THIS STUDY

### 2.1 Study purpose:

The present study is designed to understand the brain mechanisms involved in recovery from depression and their modulation.

To do this, we will investigate the effects of a fast-acting antidepressant on your brain and nervous system, called “neural” responses, compared to the effects of a conventional antidepressant. We will investigate these effects pharmacologically using an opioid blocker, naltrexone, an opioid enabler, buprenorphine, and compared then to a control condition (a placebo pill). In addition, these effects will be examined using transcranial magnetic stimulation (TMS) of the prefrontal cortex, a brain area implicated in the formation of depressive symptoms.

Ultimately, we hope to better understand the mechanisms involved in individual responses to treatments for depression; however, you will need to understand that this will not cure your depression, and that you might continue to need conventional antidepressant treatments in the future.

Please, be aware that the investigators have purposely misdescribed certain aspects of the study. This consent form describes the major risks and benefits of the study. This is necessary to obtain valid results. The researchers will explain any misdescribed aspects of the study to you at the end of your participation.

## 3. INFORMATION ABOUT STUDY PARTICIPANTS (SUBJECTS)

Taking part in this study is completely **voluntary**. You do not have to participate if you don't want to. You may also leave the study at any time. If you leave the study before it is finished, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled.

### 3.1 Who can take part in this study?

You may be eligible to participate in this study if:

- You are between the ages of 18 and 55.
- You are fluent in English and able to understand the nature of the study to sign the written informed consent.
- You are currently experiencing symptoms of depression.
- You are currently not receiving any medication, psychotherapy, ECT or TMS for your depression.

### 3.2 How many people (subjects) are expected to take part in this study?

120 participants with Major Depressive Disorder.

## 4. INFORMATION ABOUT STUDY PARTICIPATION

### 4. What will happen to me in this study?

By participating in this study, you will complete 4 visits.

- Visit 1: complete a clinical interview and several questionnaires.
- Visits 2,3, and 4: be assigned to receive:
  - one-single dose of the opioid blocker, naltrexone, or
  - one single dose of the opioid enabler, buprenorphine
  - or a placebo
- at each visit, receive three sessions of:
  - Transcranial Magnetic Stimulation (TMS)
  - then functional magnetic resonance image (fMRI)

#### 4.1. Visit 1:

You will first be interviewed over the phone screening to see if you might qualify for the study.

Then you will be invited to an in-person screening visit where you will:

- be asked to sign this consent form after we review it with you,
- participate in a psychiatric interview (1 ½ hours),
- be asked to fill out questionnaires about depressive symptoms.

During the initial visit, we will also ensure that you are eligible to participate in the study. This will help to minimize any risk to you during your participation in the study.

In addition, you will be asked questions about your psychiatric history and current mood symptoms. You will be asked to fill out several questionnaires about depressive symptoms, stressful life events and lifestyle, including smoking and alcohol habits (~ 2 hours). You may be asked to disclose information about any firearms you may own. While ownership of a firearm is not reason for exclusion from the study, if you own a firearm, we will ask you to sign a firearm safety contract to reduce suicide risk during your study participation.

The results of this clinical evaluation will not be part of your medical records or be shared with any unauthorized persons outside of the research team. They will be used to determine your eligibility for the study and kept as part of a confidential research record. The study will pay for all test procedures.

The clinical interview will determine initial eligibility. However, final eligibility will be determined after the completion of a drug and pregnancy test at Visit 2.

You will then be randomly assigned (like flipping a coin) to receive, at each visit, one-single dose of 50 mg of naltrexone (an opioid blocker), one-single dose of 0.3 mg/1ml of buprenorphine (opioid enabler) or placebo.

After randomization, you will complete three opioid/TMS/fMRI visits (each about 150 min) on three consecutive days (~5-10 days apart). At each visit, you will be asked to complete a brief (~6-8 minutes) computerized task that asks you to choose a name that best fits the person's face.

To avoid the delayed onset of antidepressant treatment, study participation will be completed in about 4 weeks, and you will be instructed to arrange post-participation follow-up care with a psychiatrist at baseline. You will be asked to provide the contact information for a family member or friend who we may contact during and after participation, if we are unable to reach

you. We will check that you have followed up with your PCP or psychiatrist with at least 2 phone calls or registered letters.

#### **4.2. Experimental Procedures:**

After the clinical interview, you will be invited to undergo the following experimental procedures:

- **Opioid drug administration:** Both, naltrexone and buprenorphine are FDA-approved medications commonly used in the treatment of addictions and relief of pain, respectively. However, the dosage used for this study is not meant to have clinical benefits.
- **TMS session:** You will be asked to undergo three TMS sessions on three different dates. TMS is an FDA-approved treatment for depression. TMS uses a wand to stimulate your brain by passing a brief magnetic pulse near the scalp. The magnetic pulse passes through the skull and briefly affects the brain underneath the coil. However, the dosage used for this study is not meant to be used for treating your depression. These sessions will take place at The Center for Interventional Psychiatry at UPMC Western Psychiatric Institute and Clinic.
- **fMRI session:** You will be asked to undergo three fMRI scanning sessions across three days while you are given the fast-acting and conventional antidepressant through the IV line (a small catheter placed into your vein.). fMRI is a research method which makes it possible to observe changes in brain activity in response to various stimuli. These scans will take place at the MR center in UPMC Presbyterian Hospital. You will be asked to lie still during the entire scan. Immediately before the scanner, you will be asked to rate your expectancies of mood improvement. In addition, you will be asked to rate the effectiveness of the intervention after each scanning session.
- **Phlebotomy (blood draw):** You will be asked to provide one blood sample (before the scanning sessions), approximately 4 teaspoons, for the study of blood markers of antidepressant response.

#### **How much of my time will be needed to take part in this study?**

The in-person screening visit will take approximately 3 hours and will involve a clinical interview (about 1 ½ hours) and the completion of several questionnaires (about 1 ½ hours).

Each of the three study visits will take about 4h and will involve:

- A drug & pregnancy test.
- The IV placement and blood draw;
- The pre-scan expectancy questionnaires;
- The TMS session;
- The brief computerized task;
- The opioid drug administration;
- The fMRI scanning session;
- The post-scan effectiveness and credibility questionnaires.

The in-person screening visit and the first experimental study visit may take place on the same date.

#### **4.3 When will my participation in the study be over?**

Your study participation will be concluded at the end of third TMS and fMRI session.

## 5. INFORMATION ABOUT RISKS AND BENEFITS

### 5.1 What risks will I face by taking part in the study? What will the researchers do to protect me against these risks?

The potential risks associated with participation in this study are considered mild. The known or expected risks are:

- **Risk of Screening and Interviewing Procedures:** The questions about mood symptoms and feelings could make you feel embarrassed or to focus on feelings or events that make you distressed. Longer questionnaire completion time may be annoying or tiresome or cause boredom.
- **Risk of Drug and Pregnancy Test:** A positive drug or pregnancy test could make you feel embarrassed, worried or distress.
- **Risk of IV Placement and Antidepressant Infusion:** Risk associated with placing an IV include pain or bruising at the site of puncture, fainting, nerve damage and bruising. Unlikely complications of gaining I.V. may include an air embolism in the vein, saline administration outside of the vein, and rarely, unintentional injection in the artery.
- **Risk of Blood Draw:** Your blood will be analyzed for protein plasma levels and for genetic testing. There is a small chance of pain, infection, clotting, or bruising in the area from which the blood was taken. Fainting is also a noted side effect. If persisting pain or redness in the area is noted, this may require medical or surgical treatment.
- **Risk of Opioid Protocol:** Buprenorphine and naltrexone are FDA-approved treatments for the treatment of pain (buprenorphine), and opioid overdose and alcohol dependence (naltrexone).
  - **Buprenorphine**, Buprenex®, (0.3 mg/ml) is an injectable partial opioid enabler. The most common side effect of buprenorphine is sedation. Other less frequent adverse reactions occurring in 5-10% of the patients are nausea, dizziness, and vertigo.
  - **Naltrexone**, ReVia®, is a pure opioid blocker. Side effects associated with naltrexone include nausea, headache, depression, dizziness, fatigue, insomnia, anxiety or depressive mood, and sleepiness. While unlikely, in the event of an allergic reaction to buprenorphine or naltrexone (rash; hives; itching; breathing difficulties; chest tightness; or swelling of the mouth, face, lips, or tongue), the CTRC nurses are thoroughly trained in emergency intervention and first aid.

In the event of a shortage of either buprenorphine or naltrexone at any point during the study, this information will be provided to you by the investigators, and you will only be assigned to the drug that is available or the placebo. You will not be exposed to the risks associated with the unavailable drug.

- **Risk of anti-nausea medication:** In order to prevent opioid-induced nausea, participants will receive a single dose of oral Zofran 4mg (ondansetron) before the opioid protocol. The most common adverse reactions associated with Zofran in studies that used it for the prevention of postoperative nausea and vomiting are headache and hypoxia. Less frequent adverse reactions are pyrexia, dizziness, gynecological disorders, anxiety/agitation, urinary retention, and pruritus. Rarely and predominantly with

intravenous ondansetron, transient ECG changes including QT interval prolongation have been reported.

- **Risk of TMS Protocols:** The risks of Transcranial Magnetic Stimulation (TMS) involve almost exclusively minimal to mild side effects (e.g., discomfort in the area of the coil and headaches). In this study, TMS will be delivered in compliance with the safety guidelines recommended by the International Workshop on the safety of repetitive Transcranial Magnetic Stimulation (rTMS). Our protocols will apply far fewer total pulses (600 across three days) than published clinical trials of TMS for depression (800-3000 pulses/day, 5 days per week for 4-8 weeks). No serious side effects, such as seizures have been observed in hundreds of studies performed in the past by the group according to these guidelines.

- **Risk of Magnetic Resonance Imaging (MRI):**

There are no known long-term effects of MRI procedures on the body. The main MRI-related risks include:

- a) sensitivity to the loudness or hearing damage of the MRI machine;
  - b) claustrophobia;
  - c) transient lightheadedness when sitting up after lying in the MRI machine;
  - d) discomfort from lying still for 60 minutes;
  - e) risk of incidental finding of brain abnormality; and
  - f) peripheral nerve stimulation: a light touching sensation of the skin surface lasting only for a few seconds but not harmful.
- While risks to pregnant women have not been conclusively documented, reports of potential risk to unborn fetuses have prompted the exclusion of these individuals from research.

- **Risk of Breach of Confidentiality:** As with all research, there is a chance that confidentiality could be compromised. It is possible that information regarding your mental and physical health will be discovered by individuals outside of study personnel, despite careful steps to protect confidentiality. Although every reasonable effort has been taken, confidentiality during Internet communication activities cannot be guaranteed and it is possible that additional information beyond that collected for research purposes may be captured and used by others not associated with this study. Maintaining strict security on information provided by participants will minimize risks to confidentiality. With your permission, the study team may also send reminders and answer general questions about the study through text message. Text messages are not encrypted or secure during their transmission and could be intercepted by unauthorized third parties.

- **Risk of genetic analysis:** there may be genetic analysis of your blood sample now or in the future, including whole genome sequencing (WGS). WGS means identifying your entire unique genetic code from your biological parents. There may also analyses of parts of genes, called DNA or RNA. The risk to doing this genetic analysis is that someone who is not authorized could view your information. This could affect your ability to get a job or health insurance, or other personal circumstances such biological parent determination.

We protect your genetic information in the same way as described on page 8 and 11, keeping it confidential in a locked office, storing with a study ID instead of your name among other things.

In addition, there is a Federal law called the Genetic Information Nondiscrimination Act (GINA), that generally makes it illegal for health insurance companies and group health plans to use genetic information in making decisions regarding your eligibility or premiums. GINA also makes it illegal for employers with 15 or more employees to use your genetic information when making decisions regarding hiring, promoting, firing, or setting the terms of employment. This Federal law does not protect you against genetic discrimination by companies that sell life, disability, or long-term care insurance.

The researchers will try to minimize these risks by:

- **Procedures for minimizing risk for Screening and Interviewing Procedures:** You should know that our clinical raters have been extensively trained to administer evaluations and assessments in a way that will minimize discomfort.
- **Procedures for minimizing risk of IV Placement:** Only individuals skilled in the process of IV placement will be permitted to place the intravenous line. Pressure will be applied to the site to reduce the risk of bruising. Sterile technique will be used to reduce the risk of infection.
- **Procedures for minimizing risk of Blood Draw:** Only individuals skilled in the process of blood drawing will be used to take your blood sample. Pressure will be applied to the site to reduce the risk of bruising. Sterile technique will be used to reduce the risk of infection.
- **Procedures for minimizing risk for the Opioid Protocol:** A clinical nurse will administer the pill and the IM injections. Monitoring procedures will be used throughout the administration and up to 2-hours post-administration to evaluate potential side effects. To monitor for any adverse effects, all subjects will complete pre and post administration interviews to assess for changes in nausea, fatigue, vomiting or other effects of opioids. Immediate medical intervention will be available. If side effects persist, clinical monitoring will be extended as needed.
- **Procedures for minimizing risk of TMS:** Prior to starting the session, we will discuss your tolerance of potential discomfort with you and identify personalized strategies that may be helpful based on your past experiences (e.g., paced breathing, distraction, positive imagery, etc.). If needed, the licensed study physicians can prescribe a topical anesthetic for you (lidocaine). This has been shown to reduce discomfort in TMS sessions in prior cases. We will ask you to complete pre and post TMS interviews immediately before and after the experiment to look at changes in mood, headache, muscle tension or other effects of TMS. We expect that the potential side effects of TMS will subside within 1 hour. The delayed onset headache can usually be resolved with a single dose of common painkillers (i.e., acetaminophen, ibuprofen).
- **Procedures for minimizing risk for MRI:** Prior to inclusion in the study, the presence of potential MRI risks, such as pacemakers, surgical clips or metallic devices, will be excluded by medical and surgical history using a standard review form. On the day of the scheduled scan, the consent form and contraindications for an MRI scan will be reviewed with the subject in a private waiting area. Subjects and all investigators will be screened for metallic objects prior to entering the scan room to minimize the risk of damage. You will be reminded about what to expect during the experiment and taught to

perform the experimental tasks on a computer.

Upon entering the scanner, we will provide you with foam earplugs or other hearing protection, as is routine for clinical patients, to prevent the risk of hearing damage due to scanner noise. Custom pads and pillows will minimize minor risks of discomfort due to lying still for up to an hour and will make the subject as comfortable as possible. You will be allowed to communicate with the machine operator via an intercom and may trigger an audible alarm at any time to terminate the scan.

- **Procedures for minimizing breach of confidentiality:** Information collected about you during the study will be kept in a locked cabinet in a limited-access office. The research record will not show your name and we shall keep your record confidential, to the extent provided by federal, state and local law. We will not allow anyone to see your record, other than people who have a right to see it. You will not be identified in any reports on this study. To increase our efforts in protecting confidentiality, text messages will be limited to reminders and answering general questions about the study.

As with any experimental procedure, there may be adverse events or side effects that are currently unknown and certain of these unknown risks could be permanent, severe or life-threatening.

## **5.2 What happens if I get hurt, become sick, or have other problems as a result of this research?**

The study will pay for research-related items or services that are provided only because you are in the study. You or your health plan will pay for all the things you would have paid for even if you were not in the study, like health care given during the study as part of your regular care, and deductibles and copays for monitoring of side effects or other problems.

If you believe that the research procedures have resulted in an injury to you, immediately contact the Principal Investigator, Dr. Pecina, who is listed on the first page of this form. Emergency medical treatment for injuries solely and directly related to your participation in this research study will be provided to you by the hospitals of UPMC. Your insurance provider may be billed for the costs of this emergency treatment, but none of those costs will be charged directly to you. If your research-related injury requires medical care beyond this emergency treatment, you will be responsible for the costs of this follow-up care. At this time, there is no plan for any additional financial compensation. You do not, however, waive any legal rights by signing this form.

Standard MRI scans at the University of Pittsburgh Magnetic Resonance Research Center are not read by neuroradiologists. However, in the event that the MRI technicians or the study team discover an abnormal, incidental finding on the MRI scan, the finding will be brought to the immediate attention of the Principal Investigator (PI), Dr. Pecina. The PI will review the finding and seek consultation as appropriate, such as from a neuroradiologist. The PI will determine how to inform you about the finding immediately. You will be informed by the PI, personally, either through a phone call or a face-to-face meeting. In the event of an incidental finding, you should follow up with your personal physician and the investigators can make arrangements to provide a summary of the finding to your personal physician, with your permission. In the case of this abnormal finding, we will recommend that you obtain a follow-up, clinical MRI to evaluate this finding.

**5.3 If I take part in this study, can I also participate in other studies?**

Being in more than one research study at the same time, or even at different times, may increase the risks to you. It may also affect the results of the studies. You should not take part in more than one study without approval from the researchers involved in each study.

**5.4 How could I benefit if I take part in this study? How could others benefit?**

You may not receive any personal benefits from being in this study and you will not be notified of any individual research results. However, your participation will help improve our understanding recovery from depression, which could lead to better treatments for depression.

**5.5 Will the researchers tell me if they learn of new information that could change my willingness to stay in this study?**

Yes, the researchers will tell you if they learn of important new information that may change your willingness to stay in this study. If new information is provided to you after you have joined the study, it is possible that you may be asked to sign a new consent form that includes the new information.

**6. OTHER OPTIONS****6.1 If I decide not to take part in this study, what other options do I have?**

Participation in this study is voluntary, and there is no penalty for not participating. You may have other research options for treatment. You may have other options for clinical treatment of your depression, which you should discuss with your primary care physician.

**7. ENDING THE STUDY****7.1 If I want to stop participating in the study, what should I do?**

You are free to leave the study at any time. If you leave the study before it is finished, there will be no penalty to you. You will not lose any benefits to which you may otherwise be entitled. If you choose to tell the researchers why you are leaving the study, your reasons for leaving may be kept as part of the study record. If you decide to leave the study before it is finished, please tell one of the persons listed in Section 11 "Contact Information" (below).

**7.2 Could there be any harm to me if I decide to leave the study before it is finished?**

Participation in this study is voluntary and you may decide to leave the study at any time for any reason.

**7.3 Could the researchers take me out of the study even if I want to continue to participate?**

Yes. There are many reasons why the researchers may need to end your participation in the study. Some examples are:

- The researcher believes that it is not in your best interest to stay in the study.
- You become ineligible to participate.
- Your condition changes and you need treatment that is not allowed while you are taking part in the study.
- You do not follow instructions from the researchers.
- The study is suspended or canceled.

**8. FINANCIAL INFORMATION****8.1 Who will pay for the costs of the study? Will I or my health plan be billed for any costs of the study?**

The study will pay for research-related items or services that are provided only because you are in the study. If you are not sure what these are, see Section 4 above or ask the researchers for

a list. If you get a bill you think is wrong, call the researchers' number listed in section 11.1. You or your health plan will pay for all the things you would have paid for even if you were not in the study, like:

- Healthcare given during the study as part of your regular care
- Items or services needed to give you study drugs or devices
- Monitoring for side effects or other problems
- Deductibles or co-pays for these items or services.

If you do not have a health plan, or if you think your health plan may not cover these costs during the study, please talk to the researchers listed in Section 11 below or call your health plan's medical reviewer.

By signing this form, you do not give up your right to seek payment if you are harmed as a result of being in this study.

## **8.2 Will I be paid or given anything for taking part in this study?**

Yes, you will be paid as follows:

- \$25 for completion of the clinical interview and self-reported questionnaires of the first visit.
- \$50 for each opioid drug administration and TMS session.
- \$100 for each I.V. placement and fMRI session.

You may earn up to \$475 by the end of the study and should expect to receive payments within approximately two to three weeks after each intervention. If the fMRI or TMS sessions are not completed, you will receive the prorated amount for parts of the research completed.

Compensation will be made through Pitt's "Vincent Pay" system. Since you are being compensated for your participation in this study, your name, address, and social security number will be released to the Accounting Office. If the total reimbursement for your participation in research is greater than \$600 in a year, this will be reported to the Internal Revenue Service (IRS) as income.

Participants who do not provide a social security number may still participate in the research, but the IRS requires that 24% of the payment be sent by the institution to the IRS for 'backup withholding;' thus you would only receive 76% of the expected payment.

## **8.3 Who could profit or financially benefit from the study results?**

No person or organization has a financial interest in the outcome of this study.

# **9. CONFIDENTIALITY OF SUBJECT RECORDS AND AUTHORIZATION TO RELEASE YOUR PROTECTED HEALTH INFORMATION**

The information below describes how your privacy and the confidentiality of your research records will be protected in this study.

## **9.1 How will the researchers protect my privacy?**

Every effort will be taken to protect your privacy. We will put the information collected about you during the study into a research record that is kept in a locked cabinet in a limited-access office and a limited-access password-protected electronic database. This research record will not show your name, but we will use an ID code to avoid the information being linked to you. The study team will retain a confidential, limited access, password-protected document linking your ID code with your personal information. Only the research study team will have access to this document. We shall keep your research record confidential, to the extent provided by federal, state, and local law. Research records will be kept in a separate research file that does not

include names, registration numbers, or other information that is likely to allow someone other than the researchers to link the information to you. We will not allow anyone to see your record, other than people who have a right to see it. You will not be identified in any reports on this study.

## **9.2 What information about me could be seen by the researchers or by other people? Why? Who might see it?**

Signing this form gives the researchers your permission to obtain, use, and share information about you for this study, and is required in order for you to take part in the study. Your de-identified research information may be shared with investigators conducting other research.

The study team may obtain information about you from any hospital, doctor, and other health care provider involved in your care, including:

- Hospital/doctor's office records, including test results (MRI, urine tests, etc.)
- Mental health care records (except psychotherapy notes not kept with your medical records)
- Demographic and billing information
- Other information

There are many reasons why information about you may be used or seen by the researchers or others during or after this study. Examples include:

- The researchers may need the information to make sure you can take part in the study.
- The researchers may need the information to check your test results or look for side effects.

We may inform your named emergency contact, PCP, psychiatrist, or other provider if you or your survey answers suggest you are contemplating self-harm or suicide.

In addition to the investigators listed on the first page of this consent form and the research staff, the following individuals will or may have access to identifiable information related to your participation in this research study:

- Study sponsors or funders, safety monitors or committees, or other regulatory agencies such as authorized representatives of the National Institutes of Mental Health, U.S. Food and Drug Administration (FDA), and the University of Pittsburgh Research Office of Research Protections, may need to review de-identified and identifiable medical record information to:
  - Make sure the study is done safely and properly
  - Learn more about side effects
  - Analyze the results of the study
  - Monitor the accuracy of the research data
- Authorized representatives of the UPMC hospitals or other affiliated health care providers may have access to your identifiable information (which may include your identifiable medical record information) for the purpose of:
  - fulfilling orders, made by the investigators, for hospital and health care services (such as laboratory tests, diagnostic procedures) associated with research study participation;
  - addressing correct payment for tests and procedures ordered by the investigators;
  - for internal hospital operations (i.e. quality assurance).

- The researchers may need to use the information to create a databank of information about your condition or its treatment.
- Information about your study participation may be included in your regular UPMC medical record.
- In unusual cases, Federal or State law may require the study team to give identifiable research information to government agencies. For example, to prevent harm to you or others, or for public health reasons. If the investigators learn that you or someone with whom you are involved is in serious danger or potential harm, they will need to inform the appropriate agencies, as required by Pennsylvania law.

The results of this study could be published in an article but would not include any information that would let others know who you are.

A description of this clinical trial will be available on <http://www.ClinicalTrials.gov>, as required by U.S. Law. This website will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.

We will also use websites such as REDCap and GitHub to help us analyze the data we receive in this study. The data we use for analysis contains no identifiable information.

### **9.3 What happens to information about me after the study is over or if I cancel my permission?**

As a rule, the researchers will not continue to use or disclose information about you but will keep it secure until it is destroyed. Sometimes, it may be necessary to continue to be used or disclosed information about you, even after you have canceled your permission, or the study is over. Examples of reasons for this include:

- To avoid losing study results that have already included your information
- To provide limited information for research, education, or other activities (This information would not include your name, social security number, or anything else that could let others know who you are.)
- To help University and government officials make sure that the study was conducted properly

As long as your information is kept within UPMC, it is protected by UPMC's privacy policies. For more information about these policies, ask for a copy of the UPMC "Notice of Privacy Practices". This information is also available on the web at <http://www.upmc.com/patients-visitors/privacy-info/Pages/notice-of-privacy-practice.aspx>. Note that once your information has been shared with others as described under Question 9.2, it may no longer be protected by the privacy regulations of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

#### **9.4 When does my permission expire?**

Your permission for study participation expires at the end of the study, unless you cancel it sooner. You may cancel your permission at any time by writing to the researchers listed in Section 11 "Contact Information" (below). The permission to access your medical record information up to the end of your participation does not expire. Per University of Pittsburgh Policy, research records will be maintained for a minimum of 7 years after study completion.

### **10. NATIONAL DATA ARCHIVE**

Data from this study will be submitted to the National Institute of Mental Health Database (NDA) at the National Institutes of Health (NIH). NDA is a large database where deidentified study data from many National Institute of Mental Health (NIMH) studies is stored and managed.

Deidentified study data means that all personal information about you (such as name, address, birthdate and phone number) is removed and replaced with a code number. Sharing your deidentified study data helps researchers learn new and important things about mental health and substance use more quickly than before. During and after the study, the study researchers will send deidentified study data about your health and behavior to the NDA.

Other researchers across the world can then request your deidentified study data for other research. Every researcher (and institutions to which they belong) who requests your deidentified study data must promise to keep your data safe and promise not to try to learn your identity. Experts at the NIH who know how to keep your data safe will review each request carefully to reduce risks to your privacy. Sharing your study data does have some risks, although these risks are rare. Your study data could be accidentally shared with an unauthorized person who may attempt to learn your identity. The study researchers will make every attempt to protect your identity.

You may not benefit directly from allowing your study data to be shared with NDA. The study data provided to NDA may help researchers around the world learn more about mental health and substance use and how to help others who have problems with mental health and substance use. NIMH will also report to Congress and on its website about the different studies using NDA data. You will not be contacted directly about the study data you contributed to NDA.

You may decide now or later that you do not want your study data to be added to the NDA. You can still participate in this research study even if you decide that you do not want your data to be added to the NDA. If you know now that you do not want your data in the NDA, please tell the study researcher before leaving the clinic today. If you decide any time after today that you do not want your data to be added to the NDA, call or email the study staff who conducted this study, and they will tell NDA to stop sharing your study data. Once your data is part of the NDA, the study researchers cannot take back the study data that was shared before they were notified that you changed your mind. If you would like more information about NDA, this is available on-line at <http://nda.nih.gov>.

We may share part of your de-identified blood sample with other researchers or federal repositories in the future. This future use may include genetic analysis but note that samples are de-identified. Please inform the study team if do not want your de-identified sample shared.

## 11. CONTACT INFORMATION

### 11.1 Who can I contact about this study?

Please contact the researchers listed below to:

- Obtain more information about the study.
- Ask a question about the study procedures or treatments.
- Talk about study-related costs to you or your health plan.
- Report an illness, injury, or other problem (you may also need to tell your regular doctors)
- Leave the study before it is finished.
- Express a concern about the study.
- 

#### STUDY COORDINATOR (KEY CONTACT PERSON):

Eli Strohecker, BS  
100 N. Bellefield Ave.  
Pittsburgh, PA 15213  
(412) 376-3913

#### PRINCIPAL INVESTIGATOR

Marta Peciña Iturbe, MD, PhD  
100 N. Bellefield Ave.  
Pittsburgh, PA 15213  
(412) 246-5831

#### PRESCRIBING PHYSICIANS:

Alexandre Dombrovski, MD.  
100 N. Bellefield Ave.  
Pittsburgh, PA 15213  
(412) 246-6143

Fabio Ferrarelli, MD, PhD  
3501 Forbes Ave.  
Pittsburgh, PA 15213  
(412) 864-1668

## 12. CERTIFICATE OF CONFIDENTIALITY

To help us protect your privacy, the National Institutes of Health will issue a Certificate of Confidentiality to all studies it funds in which sensitive information are acquired and stored for research analysis. The researchers can use this Certificate to legally refuse to disclose information that may identify you in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings, for example, if there is a court subpoena. The researchers will use the Certificate to resist any demands for information that would identify you, except as explained below. The Certificate cannot be used to resist a demand for information from personnel of the United States Government that is used for auditing or evaluation of federally-funded projects or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA). You should understand that a Certificate of Confidentiality does not prevent you or a member of your family from voluntarily releasing information about yourself or your involvement in this research. If an insurer, employer, or other person obtains your written consent to receive research information, then the researchers may not use the Certificate to withhold that information.

### 13. SIGNATURES

#### VOLUNTARY CONSENT

The above information has been explained to me and all of my current questions have been answered. I understand that I am encouraged to ask questions, voice concerns or complaints about any aspect of this research study during the course of this study, and that such future questions, concerns or complaints will be answered by Dr. Pecina or a qualified member of her research team. I understand that I may always request that my questions, concerns or complaints be addressed by a listed investigator. I understand that I may contact the Human Subjects Protection Advocate of the IRB Office, University of Pittsburgh (1-866-212-2668) to discuss problems, concerns, and questions; obtain information; offer input; or discuss situations that occurred during my participation. By signing this form, I agree to participate in this research study and provide my authorization to share my medical records with the research team. A copy of this consent form will be given to me.

---

Participant's Name

---

Participant's Signature

Date

What information must be provided to the Investigator and study team?

I understand that in order to participate in this study I must provide a contact person and their contact information to the study team, who will be authorized to contact this person to inquire about my health status and depression treatment.

I authorized study team to contact the following person regarding my status during my participation in this study:

Name: \_\_\_\_\_

Relationship: \_\_\_\_\_

Phone number: (H) \_\_\_\_\_ (C) \_\_\_\_\_

Email: \_\_\_\_\_

INVESTIGATOR CERTIFICATION:

I certify that I have explained the nature and purpose of this research study to the above-named individual(s), and I have discussed the potential benefits and possible risks of study participation. Any questions the individual(s) have about this study have been answered, and we will always be available to address future questions, concerns or complaints as they arise. I further certify that no research component of this protocol was begun until after this consent form was signed.

_____	_____
Printed Name of Person Obtaining Consent	Role in Research Study
_____	_____
Signature of Person Obtaining Consent	Date