NCT: 02360371

Title: A118G SNP and OPRM1 Gene Opioid-mediated Effects in Humans

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If you are using Epic for this study, fax a copy of the signed consent form to 410-367-7382.

Patient I.D. Plate

RESEARCH PARTICIPANT INFORMED CONSENT AND PRIVACY AUTHORIZATION FORM

Protocol Title : **Individual Differences in Drug Response**

Application No . : **IRB00047423**

Sponsor: **National Institute on Drug Abuse**

Principal Investigator: Kelly Dunn, Ph.D.
5510 Nathan Shock Drive
Baltimore MD 21224
Phone: 410-550-2254; Fax: 410-550-0030

1. What you should know about this study:

- You are being asked to join a research study. This consent form explains the research study and your part in it. Please read it carefully and take as much time as you need. Ask your study doctor or the study team to explain any words or information that you do not understand.
- You are a volunteer. If you join the study, you can change your mind later. There will be no penalty or loss of benefits if you decide to quit the study.
- During the study, we will tell you if we learn any new information that might affect whether you wish to continue to participate.
- If we think your participation in this study may affect your clinical care, information about your study participation will be included in your medical record, which is used throughout Johns Hopkins. Doctors outside of Johns Hopkins may not have access to this information. You can ask the research team to send this information to any of your doctors.
- When Johns Hopkins is used in this consent form, it includes The Johns Hopkins University, The Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Howard County General Hospital, Johns Hopkins Community Physicians, Suburban Hospital, Sibley Memorial Hospital and All Children's Hospital.
- Biospecimens will be collected in this study. Biospecimens may include any of the following: blood, tissue, saliva, urine, bone marrow, cells, etc. Most biospecimens contain DNA, which is the genetic code for each person.
- A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.
- If you would like to review the information for this study, or a summary of the results, ask the study team doctor for the ClinicalTrials.gov study registration number.

- During this study, you will not have access to certain medical information and test results collected for study purposes. If an emergency occurs while you are in the study, medical information needed for your treatment can be made available to your study physician and other physicians who treat you. When the study is completed, all the information in your medical record will be available to you.

2. Why is this research being done?

This research is being done to learn more about how people respond to different types of drugs, including how they feel in response to the drugs, as well as how their body may respond to the drugs.

We know that not all medicines work for all people, and not all people experience the same good or bad effects. Scientists now know that certain genes (the material in the cells that is inherited and is made of DNA) may in part be responsible for how drugs are handled by the body, as well as for the drugs' effects, good and bad. This research will help us understand how and why medicine may or may not work for specific people. We hope this research will help improve doctors' ability to prescribe the right drug to patients.

People who are healthy may join this study.

How many people will be in this study?:
Our goal is to enroll and complete 100 people in this study.

3. What will happen if you join this study?

If you agree to be in this study, we will ask you to do the following things:

Screening Visit:
You will be completing the Screening visit today. The goal of this visit will be to determine whether you're eligible for the study. During the visit, we will ask you a series of questions and will collect a blood sample (no more than 2 tablespoons) and urine sample from you to ensure it is safe for you to be enrolled into the study. As mentioned during the phone interview, you will also meet with a medical staff member to complete a brief history and physical either during this Screening visit or during Study Day 1.

Once you complete the Screening visit, we will notify you whether you are eligible to join the study. Women will also be asked to keep a log of their menstrual cycle, which will help determine the day on which they will be admitted into the study.

Study Visits:
Next, we will schedule a time for you to be admitted to a clinical research unit, where you will stay for a total of 5 days. While you are on the unit, you will be provided scrubs to wear and (if you are a smoker) will be able to smoke cigarettes. You will be admitted to the unit on **Study Day 1** and will have that day to adjust to being on the unit. We will also introduce you to the tasks and questionnaires that we will ask you to complete during the rest of the study days so that you will feel completely comfortable with everything before any study-related activities begin.

Request to collect and store biospecimens for future research
As part of this study, we will collect a blood sample that will be analyzed for different genetic information. You will not be informed of the results of these tests because, as of now, there are no known links to the genes being tested and any clinical conditions.

The Genetic Information Nondiscrimination Act (GINA) may help protect you from health insurance or employment discrimination based on genetic information.

The law provides that health insurance companies and group health plans

- may not ask for genetic information from this research and
- may not use genetic information when making decision about eligibility or premiums

The law will not stop health insurance companies from using genetic information to decide whether to pay claims. The law does not apply to other types of insurance (such as: life, disability or long-term care).

As part of this research study, we would like to ask you to let us collect an additional sample (no more than 2 tablespoons) and let us store your biospecimens and health information for future research. This research could include other diseases and involve research tools such as gene sequencing or the creation of cell lines.

- Gene sequencing of your DNA provides researchers with the code to your genetic material.

- Cell lines are living tissue samples that can be grown in a laboratory. A cell line can provide an unlimited supply of cells in the future without requiring more samples from you. Each cell contains your complete DNA.

The study doctor can provide you with additional information if you have questions. Also, further information about our use of your biospecimens can be found in this consent document under the heading *What happens to Data and Biospecimens that are collected in the study?*.

Will you allow us to store the biospecimens we collect for this study for use in future research*?*

YES ☐ _____ **NO** ☐ _____
Signature of Participant Signature of Participant

Study Days 2-5:
At the beginning of each session during Study Days 2-5, you will be given a pill that may contain a prescription stimulant, a benzodiazepine (e.g., anti-anxiety medication), an opioid (e.g., a pain medication), an over-the-counter medication, or a placebo (contains no medication, like a sugar pill). Neither you nor the staff member administering the pill will know what the pill contains. After you take the pill, you will be asked to complete several questions about how the pill makes you feel, and you will complete these questionnaires several times up to 6 hours after you take the pill. We will also collect a saliva sample from you at multiple points during the day that will be tested for levels of stress hormones, and will ask you to complete computerized tasks. In addition, you will be asked to complete a **pain testing session**. For this session you will be asked to place your arm and/or hand into cold water. This may be mildly painful, however you will be able to remove your arm/hand whenever you want. A staff member will also place a small device on some of your muscles, this device will make you feel some pressure on those muscles. This procedure may also be mildly painful, and you will be able to end the procedure whenever you wish. Finally, we will tap your hand with some pencil-like objects. This may be mildly painful, but again you will be able to stop the task whenever you want. Finally, at some point during your study participation we will collect a blood sample (no more than 1 tablespoon) that will be used to analyze your metabolic status.

You will be discharged at the end of Day 5 after you complete the sessions for that day and are able to pass a sobriety test that indicates you are not under the influence of any drugs. If you are unable to complete the sobriety test, you will remain in the unit until you can pass the test, or until the following day if necessary.

How long will you be in the study?
You will be in this study for 5 days.

Request to re-contact you for future research
We would also like to store the information that you provide to us so that we may re-contact you in the future to ask if you'd like to learn about additional research opportunities. This does not mean you would have to participate in any additional research, that is a separate decision that you would make at another time. Rather, it will give us permission to contact you about research for which we believe you may be interested and/or eligible, based on the responses that you provide to us during *this* study. You are free to chose whether we can contact you or not, and your choice will not impact your ability to be enrolled into this study.

Would you like us to contact you in the future regarding new research opportunities?

YES ☐ _____ NO ☐ _____
Signature of Participant Signature of Participant

4. What are the risks or discomforts of the study?

Study Drug:
The largest risk of this study is associated with the medication(s) you will receive. Side effects of the medication(s) you will be receiving are expected to be mild and short-lived. You will be screened before enrolling in the study to ensure you are at a low risk of experiencing any study drug-related side effects. Below we list the side effects that you may experience from the study medication and the percent of people who experience these side effects from any formulation of the medication. The severity of the symptoms increases as you move down the list:

- Dermatologic: Flushing (2% of people), Pruritus ("itchy skin", 1-8%)
- Gastrointestinal: Constipation (7-31%), Nausea (9-28%), Vomiting (6-14%)
- Cardiovascular: Hypotension ("low blood pressure", less than 2%), Syncope ("fainting", less than 2%)
- Neurologic: Asthenia ("weakness", 1-11%), Dizziness (1-11%), Headache (1-12%), Somnolence ("sleepiness", less than 2%), Coma (less than 2%), Myoclonus ("jerking of muscles", less than 2%), Raised intracranial pressure (less than 2%)
- Psychiatric: Suicidal thoughts (less than 2%)
- Respiratory: Apnea ("brief stop in breathing", less than 1%), Respiratory Arrest or Depression ("stopping breathing", less than 2%)
- Other: Drug dependence/Addiction (less than 1%), Drug Withdrawal (less than 1%)

It is important for you to know that, in extreme cases, these medications may cause respiratory depression or arrest, severe allergic reaction, or even death. You will undergo extensive medical testing during the Screening visit to identify whether you have any of the risk factors that would increase the likelihood that you would have an extreme reaction to the study medication and will not be enrolled into the study if we have any reason to believe that the study medication would put you at undue risk.

Pain Testing:
You will likely experience some discomfort from the pain testing procedures that are conducted during the study. The pain is expected to be mild and short-lived, and you will be able to end your participation in the pain sessions at any time.

Genetic Testing:
We will collect a blood sample that will be tested for your genetic background. Despite the GINA protections and the best efforts of the research team, there may still be a risk if information about you were to become known to people outside of this study.

Genetic information is unique to you, even without your name or other identifiers. For this reason, genetic information like DNA may be used to identify you and possibly your family members. We have procedures (such as, labeling your biospecimens with a password protected code known only to select research staff) to prevent people working with your DNA from discovering if it belongs to you. However, there is the risk this can happen as new ways of tracing genetic information are being developed that may make re-identification of genetic information possible.

Blood Draw:
We will use a needle to draw blood from you. Taking blood may cause discomfort, bleeding, or bruising where the needle enters the body. In rare cases, it may result in fainting. There is a small risk of infection.

Study Questionnaires:
You may get tired or bored when we are asking you questions or you are completing questionnaires. You do not have to answer any question you do not want to answer.

There may be additional side effects and discomforts that are not yet known.

5. Are there risks related to pregnancy?
This research may hurt an embryo or fetus in ways we do not currently know. To protect against this risk, we will test all women for pregnancy before joining the study and will ask women to keep a log of their menstrual cycle before they are admitted into the study.

6. Are there benefits to being in the study?
There is no direct benefit to you from being in this study. However, your participation in this study will help us to learn more about how individual people respond to different types of medications. This will help improve our ability to select appropriate medications for persons, to prevent us from needing to try several medications before finding one that works well.

If you take part in this study, you may help others in the future.

7. What are your options if you do not want to be in the study?
You do not have to join this study. If you do not join, your care at Johns Hopkins will not be affected.

8. Will it cost you anything to be in this study?
No.

9. Will you be paid if you join this study?

You will be compensated for your time in the study. You will be paid $30 for completing this Screening visit. You will also earn $50 for each session day, and will earn a bonus payment for each day you remain in the study. The bonus will be paid only to those individuals who remain in the study for the entire 5 days. Table 1 shows you the payment schedule for the study, you can earn up to $750 in study payments for Days 1-5.

Study Day	Session Payment	Completion Bonus	
Admission	$50.00	$50.00	
Day 2	$50.00	$75.00	
Day 3	$50.00	$100.00	
Day 4	$50.00	$125.00	
Day 5	$50.00	$150.00	
Total:	$250.00	$500.00	$750.00

You may be required to provide your social security number to be paid for taking part in this study. Federal tax law requires that you report your research payments when you file your taxes. If your total payments from Johns Hopkins exceed $600 per year, Johns Hopkins will report these payments to the Internal Revenue Service and you will receive a 1099-MISC form from us.

10. Can you leave the study early?

- You can agree to be in the study now and change your mind later.
- If you wish to stop, please tell us right away.
- Leaving this study early will not stop you from getting regular medical care.
- If you decide to leave early, we will ask you to complete a sobriety test to ensure you are not under the effects of any drugs; if you fail this test we may ask you to stay until you complete the test safely.

If you leave the study early, Johns Hopkins may use or give out your health information that it has already collected if the information is needed for this study or any follow-up activities**.**

11. Why might we take you out of the study early?

You may be taken out of the study if:

- Staying in the study would be harmful.
- You need treatment not allowed in the study.
- You fail to follow instructions.
- You become pregnant.
- The study is cancelled.
- There may be other reasons to take you out of the study that we do not know at this time.

If you are taken out of the study early, Johns Hopkins may use or give out your health information that it has already collected if the information is needed for this study or any follow-up activities**.**

12. How will your privacy be protected?

We have rules to protect information about you. Federal and state laws and the federal medical Privacy Rule also protect your privacy. By signing this form you provide your permission, called your "authorization," for the use and disclosure of information protected by the Privacy Rule.

The research team working on the study will collect information about you. This includes things learned from the procedures described in this consent form. They may also collect other information including your name, address, date of birth, and information from your medical records (which may include information about HIV, drug, alcohol or STD treatment, genetic test results, or mental health treatment).

The research team will know your identity and that you are in the research study. Other people at Johns Hopkins, particularly your doctors, may also see or give out your information. We make this information available to your doctors for your safety.

People outside of Johns Hopkins may need to see or receive your information for this study. Examples include government agencies (such as the Food and Drug Administration), safety monitors, other sites in the study and companies that sponsor the study. If you are in a cancer study that receives federal funding, the National Cancer Institute (NCI) now requires that we report identifiable information (such as, zip code) about your participation. You may contact the NCI if you have questions about how this information is used.

We cannot do this study without your authorization to use and give out your information. You do not have to give us this authorization. If you do not, then you may not join this study.

We will use and disclose your information only as described in this form and in our Notice of Privacy Practices; however, people outside Johns Hopkins who receive your information may not be covered by this promise or by the federal Privacy Rule. We try to make sure that everyone who needs to see your information keeps it confidential – but we cannot guarantee that your information will not be re-disclosed.

The use and disclosure of your information has no time limit. You may revoke (cancel) your permission to use and disclose your information at any time by notifying the Principal Investigator of this study by phone or in writing. If you contact the Principal Investigator by phone, you must follow-up with a written request that includes the study number and your contact information. The Principal Investigator's name, address, phone and fax information are on page one of this consent form.

If you do cancel your authorization to use and disclose your information, your part in this study will end and no further information about you will be collected. Your revocation (cancellation) would not affect information already collected in the study, or information we disclosed before you wrote to the Principal Investigator to cancel your authorization.

13. What if there is a Certificate of Confidentiality for this study?

The National Institutes of Health has given us a Certificate of Confidentiality for this study. This Certificate provides some additional protection for research information that identifies you. The Certificate allows us, in some circumstances, to refuse to give out information that could identify you as a research subject without your consent, when such information is sought in a federal, state, or local court or public agency action. Still, we may disclose identifying information about you if, for example, you need medical help.

We may also disclose identifiable information about you as described in Section 12 of this form or in other cases. For example, the government may see your information if it audits us, and the research team will voluntarily comply with reporting requirements to the appropriate local or state authorities:

- if they suspect abuse, neglect or abandonment of a child or vulnerable or dependent adult;
- if certain diseases are present; and

- if the team learns that you plan to harm someone. In this case, the team also may warn the person who is at risk.

Even with this Certificate in place, you and your family members must continue to protect your own privacy. If you voluntarily give your written consent for an insurer, employer, or lawyer to receive information about your participation in the research, then we may not use the Certificate to withhold this information.

This Certificate does not mean the government approves or disapproves of this research project.

14. What treatment costs will be paid if you are injured in this study?

Johns Hopkins and the federal government do not have programs to pay you if you are hurt or have other bad results from being in the study. However, medical care at Johns Hopkins is open to you as it is to all sick or injured people.

- If you have health insurance: The costs for any treatment or hospital care you receive as the result of a study-related injury will be billed to your health insurer. Any costs that are not paid for by your health insurer will be billed to you.

- If you do not have health insurance: You will be billed for the costs of any treatment or hospital care you receive as the result of a study-related injury.

By signing this form you will not give up any rights you have to seek compensation for injury.

15. What other things should you know about this research study?

a. What is the Institutional Review Board (IRB) and how does it protect you?

The Johns Hopkins Medicine IRB is made up of:

- Doctors
- Nurses
- Ethicists
- Non-scientists
- and people from the local community.

The IRB reviews human research studies. It protects the rights and welfare of the people taking part in those studies. You may contact the IRB if you have questions about your rights as a participant or if you think you have not been treated fairly. The IRB office number is 410-955-3008. You may also call this number for other questions, concerns or complaints about the research.

When the Johns Hopkins School of Medicine Institutional Review Board (IRB) reviews a study at another site, that site (institution) is solely responsible for the safe conduct of the study and for following the protocol approved by the Johns Hopkins IRB.

b. What do you do if you have questions about the study?

Call the principal investigator, Dr. Kelly Dunn at 410-550-2254. If you wish, you may contact the principal investigator by letter or by fax. The address and fax number are on page one of this consent form. If you cannot reach the principal investigator or wish to talk to someone else, call the IRB office at 410-955-3008.

c. What should you do if you are injured or ill as a result of being in this study?
If you think you are injured or ill because of this study, call Dr. Eric Strain, M.D. or Dr. Denis Antoine, M.D. at 410-550-0052 during regular office hours.

d. What happens to Data and Biospecimens that are collected in the study?
Johns Hopkins and our research partners work to understand and cure diseases. The biospecimens and/or data you provide are important to this effort.

If you join this study, you should understand that you will not own your biospecimens or data, and should researchers use them to create a new product or idea, you will not benefit financially.

With appropriate protections for privacy, Johns Hopkins may share your biospecimens and information with our research sponsors and partners.

16. What does your signature on this consent form mean?

Your signature on this form means that: You understand the information given to you in this form; you accept the provisions in the form and you agree to join the study. You will not give up any legal rights by signing this consent form.

WE WILL GIVE YOU A COPY OF THIS SIGNED AND DATED CONSENT FORM

Signature of Participant	(Print Name)	Date/Time

Signature of Person Obtaining Consent	(Print Name)	Date/Time

NOTE: A COPY OF THE SIGNED, DATED CONSENT FORM MUST BE KEPT BY THE PRINCIPAL INVESTIGATOR; A COPY MUST BE GIVEN TO THE PARTICIPANT; IF YOU ARE USING EPIC FOR THIS STUDY A COPY MUST BE FAXED TO 410-367-7382; IF YOU ARE NOT USING EPIC A COPY MUST BE PLACED IN THE PARTICIPANT'S MEDICAL RECORD (UNLESS NO MEDICAL RECORD EXISTS OR WILL BE CREATED).

ONLY CONSENT FORMS THAT INCLUDE THE JOHNS HOPKINS MEDICINE LOGO CAN BE USED TO OBTAIN THE CONSENT OF RESEARCH PARTICIPANTS.

DOCUMENTATION OF PHYSICIAN/MID-LEVEL PROVIDER CONSENT

My signature below indicates that I have discussed the risks, benefits, and alternatives, answered any questions, and believe the participant is able to make an informed choice to join the study.

Signature of Physician/Mid-Level Provider	(Print Name)	Date/Time

Signature of Participant	(Print Name)	Date/Time

NOTE: A COPY OF THE SIGNED, DATED CONSENT FORM MUST BE KEPT BY THE PRINCIPAL INVESTIGATOR; A COPY MUST BE GIVEN TO THE PARTICIPANT; IF YOU ARE USING EPIC FOR THIS STUDY A COPY MUST BE FAXED TO 410-367-7382; IF YOU ARE NOT USING EPIC A COPY MUST BE PLACED IN THE PARTICIPANT'S MEDICAL RECORD (UNLESS NO MEDICAL RECORD EXISTS OR WILL BE CREATED).

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