LACOSAMIDE EFFECTS ON ALCOHOL SELF ADMINISTRATION AND CRAVING IN HEAVY DRINKERS

ClinicalTrials.gov number: NCT03271528

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BOSTON MEDICAL CENTER AND THE BOSTON UNIVERSITY SCHOOLS OF MEDICINE, PUBLIC HEALTH AND DENTAL MEDICINE





RESEARCH CONSENT FORM

Basic Information

Title of Project: LACOSAMIDE EFFECTS ON ALCOHOL SELF ADMINISTRATION AND

CRAVING IN HEAVY DRINKERS

IRB Number: H-36766

Sponsor: National Institute on Alcohol Abuse and Alcoholism

Principal Investigator: Eric Devine, Ph.D.

Eric.devine@bmc.org

Doctor's Office Building, Suite 1150

720 Harrison Ave Boston, MA 02118-2391

617-414-1990 (Business hours and 24-hour emergency contact)

Background

This is a research study evaluating the effects of a drug called lacosamide (also known as Vimpat) on alcohol craving and consumption. This medication has been approved by the Food and Drug Administration (FDA) for treatment of some types of seizures. It has no known use in the treatment of alcohol misuse, but we believe that this medication could help people to reduce alcohol craving and consumption. You are being asked to take part in this study because you drink regularly and are not seeking treatment for alcohol misuse. Participation in this study is voluntary. After reading this consent you will meet with a study doctor and have a chance to discuss the study and ask any questions you might have. If you decide to participate, you will be given a signed copy of this consent. However, you may still decide to stop participating at any time.

<u>Purpose</u>

We are conducting this study to see if taking lacosamide will have an impact on alcohol cravings and alcohol consumption. If lacosamide has an effect of reducing alcohol cravings or drinking, researchers may want to test this medication with people who are trying to cut back or stop drinking alcohol. The results of this study will help researchers decide if lacosamide should be tested as a treatment for alcohol misuse.

What Will Happen in This Research Study

Participants in this study will be asked to come in for 5-6 visits over a period of up to 44 days. Each part of the study is described below.

1. Screening Visit (Today)

If you decide to volunteer for this study, your first visit will take approximately 3 hours to complete. You may complete all of this today, or your visit may be split over two visits on different days. In this visit you will be evaluated to make sure that you meet the requirements for participation and that you can safely take the study medication.

During this visit you will be asked to:

- Blow into a small device (Breathalyzer) that will measure the amount of alcohol in your blood.
- Undergo a physical exam, and review of your medical history to assess your overall health and wellness.
- Have an electrocardiogram (ECG). This is a test that measures the electrical activity of your heart. It
 involves placement of leads on your chest, arms and legs for about 15 minutes.
- Have vital signs (blood pressure and heart rate) taken.
- Provide a blood sample to assess how your liver and kidneys are working.
- Provide a urine sample to test for drug use.
- Provide basic demographic information (e.g., age, occupation, and income).
- Provide the names of any prescription and "over-the-counter" medications you are taking.
- Answer questions about your mental health, substance use and alcohol withdrawal symptoms.
- Describe your daily alcohol use over the past 28 days.
- If you are a female, provide a urine sample to test for pregnancy and answer questions about your birth control method(s).

You will provide addresses and telephone numbers for yourself and other people, such as family members or friends who will know how to contact you if you fail to show up for clinic visits, or if study personnel have problems getting in touch with you. In doing so, you give study personnel permission to contact these people to find out how to contact you. Please be aware that telling others you are in this study could jeopardize your privacy.

If you test positive for any recreational drugs other than marijuana during this screening visit, you will be excluded from this study and will not be reimbursed. If we encounter anything else during the screening that would disqualify you from taking part in this study, we will end the interview and provide you will a pro-rated payment for the time you have spent in screening. You will receive a percentage of the payment based on the amount of time you have spent in screening. If your laboratory results disqualify you from taking part in the study, you will receive a telephone call from study staff prior to medication visit #1 informing you of these results.

If you decide at any time during this study that you would like to cut back or quit drinking, please inform study staff immediately. Drinking alcohol in a laboratory could interfere with any effort you are making to change your drinking. If you purposefully abstain from alcohol for 7 consecutive days, you will be excluded from study participation.

2. Medication visit #1 (This visit takes place within 14 days after the screening visit.) The medication visit #1 is expected to take 60 minutes.

During this visit you will be asked to:

Blow into a small device (Breathalyzer) that will measure the amount of alcohol in your blood.

- Have vital signs (blood pressure and heart rate) taken.
- Provide a urine sample to test for drug use.
- Provide the names of any prescription and "over-the-counter" medications you are taking.
- Describe your daily alcohol use over the past 7 days.
- If you are a female, provide a urine sample to test for pregnancy and answer questions about your birth control method(s).
- Answer questions about alcohol craving.

During the medication visit #1 you will receive a bottle of study pills containing either lacosamide or placebo (an inactive pill). Both pills look the same and each contains a small about of vitamin B2 (riboflavin). This helps us determine if you have taken the study medication. A random process will be used, like the flip of a coin, to determine whether you receive the lacosamide pills or placebo pills. This is a blinded study which means that neither you nor the study staff will not know which pills you receive. This blinding process is necessary to study the true effects of lacosamide on your alcohol use. If a concern for your safety arises, the study doctor will be able to find out immediately which study pills you are receiving and tell it to any doctors treating you. You will be instructed to start taking the study pills the evening of your medication visit #1.

The study team will ask you to start taking the medication on the day that is exactly one week before your next study visit. The study team will contact you to remind what day to start the medication on. The study team will contact you by telephone on the 3rd or 4th day after you start the study medication to ask you how you are feeling. Each day that you take study medication, the team will send you a link by email or text message for you to complete a 2 question survey. The survey will ask if you took your medication and also your level of craving. The link will open a web-based survey that can be accessed on your smartphone.

3. Drinking session #1 (after 7 days of taking the study medication)

The drinking session #1 is expected to take 5-8 hours. For safety reasons, we ask that you arrange for transportation that does not involve you driving a motorized vehicle on the day of the drinking sessions. You will not be permitted to use nicotine during the drinking session. If you are unable to abstain from nicotine for periods of up to 8 hours, then you may not take part in this study.

During this visit you will be asked to:

- Blow into a small device (Breathalyzer) that will measure the amount of alcohol in your blood.
- Have vital signs (blood pressure and heart rate) taken.
- Provide a urine sample to test for recreational drug use.
- Provide the names of any prescription and "over-the-counter" medications you are taking.
- Describe your daily alcohol use over the past 7 days.
- If you are a female, provide a urine sample to test for pregnancy and answer questions about your birth control method(s).
- Answer questions about alcohol craving
- Complete a test designed to evaluate your memory and attention
- Take your morning dose of study medication with study staff observing you

You may be excluded from continuing in the study if you have become pregnant, if you test positive for recreational drug use, or if you have started a new medication that would make participation unsafe for you.

You may also be excluded from continuing in the study if we determine that you have not been taking the study medication. We will test your urine to confirm that you have been taking study medication.

After completing surveys and interviews, you will be brought to a room that is furnished with a comfortable chair, side table, and television. You will choose your alcohol of choice that exceeds 24% alcohol by volume. The study staff will pour you a drink of this alcohol that is measured to raise your blood alcohol level to .03 g/dl. You will consume this first drink in five minutes. You will complete a 1-item alcohol craving measure and alcohol breath test every 10 minutes for a period of 40 minutes.

After 40 minutes have passed since your first drink, study staff will bring you an additional 4 drinks. It is up to you whether you consume these additional 4 drinks over the next 60 minutes. If you choose to not consume them, you will receive \$3.00 for every drink you do not consume. You will complete a craving questionnaire and alcohol breath test twice over the 60 minutes.

After the 60 minutes have passed since receiving your first 4 drinks, study staff will remove these drinks and bring you an additional 4 drinks. It is up to you whether you consume these additional 4 drinks over the next 60 minutes. If you choose to not consume them, you will receive \$3.00 for every drink you do not consume. You will complete the same craving and alcohol breath test.

During the entire duration of the drinking session you will have access to Netflix, HBOgo and YouTube. You will be asked to not use your personal electronics (e.g. cellphone, laptop) during the drinking session. The estimated maximum BAC you might achieve if you consumed every drink is between .09 g/dl and .13 g/dl. For reference, the legal limit in Massachusetts for drinking is .08 g/dl. You will be asked to remain in the drinking room until your blood alcohol level reaches .04 g/dl or less. If you consume all of the drinks available to you during the session, it could take up to 5 hours for you to reach a blood alcohol level of .04 g/dl or less. During this time you will continue to have access to entertainment. You will have a choice of snacks and non-alcoholic beverages. You may also resume use of your personal electronics.

Your drinking session will be observed by study staff using a small video camera in the room where you are drinking. This drinking session will be recorded. The video will be stored on an encrypted hard drive with password protection. The video recording will be deleted upon completion of the study.

4. Medication visit #2 (This visit takes place 7-10 days after Drinking Session #1.) The medication visit #2 will take about 60 minutes.

During this visit you will:

- Blow into a small device (Breathalyzer) that will measure the amount of alcohol in your blood.
- Have vital signs (blood pressure and heart rate) taken.
- Provide a urine sample to test for recreational drug use.
- Provide the names of any prescription and "over-the-counter" medications you may be taking.
- Describe your daily alcohol use over the past 7-10 days.
- If you are a female, provide a urine sample to test for pregnancy and answer questions about your birth control method(s).
- Answer questions about alcohol craving

• Complete a test designed to evaluate your memory and attention

You may be excluded from continuing in the study if you have become pregnant, if you test positive for recreational drug use, or if you have started a new medication that would make participation unsafe for you. During this visit, you will receive a bottle of study pills containing either lacosamide or placebo. If you received the placebo at medication visit #1, then you will receive the lacosamide at medication visit #2. If you received the lacosamide at medication visit #1, then you will receive the placebo at medication visit #2. You will start taking the study pills on the day that is exactly one week before the drinking session #2. The study team will call you on the day you need to start taking the medication to remind you.

The study team will contact you by telephone on the 3rd or 4th day after you start the study medication to ask you how you are feeling. You will use your smartphone to report your medication taking each day. You will also report your alcohol craving each day using your smartphone.

5. Drinking session #2 (after 7 days of taking the study medication)

You may be excluded from continuing in the study if you have become pregnant, if you test positive for recreational drug use, or if you have started a new medication that would make participation unsafe for you. You may also be excluded from continuing in the study if we determine that you have not been taking the study medication. We will test your urine to confirm that you have been taking study medication.

The drinking session #2 is expected to take 5-8 hours and you will complete the same procedures described above in drinking session #1. Both drinking sessions are identical.

At the end of drinking session #2 study staff will provide you with some alcohol education materials

Telephone Follow-up

If you experience any physical complaints during the study that have not gone away by the end of the study, study staff will contact you by telephone after the study is over to ask you about the physical symptoms.

If you participate in this study, all visits will be completed within 44 days of your first visit.

The laboratory testing and ECG that you will have in this study are clinical tests that you will have for research purposes only. However, we might see something that could be important to your health. If we do, we will ask you if you want us to explain what we noticed. If you would like, we will also make copies of the results that you can bring to your doctor. You or your doctor should not rely on the research measurements to make any diagnosis, treatment, or health planning decisions. If you or your doctor decides that follow-up tests and treatments are necessary, then you or your insurance will be billed for the costs.

Risks and Discomforts

RISKS OF LACOSAMIDE

Most common side effects

Dizziness is the most commonly reported side effect of taking lacosamide. Dizziness occurs in about 25% of people taking lacosamide compared to 7% of people taking a placebo. You should not drive a car or operate other complex machinery until you are familiar with the effects of lacosamide.

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Less common side effects

Feeling an upset stomach (nausea, vomiting, and/or diarrhea) occurs in about 9% of people who take lacosamide. About 8% of people taking lacosamide experience double vision and 7% report feeling tired. About 6% of people report having blurry vision and decreased muscle coordination. Itching has been a problem in about 3% of people using lacosamide. Roughly 4% of people taking lacosamide have some trouble with balance. Slightly more than 1% of patients taking lacosamide at a higher dose than this study (400mg) reported fainting episodes.

Very rare side effects (less than 1%)

Cardiac

Taking Lacosamide can have an effect on the functioning of your heart. Study staff will screen you for known heart conditions that could make this side effect more likely. If you are at greater risk for heart-related health effects, you will not be able to take part in this study

Psychiatric

Taking lacosamide may increase the occurrence of suicidal thoughts and behavior. Study staff will monitor you closely throughout the study and ask you questions about suicidal thoughts and behaviors. If you experience these side effects we will take steps to plan for your safety.

Drug sensitivity

In very rare cases, lacosamide may result in a skin condition that causes painful blisters and sores of the skin and mucous membranes, especially in the mouth. If untreated, this could result in a blood infection, skin infection, loss of vision, trouble breathing, or death. Please contact a study physician immediately if you develop a rash, fever, sore throat, mouth ulcers, or bruising while you are taking the study medication.

In very rare cases, lacosamide may cause serious drug reaction that results in a fever, rash, and abnormal white cell count. This reaction can affect multiple organs such as the liver and kidney. Please contact a study physician immediately if you develop a rash, fever, become excessively tired, notice your urine turns brown, or notice your skin turning yellow.

If you get pregnant while you are in this study, it could be bad for the baby. You must use birth control if you are a woman having sex with men while you are in this study. Only some birth control methods work well enough to be safe while you are in this study. These methods are oral contraceptives (the pill), intrauterine devices (IUDs), contraceptive implants under the skin, contraceptive rings or patches or injections, diaphragms with spermicide, and condoms with foam. You should not be in this study if you are a woman who has sex with men and cannot use one of these birth control methods.

OTHER STUDY RISKS

Physical discomforts of participating in this study

The drawing of blood may cause pain, bruising, lightheadedness, and on rare occasions, infection. You may briefly feel the prick of the needle when it is inserted into your vein. You may feel dizzy or faint when your blood is drawn. Precautions will be taken to minimize these risks.

ECGs may cause discomfort and/or irritation of the skin (redness and itching) from the adhesive electrodes. Hair on your chest may need to be removed in order to obtain the best electrical contact between the adhesive electrodes and your skin.

Risks of riboflavin

Riboflavin is a B vitamin that is added to the study medication and the placebo. During this study you may notice that your urine will have a bright yellow appearance. This is a harmless side effect of taking riboflavin.

Risk of overconsumption

There is a risk that your drinking could be more than what is comfortable for you. If you decide to be in this study you will drink the entire first drink given to you, but after that you are free to drink as much or little as you choose. Medical staff will be monitoring your participation and if you become intoxicated to a point of presenting some risk to yourself or others, your participation will be stopped. The study team will ask you to stay in the laboratory until your blood alcohol level reaches .04 g/dl or less. During this time you will have snacks, access to your personal electronic devices, and access to streaming electronic entertainment.

Risk of loss of confidentiality

There is some risk that health information collected as part of this study could be seen by unauthorized individuals. Every effort will be made to minimize this risk and protect your confidentiality. Electronic data will be stored in password-protected files with restricted access. Paper forms that contain your information will be kept in double-locked storage. To protect your own confidentiality, please be mindful about what you might share with other people about your participation in this study, especially after drinking when you have access to your personal electronic devices. A Certificate of Confidentiality from National Institutes of Health has been secured to protect you from having us disclose your information even under court order or subpoena.

Discomfort with study procedures

You may feel uncomfortable answering some of the questions we ask you about your medical history and mental health history. You may also feel some discomfort with the study procedures. You are free to stop participation and discontinue at any time. If you feel uncomfortable with any part of the study you can let staff know.

There may be unknown risks or discomforts involved with taking part in this study.

Potential Benefits

You will receive no direct benefit from being in this study. Your being in this study may help the investigators determine if lacosamide may be helpful for future patients who misuse alcohol. .

Costs

There are no costs to you for being in this research study.

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Payment

During this study you will receive the following payments for completion of study tasks:

Screening visit - \$40 (split payment of two visits are needed)

Medication visit #1 - \$20

Drinking session #1 - \$80

Medication visit #2 - \$20

Drinking session #2 - \$80

Answering surveys on your smartphone — Up to \$90

You will receive \$5 compensation for each day you report your pill taking and craving on your smartphone. If you report your pill taking and craving all 7 days after medication visit #1, you will receive a \$10 bonus. If you report your pill taking and craving all 7 days after medication visit #2, you will receive a \$10 bonus.

Completion bonus - \$40

In addition to the payments described above, you will receive a \$40 bonus payment if you complete both drinking sessions.

Drink incentive - up to \$48

You will receive \$3.00 for each drink you do not consume during this study.

In total, you may be compensated up to \$418 if you complete all of the study activities. In addition to this \$418 of compensation, you may also be reimbursed up to an additional \$60 for distributing study recruitment materials to other people who may want to take part in this study. Distributing recruitment materials is completely optional. You may take part in the study and decline to hand out flyers to people you know. Study staff will provide additional information about this after you have enrolled in the study.

Confidentiality

We will do our best to keep your information safe. However, we cannot guarantee confidentiality.

Federal and state agencies, if they are required by law or are involved in research oversight, may access information about you from this study including your health information. Such agencies may include the U.S. Department of Health and Human Services, the Food and Drug Administration, the National Institutes of Health, and the Massachusetts Department of Public Health. Information collected about you will remain in the study record even if you later withdraw.

We will protect your information by keeping your records locked and accessible only to study staff and agencies mentioned above who may audit our work. Your records will be kept for a minimum period of 7 years. When study results are published, no individually identifying information will be included in any publications.

If somebody referred you to this study, it may be possible that that person will know whether you have enrolled. In this study, subjects who enroll can give out study flyers and earn an extra \$20 for each person that enrolls (up to 3) based on the flyer. If you received a flyer from somebody and you enroll, they will

receive \$20. It may be possible for the person who gave you the flyer to figure out whether you enrolled or not depending upon how many cards they give out and the timing.

To help us protect your privacy, we have obtained a Certificate of Confidentiality from the National Institutes of Health. We 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. We 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 federal or state government agency sponsoring the project and that will be used for auditing or program evaluation of agency 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 know 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, medical care provider, or other person obtains your written consent to receive research information, then the researchers will not use the Certificate to withhold that information.

The Certificate of Confidentiality will not be used to prevent disclosure to state or local authorities of situations that we have an ethical obligation to act on including ongoing child abuse and neglect, immediate risk of self-harm, and immediate risk of harm to others.

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.

We might use our research data in future studies. These future studies might be done by us or by other investigators. Before we use your data, we will remove any information that shows your identity.

Use and Disclosure of Your Health Information

Boston Medical Center wants to use and/or share your health information as part of this research study. The law requires Boston Medical Center to get your authorization (permission) to do so.

Health information that might be used or given out during this research includes:

- Information from your hospital or office health records at Boston Medical Center or elsewhere. This
 applies to information that is reasonably related to the aims, conduct, and oversight of the research
 study. If health information is needed from your doctors or hospitals outside of Boston Medical Center,
 you will be asked to give permission for these records to be sent to the researcher.
- New health information from tests, procedures, visits, interviews, or forms filled out as part of this
 research study.

The reasons that your health information might be used or given out to others are:

- To do the research described here
- To make sure we do the research according to certain standards set by ethics, law, and quality groups or otherwise as required by law

The people and groups that may use or give out your health information are:

- Researchers involved in this research study from Boston Medical Center
- Researchers from other institutions or organizations that are involved in this research study
- Other people at Boston Medical Center who may need to access your health information to do their jobs such as for treatment, research administration, payment, billing, or health care operations
- · People or groups that the researchers use to help conduct the study or to provide oversight for the study
- The Institutional Review Board that oversees the research and other people or groups that are part of the Human Research Protection Program that oversees the research
- Research monitors, reviewers, or accreditation agencies and other people or groups that oversee research information and the safety of the study
- The sponsor(s) of the research study, listed on the first page, and people or groups they hire to help them do the research

Some people or groups who get your health information might not be obligated to follow the same privacy laws that we follow. We ask anyone who gets your health information from us to protect the privacy of your information. However, after your information has been shared with others, we cannot promise that it will be kept private.

The time period for using or giving out your health information:

 Because research is an ongoing process, we cannot give you an exact date when we will either destroy or stop using or sharing your health information.

Your privacy rights are:

- You have the right not to sign this form that allows us to use and give out your health information for
 research. If you do not sign this form, you cannot be in the research. This is because we need to use the
 health information to do the research. Your decision not to sign the form will not affect any treatment,
 health care, enrollment in health plans, or eligibility for benefits.
- You have the right to withdraw your permission to use or share your health information in this research study. If you want to withdraw your permission, you must write a letter to the Principal Investigator at the address listed on the first page of this form. If you withdraw your permission, you will not be able to take back information that has already been used or shared with others. This includes information used or shared to do the research study or to be sure the research is safe and of high quality. If you withdraw your permission, you cannot continue to be in the study.
- You have the right to see and get a copy of your health information from the Principal Investigator that is used or shared for research. However, you may only get this copy after the research is finished.
- The results of this research study may be published in a medical book or journal, or used to teach others. However, your name or other identifying information will not be used for these purposes without your specific permission.

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Compensation for Injury

If you think that you have been injured by being in this study, please let the investigator know right away. Use the phone number on the first page of this form. You can get treatment for the injury at Boston Medical Center or at any healthcare facility you choose. There is no program to provide compensation for the cost of care for research related injury or for other expenses. Other expenses might be lost wages, disability, pain, or discomfort. You or your insurance will be billed for the medical care you receive for a research injury. You are not giving up any of your legal rights by signing this form.

Subject's Rights

By consenting to be in this study you do not waive any of your legal rights. Consenting means that you have been given information about this study and that you agree to participate in the study. You will be given a copy of this form to keep.

If you do not agree to be in this study or if at any time you withdraw from this study you will not suffer any penalty or lose any benefits to which you are entitled. Your participation is completely up to you. Your decision will not affect your ability to get health care or payment for your health care. It will not affect your enrollment in any health plan or benefits you can get.

During this study, we may find out something that might make you not want to stay in the study. If this happens, we will tell you as soon as possible.

We may decide to have you stop being in the study even if you want to stay. If you have side effects and are unable to reach the full dosage of study medication, we will discontinue your participation in the study. Other reasons this could happen are if staying in the study may be bad for your health or if the study is stopped.

Questions

The investigator or a member of the research team will try to answer all of your questions. If you have questions or concerns at any time, contact Eric Devine at 617-414-1990. Also call if you need to report an injury while being in this research. Contact Eric Devine at 617-414-1990 if you are calling after normal business hours.

You may also call 617-638-7207 or email medirb@bu.edu. You will be talking to someone at the Boston Medical Center and Boston University Medical Campus IRB. The IRB is a group that helps monitor research. You should call or email the IRB if you want to find out about your rights as a research subject. You should also call or email if you want to talk to someone who is not part of the study about your questions, concerns, or problems.

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Subject:	
By signing this consent form, you are indicating that you have read this form, that your questions have been answered to your satisfaction, and that you voluntarily agree to participate in this research study and authorize the use and release of your Protected Health Information.	
Researcher:	
Printed name of person conducting consent discussion	
I have personally explained the research to the above-n that the subject understands what is involved in the stu	•
Signature of person conducting consent discussion	Date