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





RESEARCH CONSENT FORM

Basic Information

Title of Project: The effects of exenatide on alcohol craving and drinking

IRB Number: H-38015

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)

Overview

We are asking you to be in a research study. A research study is an organized way of collecting information about scientific questions. This form will tell you what you should expect if you agree to be in the study. There are programs in place to make sure that investigators fulfill their obligations listed in this form.

It is your decision whether or not to join the study. We are doing the research to find out if a medication for diabetes called exenatide has an effect on drinking alcohol and alcohol cravings. If you agree, you will receive an injection of exenatide once and then drink alcohol in a lab. You will also receive an injection with no study drug once and drink alcohol in a lab. You will be in the study for up to 38 days if you decide to stay for the whole study. You will find more information about what will happen in this study later in this form.

The main risks of being in the study are nausea from taking exenatide. You will find more information about risks later in this form.

Purpose

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

What Will Happen in This Research Study

Participants in this study will be asked to come in for 3-4 visits over a period of up to 38 days. Prior to each study visit, participants will be asked to complete a COVID-19 symptom screening questionnaire. Each part of the study is described below.

Principal Investigator: Eric Devine, Ph.D.

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 be given the study drug.

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 at least one person, 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 with a partial payment. You will receive a percentage of the payment based on the amount of screening that has been completed. If your laboratory results disqualify you from taking part in the study, you will receive a telephone call from study staff prior to your next appointment informing you of these results.

If you decide that you would like to cut back or quit drinking, please inform study staff immediately. Drinking alcohol in a laboratory could interfere with changing your drinking. If you have abstained from alcohol for 14 consecutive days, you will be excluded from study participation.

2. Drinking session #1 (Within 14 Days of screening visit)

The drinking session #1 is expected to take 5-8 hours. For safety reasons, we ask that you arrange for transportation home in which you are not driving. You will not be able to use nicotine during the drinking session. If you can't abstain from nicotine for 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 since your first visit.
- 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 and nausea
- Provide a blood sample via a pin-prick on your finger to measure blood sugar.
- Receive an injection of a 5mcg dose of immediate release exenatide or a fake injection. (a fake injection involved inserting a small needle in your arm without injecting any medicine)

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

After completing surveys and interviews, you will be brought to a room that is furnished with a lounge 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 0.03 g/dL. Drinks will be mixed with a sugary mixer of your choice. You will consume this first drink in five minutes. You will complete craving measures and alcohol breath tests 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. Each drink is measured to raise your blood alcohol level by 0.0125 g/dL. 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's up to you whether you consume these additional 4 drinks over the next 60 minutes. Each drink is measured to raise your blood alcohol level by 0.0125 g/dL. 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 tests.

Principal Investigator: Eric Devine, Ph.D.

During the entire duration of the drinking session you will have access to Netflix, HBOgo and YouTube. You will be asked to limit use of your personal electronics (e.g. cellphone, laptop) during the drinking session. The estimated maximum Blood Alcohol Level (BAL) you might achieve if you consumed every drink is approximately 0.09 g/dL to 0.13 g/dL depending upon how quickly your body processes alcohol. For reference, the legal limit in Massachusetts for drinking is 0.08 g/dL. You will be asked to remain in the drinking room until your blood alcohol level reaches 0.04 g/dL or less. If you consume all of the drinks available to you during the session, it could take up to 5 hours after you stop drinking for you to reach a blood alcohol level of 0.04 g/dL or less. During this time you will continue to have access to entertainment. Staff will provide you with a meal and non-alcohol beverage. You may also resume full 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. We will make video recording of drinking session. The video will be stored on an encrypted hard drive with password protection. The video recording will be deleted upon completion of the study.

5. Drinking session #2 (7-14 days after drinking session #1)

You may be excluded from continuing in the study if you have become pregnant, if you test positive for recreational drug use other than marijuana, or if you have started a new medication that would make participation unsafe for you. 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 except for the study drug you will receive. If you received an injection of exenatide in the first drinking session, then you will receive a fake injection in the second session. If you received a fake injection in the first drinking session, then you will receive exenatide in the second session. 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 38 days (or sooner) from 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

Principal Investigator: Eric Devine, Ph.D.

RISKS OF EXENATIDE

Most common side effects

Nausea is the most commonly reported side effect of taking exenatide. Nausea occurs in about 8-10% of people with diabetes taking exenatide to treat their diabetes compared to 0% of people taking a placebo.

Less common side effects

Vomiting occurs in 4% of people who take exenatide. About 3% of people taking exenatide experience upset stomach. About 1-2% of people taking exenatide experience decreased appetite, diarrhea and/or dizziness.

Very rare side effects (less than 1%)

You may have itching or small bump where the exenatide shot is given. In very rare cases, serious skin problems have happened where the shot was given and sometimes surgery was needed for these skin problems. If the area feels hard, blisters, or has dark scab, lumps, open wound, pain, swelling, or other very bad skin irritation, please contact a study physician immediately.

In very rare cases, exenatide may cause serious drug reaction. During the study, please contact a study physician immediately if you develop rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing, swallowing, or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat.

Please ask the study staff if you have any questions about these possible risks.

Other very rare side effects (less than 1%) that are NOT expected

There are some serious risks that have been observed among people with diabetes who receive exenatide for a prolonged period of time. These risks are not expected to occur with a single injection of the study drug.

These risks include a very serious and sometimes deadly pancreas problems (pancreatitis). Please let the study physician know if you have history of pancreatitis. If, during the study, you experience persistent severe abdominal pain, with or without vomiting and pain spreading to your back, please contact a study physician immediately.

Kidney problems have occurred in people with diabetes who were taking this drug for a prolonged period of time. Some people have needed dialysis or a kidney transplant. Signs of kidney problems includes inability to pass urine, change in how much urine is passed, blood in the urine, or a large weight gain. Please contact a study physician immediately if you experience these symptoms at any time during the study.

This drug has been shown to cause thyroid cancer in some animals receiving high doses of exenatide. The single dose you will receive in this study is well below the dose given to animals that is associated with a risk of thyroid cancer. It is not known if there is any thyroid cancer risk in

Principal Investigator: Eric Devine, Ph.D.

humans from taking exenatide. If thyroid cancer happens, it may be deadly if not found and treated early.

It is possible that exenatide can cause a reduction in blood cells (platelets) that help us stop bleeding. A reduction in these cells has been observed in some patients taking exenatide. Please inform the study doctor if you notice that you bruise more easily, bleed from your gums when you brush your teeth, or have any other abnormal bleeding. Also, please inform the study doctor if you have a history of drug-induced thrombocytopenia.

Risk in pregnancy

If you get pregnant while you are in this study, it could be bad for the fetus. 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 and receiving injections of the study drug may cause pain, bruising, lightheadedness, fainting, and on rare occasions, infection. You may briefly feel the prick of the needle when it is inserted into your vein or finger. You may feel dizzy or faint when your blood is drawn. We will use trained phlebotomists to minimize this risk.

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.

Risk of alcohol 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 0.04 g/dL or less. During this time you will have a meal, access to your personal electronic devices, and access to streaming electronic entertainment.

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 may decline to answer questions if you are uncomfortable. You are also free to stop participation and discontinue at any time. If you feel uncomfortable with any part of the study you can let staff know.

Principal Investigator: Eric Devine, Ph.D.

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 exenatide may be helpful for future patients who suffer with alcohol problems.

Costs

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

Payment

During this study you will receive the following payments at the time you complete each of the study tasks:

Screening visit - \$50 (split payment if two visits are needed)

Drinking session #1 - \$150

Drinking session #2 - \$150

Completion bonus - \$50 (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 \$448 if you complete all of the study activities. In addition to this \$448 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. If you discontinue study participation at any time, payments will be pro-rated to take into account the portion of the study you have finished.

Payments will be made using a debit card ("clincard") we give to you during screening. This card can be used in any place that other credit cards are accepted. You must give us your Social Security Number or Individual Taxpayer Identification Number to receive this payment.

Confidentiality

We must use information that shows your identity to do this research. Information already collected about you will remain in the study record even if you later withdraw.

We will store your information in ways we think are secure. We will store paper files in locked filing cabinets. We will store electronic files in computer systems with password protection and encryption. However, we cannot guarantee complete confidentiality.

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.

This study is covered by a Certificate of Confidentiality (CoC) from the National Institutes of Health. All studies funded by the National Institutes of Health that involve identifiable information are covered by a CoC. The CoC provides how we can share research information. Because we have a CoC, we cannot give out research information that may identify you to anyone that is not involved in the research except as we describe below. Even if someone tries to get your information in connection with a legal proceeding, we cannot give it to them. The CoC does not prevent you from sharing your own research information.

If you agree to be in the study and sign this form, we will share information that may show your identity with the following groups of people:

- People who do the research or help oversee the research, including safety monitoring.
- People from Federal and state agencies who audit or review the research, as required by law. 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.
- People who will get information and biological samples from us include Quest Diagnostics.
 During screening, we will draw your blood to test the health of your liver. This blood will be shared with Quest diagnostics as they are performing the test on your blood. Quest diagnostics will not have access to your name or any identifying information. Quest diagnostics will not keep or store any of your blood after the test is complete. Quest Diagnostics is expected to protect your information and biological samples in the same way we protect it.
- Any people who you give us separate permission to share your information.
- Confidentiality has some limits. If you are in immediate danger of hurting yourself or hurting another person at any time in the study, the study team would work with you to ensure a plan to keep you or another person safe. Because study staff have an ethical obligation to protect you (or another person), it is possible that your information will be shared as part of a plan for safety.

We will share research data where we have removed anything that we think would show your identity. There still may be a small chance that someone could figure out that the information is about you. Such sharing includes:

- Publishing results in a medical book or journal.
- Adding results to a Federal government database.
- Using research data in future studies, done by us or by other scientists.

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.

Principal Investigator: Eric Devine, Ph.D.

Use and Disclosure of Your Health Information

The research team has to use and share your health information to do this study, including information that may identify you. By agreeing to be in this study and signing this form, you are giving us your permission where needed to use and share your health information as described in this form.

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

- Information that is in your hospital or office health records. The records we will use or give out are those related to the aims, conduct, and monitoring of the research study.
- 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.
- To comply with laws and regulations. This includes safety-related information. As we explained above, we also have to give out any information from you in the event that there is an immediate risk of you harming yourself or another person.

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

- Researchers involved in this research study from Boston Medical Center, Boston University, and/or other organizations
- Other people within Boston Medical Center and Boston University 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
- Public health and safety authorities who may be involved in protecting people who have an immediate danger of harming themselves or others.

We ask anyone who gets your health information from us to protect the privacy of your information. However, we cannot control how they may use or share your health information. We cannot promise that they will keep it completely 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.
- When the study has been completed for everyone, you have the right to request access to the health information that we used or shared to make your treatment or payment decisions. If you ask for research information that is not in your medical record, we might not give it to you, but we will explain why not. You may use the contact information on the first page of this form to find out how to get your health information. You may also contact the HIPAA Privacy Officer at Boston Medical Center at DG-privacyofficer@bmc.org or at Boston University at HIPAA@BU.EDU.

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.

Re-Contact

	ask your permission to contact you again in the future. This contact would be as ended. Please initial your choice below:
 Yes _	No You may contact me again to ask for additional information related to this study
 Yes	No You may contact me again to let me know about a different research study

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. Some reasons this could happen are if staying in the study may be bad for you, 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, 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 617-358-5372 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.

By agreeing to be in this research, you are indicating that y read to you), that your questions have been answered to y voluntarily agree to participate in this research study.	·
Subject:	
Printed name of subject	
 By signing this consent form, you are indicating that you have read this form (or it has been read to you) your questions have been answered to your satisfaction you voluntarily agree to participate in this research you permit the use and release of information that your health information. 	ction study
Signature of subject	 Date
Researcher:	
Printed name of person conducting consent di	iscussion
I have personally explained the research to the above-nam believe that the subject understands what is involved in the	-
Signature of person conducting consent discussion	 Date
To be completed by witness if researcher reads this form to	o the subject
This consent form was read to and apparently understood	by the subject in my presence.
Printed name of witness (a person not otherwise associate	ed with the study)

Date

Project Title: The effects of exenatide on alcohol craving and drinking

Principal Investigator: Eric Devine, Ph.D.

Signature of witness