THE MIND RESEARCH NETWORK

MIND RESEARCH NETWORK
CONSENT TO PARTICIPATE IN RESEARCH

Lorcaserin effects on alcohol responses

You are being asked to participate in a research study. The box below highlights key information about this research for you to consider when making a decision about whether or not to participate. This form will explain the study to you, including the possible risks as well as the possible benefits of participating, so you can make an informed choice about whether or not to participate in this study. Please read this consent form carefully. Ask the investigators or study staff to explain any words or information that you do not clearly understand.

Key Information for You to Consider
• You are being asked to participate in a research study about how the medication *lorcaserin* affects responses to alcohol and nicotine. Participation is voluntary and it is up to you whether or not you choose to participate. • Your participation is expected to last about 25 hours over approximately 5 weeks. This will include 5 study visits, with an additional 30-60 min. over the phone. • During the study you will answer questions, perform some paper and pencil/computer tests, take the study medication and placebo pills, and complete two sessions in which you will consume alcohol. • You will also complete some medical tests such as collection of blood samples, collection of urine, and breath alcohol (to detect recent alcohol use) and breath carbon monoxide (to detect recent cigarette use) tests • Potential risks include discomfort and fatigue from study procedures, temporary impairment from alcohol consumption, and potential side effects from the medication. • You are not expected to receive any specific benefits from participating. • This is not a treatment study. • Taking part in this study is voluntary so you can choose not to participate.

Purpose and General Information

You are being asked to participate in a research study that is being done by Eric Claus, Ph.D., and Christian Hendershot, Ph.D, who are the Principal Investigators. This research is being done to evaluate how the medication *lorcaserin* affects responses to alcohol in smokers who drink alcohol. Lorcaserin is approved by the Federal Drug Administration (FDA) in 2012 for the purpose of weight management. The medication is typically prescribed to help people who have a body mass index (BMI) over 30 lose weight. Research in animal studies has also shown this medication may influence responses to certain commonly used drugs. Therefore, the main goal of this study is to examine how lorcaserin influences responses to alcohol. This study also will try to identify, using questionnaires and computerized tasks, whether lorcaserin influences responses to alcohol and cigarettes in certain groups of people. *This study is not a treatment study.*

You are being asked to participate in this research study because you report using at least moderate amounts of both alcohol and cigarettes regularly, and report that you are not currently seeking treatment for alcohol use or cigarette use. Approximately 40-50 people will take part in this study at the Mind Research Network.

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This study is funded through the National Institute on Alcohol Abuse and Alcoholism (a division of the National Institutes of Health).

What will happen if I participate?

If you agree to be in this study, you will be asked to read and sign this consent form. You can discuss any questions you may have about this form with the study staff. After you sign the consent form, the following things will happen:

You will answer a series of questions about your alcohol use, cigarette use, and medical history, as well as other questions to make sure that you're eligible for the study. You will also meet with a member of the study staff to complete a medical history interview, as well as some brief assessments (e.g., breath carbon monoxide, blood pressure, etc.), height/weight and heart function (described below).

If you are eligible for the study, you will be asked to take the active medication for approximately one week, and placebo pills for approximately one week (a placebo is a pill that looks like the active medication, but has no active medication in it). The order in which you take the pills will be randomized. Randomization means you will be assigned to a group based on chance, like a flip of a coin. Neither you nor any member of the research team chooses your assigned group or will know what group you are assigned to. However, in an emergency (e.g., if you are hospitalized or in an accident and knowing the drug would be important for your treatment), the study doctor can get this information.

Participation will occur over the course of approximately 5 weeks, and will include a total of approximately 5 visits to MRN (approximately 20-25 hours total), including 1 hour over the phone (roughly 4, 15-minute calls). The study visit schedule is as follows:

- One **screening visit** (today) to complete the consent process, eligibility interviews, and medical assessment (3 hours). (Note: the medical assessment may be conducted on a separate day to accommodate scheduling.)
- If you are eligible after the screening visit, you will then complete a **baseline visit** (3-4 hours). At this visit, you will complete additional questionnaires and computerized tasks, and receive the first set of study pills (active medication or placebo).
- **Follow-up visit 1** (full day, up to 6-8 hours). After taking the first set of study pills for roughly one week, you will complete a follow-up visit that includes a repeat medical assessment, a blood draw, as well as follow-up questionnaires and computerized tasks. This visit will take place after you have taken the study pills for roughly one week. This visit will also include an alcohol use session (described in more detail below).
- Next, you will have a **medication break** (no pills or study visits) for at least 7 days.
- **Medication refill visit** (1 hour). This appointment will take place about 1-2 weeks after follow-up visit 1. At this appointment you will be asked to complete some follow-up questionnaires and medical assessments (e.g., weight, blood pressure), and will receive the next set of study pills (active medication or placebo).
- **Follow-up visit 2** (full day, up to 6-8 hours). This visit will take place after you've taken the second set of study pills for roughly one week. The study visit will be identical to follow-up visit 1.
- **Telephone check-ins** (5-15 minutes each, total of 4 check-ins): During weeks when you are taking the study pills, a member of the study staff will call you on the phone to ask about potential side effects, as well as alcohol use and smoking.

If you are unable to commit to the timeframe of the study (6 weeks) or if you plan to travel out of town, you should let us know, as this will make you ineligible for participation.

We have organized the different parts of the study below into three categories (*Screening visit, Baseline visit*, *Medication weeks*, and *Follow-up visits*), described in more detail below.

I. Screening Visit

As part of screening to see if you qualify for the study, we will ask you about your current and previous alcohol and drug use, and conduct a structured interview asking you about your substance use and medical history. You will meet with a member of our medical staff, and we will ask you to complete some brief assessments, including heart rate/blood pressure, body weight/height, a blood sample (approximately 4 teaspoons), and an electrocardiogram (ECG) to measure cardiovascular function. You will be asked to provide a breath alcohol test, an expired carbon monoxide (CO) test (a breath test that can detect recent smoking) to verify that you smoke, and a urine sample to test for the presence of several drugs, including cocaine, heroin, methamphetamine, and marijuana. You will be able to collect the sample in a bathroom without anyone watching you. For females, this urine test will also be used to complete a pregnancy test (as a safety precaution). These procedures are intended primarily to rule out any factors that would make it unsafe for you to take the study medication. The blood sample will be checked for kidney function, electrolytes, nicotine metabolites, liver function, and blood cell counts. If you test positive for drugs (other than marijuana) or pregnancy, you will not be eligible for the study. If your pregnancy test shows a positive result at any point during the study, we will tell you this result in a private room. Your urine sample will also be saved and analyzed to assess levels of nicotine and nicotine metabolites. If the tests on your blood sample are abnormal or if your ECG or vital signs seem abnormal, the study's medical staff will notify you of the findings; you will not be notified about any genetic results.

Saliva Collection. Finally, we will ask you for a saliva sample to collect genetic material (genes or DNA). We will provide you with a small cup and ask you to fill it with saliva up to a certain line (less than half a teaspoon). The purpose of collecting saliva for DNA in this study is to examine whether medication effects might be different according to certain genetic factors. We will also examine a genetic marker that has been linked to nicotine metabolism. Your saliva will be labeled only with a special number (code), which will remain linked to your identity. We will store this sample until we are ready to analyze it. If you agree, we may keep your saliva for a very long time (indefinitely) for future research. Please see optional procedures at the end of this consent form.

The screening visit lasts up to 3 hours. It is possible that this appointment may be split between two days, depending on your availability and availability of medical staff.

II. Baseline Visit

If you are eligible after the screening visit and wish to participate, you will be asked to return for a baseline visit. During this visit you'll be asked to complete a number of computerized questionnaires (about personality, substance use, and related factors), and do some computerized tasks (to measure things such as information processing/learning and reaction time). Women will complete a urine pregnancy test again before receiving any medication. You will also receive your first set of study pills along with instructions on how to take them. This visit is expected to take around 3-4 hours.

III. Medication Weeks

You will be asked to take each type of study pill (active medication or placebo) for 7 days each, with a break of at least 7 days in between. During the break in between, you will complete one visit at MRN to pick up your second set of study pills. During each of the medication weeks, you will be asked to take the study pills (consisting of 2 pills daily), and to complete a daily log to record the number of pills taken, potential side effects, alcohol use, cigarette use, cravings, and questions related to eating/hunger. We will ask that you complete a brief (1-2 minute) survey each day via cell phone. The survey will ask about alcohol use, smoking, and pills taken the day before. You will receive a text message (or if preferred, an email) each day with the link to the survey. Finally, a member of the study team will contact you at scheduled times (e.g., 2 and 4 days after starting the medication) to review your medication use and assess for any side effects. These calls are expected to last 5-15 minutes.

IV. Follow-up Visits

Each of the medication weeks will be followed by a follow-up visit to MRN (i.e., Follow-up Visits 1 and 2). These sessions will require that you spend most of the day at MRN (e.g., from the morning until 5pm). Therefore, *we ask that you do not schedule any outside appointments or commitments on these days*. You must agree not to consume alcohol or use recreational drugs within 24 hours of these visits, and not to eat for 4 hours before arriving at MRN. After arriving, you will be asked to provide a urine sample for a urine drug test and a breath alcohol reading that morning to confirm recent abstinence from alcohol and drugs. For females, the urine screen may also be used for a pregnancy screen. If you test positive for recent use of recreational drugs (with the exception of marijuana) you may be rescheduled or withdrawn from the study. The urine will also be tested to determine whether you have been taking the medication. The medication includes a small amount of riboflavin, a substance that can be detected in urine. If you have not taken the medication for the prior week, you may be rescheduled or withdrawn from the study. We will also collect a blood sample (approximately 4 teaspoons at each follow-up visit) that will be used to detect medication metabolites (to confirm whether you took the medication for the week) and nicotine metabolites.

At these visits you will complete brief follow-up interviews with the study staff and a member of the medical team, which will focus on topics related to alcohol, nicotine, and food intake. You will be asked to complete follow-up computerized questionnaires and tasks, similar to the baseline session. You will also be asked to repeat some of the assessments from the baseline session (weight, heart rate/blood pressure, expired CO reading, and breath alcohol reading). You will be asked about any side effects you have experienced. In the event that the study medical staff members have any reason to believe that continuing to participate in the study would not be safe, you may be removed from the study.

Alcohol use session. Each of the two follow-up visits will include an alcohol use session. During the alcohol session you will have the option to drink alcohol in common amounts over a period of approximately 2 hours. First, you will be asked to drink a common amount of alcohol at the beginning of the session. Next, you will be allowed to decide whether to consume additional drinks over the course of the session. During this period, we will monitor your breath alcohol level (using a breathalyzer) to ensure that your breath alcohol level does not reach unsafe levels. We will also ask you to complete questionnaires and computer tasks at various points during the session. You will be permitted to take cigarette breaks at scheduled points before and after the session. After completing the alcohol session, you will be provided with snacks, water, and reading materials and given a private room until it is safe for you to leave. You will be allowed to have

smoke breaks at certain points during the sessions, but will not be allowed to leave MRN during the sessions. Therefore, we ask that you bring your own cigarettes to the sessions.

Safety Precautions. On days involving alcohol consumption you must agree to not leave MRN until the study team allows you to leave. Prior to leaving MRN, we must verify that your breath alcohol level is within a safe range. Additionally, to ensure that the length of the follow-up visits are the same for all participants, *your follow-up visit will last for the full day (e.g., until 10 pm), regardless of how much alcohol you choose to drink*. Therefore, you will leave at the end of day (e.g., 10 pm), or when your breath alcohol level falls below .03g% (whichever happens last). For safety reasons, you will not be allowed to leave if your breath alcohol concentration meets or exceeds .03g% under any circumstances. After the alcohol sessions you should not drive a motor vehicle or operate machinery for the rest of the day. Because you will be drinking alcohol, you must agree not to drive to the follow-up visits. Please arrange for another person to drop you off and pick you up from the visit. Alternatively, we will reimburse costs for transport to/from MRN through a ride share service (e.g., Uber, Lyft), up to $25 per ride. (To request reimbursement, a receipt with confirmation of travel date/time must be emailed to the study team.)

If you arrive to the visit intoxicated, the visit will be cancelled, and you may be excluded from further participation. If you arrive intoxicated, you will not be allowed to leave MRN until your breath alcohol level is below .03g%. If you have driven to the session and arrive intoxicated, you will not be allowed to drive home unless your breath alcohol reading has reached zero.

Please initial below to indicate your agreement with these safety precautions for the alcohol sessions.

___ I agree not to drive to or from MRN on days involving an alcohol session.

___ I agree to remain at MRN for the full day, until the study team allows me to leave, following alcohol sessions.

What are the possible risks or discomforts of being in this study?

Medication. There are certain risks/side effects of the study medication. In studies where lorcaserin was taken for a longer period of time (at least one year), the most commonly reported side effects (i.e., greater than 5% of participants and more common than placebo) included:

- headache
- dizziness
- fatigue
- nausea
- dry mouth
- constipation
- nasopharyngitis (nasal/throat irritation, similar to a common cold)

Additionally, the less common side effects (reported by 2% or more of patients) included:

- diarrhea
- vomiting
- upper respiratory tract infection
- urinary tract infection
- back pain

- musculoskeletal pain
- cough
- oropharyngeal pain (e.g., sore throat)
- sinus congestion
- rash

A full summary of safety information and potential side effects is included in the medication brochure that you have received today. We encourage you to pay attention to any potential side effects you might experience. We will check for side effects at every visit and the study medical staff (physician or nurse practitioner) may choose to stop the medication if you are showing signs of serious side effects. You will also receive a phone number to contact medical staff on the study with any questions. If you visit a physician or are prescribed any medications while enrolled in this study, you should inform your physician that you will be taking lorcaserin while participating.

Blood Draw. Drawing blood may cause temporary pain and discomfort from the needle stick, occasional bruising, sweating, feeling faint or lightheaded, and in rare cases, infection or nerve pain.

Interview and Questionnaire Responses. It is possible you could experience emotional stress, inconvenience or an invasion of privacy when answering questions in this study. However, you may refuse to answer any questions or perform any test that you do not wish to answer or do.
Every effort will be made to protect the information you give us. However, there is a small risk of loss of confidentiality that may result in stigmatization. Additionally, there may also be side effects or risks to study participation that are unexpected and not known at this time.

Alcohol consumption. There are potential risks related to the alcohol use session. The effects of alcohol intoxication may lead to temporary symptoms such as dizziness, or impairment in motor coordination. You could experience hangover-like symptoms after the alcohol session.

Genetic Analyses. DNA samples will be labeled with a number only (not your name) and analyzed at an outside laboratory. The main aim of this analysis will be to examine the *CYP2A6* gene, which is related to nicotine metabolism. These analyses may also focus on genetic factors potentially associated with drug use or related behaviors, such as impulsivity. Whole genome testing will not be done on the DNA samples collected in this study. The risks associated with genetic (DNA) tests are unknown. Genes may be shown at some point in the future to be related to mental illnesses or tendency to addiction. Since in some cases the results of these genetic tests may allow us to predict the risk of getting an illness, we will keep the results confidential (only scientists working on this research project will know the results). There may also be unexpected risks connected with this type of testing. At some point in the future, your genetic information could be used to identify you; however, we have put precautions in place to help reduce this risk. We will take every measure to protect you from the risks of other people finding out about the results of your genetic tests, which include people like insurance companies or future employers.

There are risks of loss of privacy, getting insured, being employed, and stigmatization (treated badly due to your genetic testing results). There are some protections afforded by the Genetic Information Nondiscrimination Act (GINA). For a detailed list of protections, please read the GINA information sheet on our website at http://www.mrn.org/about/policies/ or ask the research team for a copy.

Participation in this study may produce emotional stress, inconvenience or an invasion of privacy. In addition, there may also be side effects or risks to study participation that are unexpected and not known at this time. Every effort will be made to protect the information you give us. However, there is a small risk of loss of confidentiality that may result in stigmatization or hardship. Procedures we will use to protect the information you give us are described below.

Unforeseeable risks. The particular treatment or procedure may involve risks to the participant (or to the embryo or fetus, if the participant becomes pregnant) that are currently unforeseeable.

How will my information be kept confidential?

We will take measures to protect your privacy and the security of all your personal information. Your name and other identifying information will be maintained in locked files and/or restricted databases, available only to authorized members of the research team for the duration of the study. All of the information we collect about you will be coded with a unique research subject identifier (URSI) or other subject code and will be kept on password-protected computers, and stored securely in restricted and protected databases according to MRN information security policies. The record linking your name to your study ID number (which the study data is labeled with) according to MRN information security policies. The record linking your name to your study ID number will be kept indefinitely (forever) at the MRN in a confidential manner so that you may continue to have access to your information. De-identified data (meaning data that cannot be traced back to you) from this study may also be presented at meetings, published in journals/books, used in classrooms for training/teaching purposes, and may be used and shared with other researchers for future research purposes, which includes scientists at other universities and institutions. However, your name and other identifying information will not be used in any published reports about this study.

The urine and blood samples collected at the medication visits will be labeled with your URSI number and date of study visit and stored in a secure freezer at MRN. These samples will be stored indefinitely until we are able to send all samples offsite for analysis. The blood and urine samples collected at the screening visit will be sent to an outside laboratory for analysis.

Your DNA sample will be stored with an URSI to protect your identity. Your name and other identifiable information will be linked to the URSI but will not be present on stored samples. If you agree, your sample may be used for future undetermined research. It will be stored at the Mind Research Network or another secure storage facility indefinitely or until it has been completely used. You may request that your DNA sample be destroyed by providing a written request or phone call to the research team listed on this consent form. It is possible we will not be able to destroy your sample if the link to your identity has already been removed because your personal information is no longer associated with your sample.

To help us protect your information, this research study has obtained a Certificate of Confidentiality from the National Institutes of Health (NIH). With this Certificate, the research team cannot be forced to provide your name or any identifiable research data or specimens to people who are not connected with this study, including Federal, state or local authorities, even under a subpoena. The protection offered by the certificate does not stop us from reporting information about suspected or known sexual, physical, or other abuse of a child or older person, or that you plan to harm yourself or someone else. If any member of the research team is given such information, we will make a report to the appropriate authorities.

Information from your participation in this study may be reviewed by MRN, federal and state regulatory agencies, the Food and Drug Administration (FDA), and by the University of New Mexico Institutional Review

Board (IRB) which provides regulatory and ethical oversight of human research. Also, because this research is sponsored by NIAAA, staff from that and other DHHS agencies may review records that identify you only for audit or program evaluation.

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.

What are the benefits to being in this study?

There are no expected direct benefits for participating in this study. However, knowledge gained through this study may aid the development of more effective treatments for substance use.

What other choices do I have if I don't participate?

Taking part in this study is voluntary so you can choose not to participate. If you would like to receive a list of referral options for alcohol or smoking cessation treatments, we will provide one to you.

How will I know if you learn something new that may change my mind about participating?

You will be informed of any significant new findings that become available during the course of the study, such as changes in the risks or benefits resulting from participating in the research or new alternatives to participation that might change your mind about participating. If, for example, we find out that there are newly reported serious side effects of the study medication, we would inform you of these side effects so that you could decide whether you wanted to continue participating.

Are there any costs to me for participating?

You will not be charged for any of the experimental study procedures, including the medical history and physical examination. If incidental findings from the study result in the need for further evaluation/ treatment, then you or your insurance company will be responsible for any clinical evaluation/treatment that may be needed. You may have costs related to transportation to follow-up visits 1 and 2, since you will be asked not to drive to the visits. However, we will reimburse costs related to your transportation (up to $25 per trip).

Will I be paid for taking part in this study?

In return for your time when participating in this study, you will be paid up to $500 total in cash for participation. The payments are as follows: $50 for completing the consent/screening and medical visit session, $30 for the baseline visit; $130 for completing follow-up visit 1; $180 for completing the medication refill visit and follow-up visit 2. You will also receive a $30 bonus for completing at least 75% of scheduled phone-check-ins, and a final bonus of $50 for completing all of the study visits (to be paid at the final visit). Therefore, the total possible compensation is **$500**. In the event you are not able to pick up your final cash payment in person, we can also send the final payment via electronic gift card to your email address.

Compensation for participation in research is considered taxable income and should be reported on your income tax return. If you earn $600 or more participating in MRN research studies, you will be sent a W-9 form to collect your tax information which will be reported to the Internal Revenue Service (IRS) as required by law. The information provided to the IRS will not disclose your participation in a research study; instead the income will be listed as "nonemployee compensation."

If MRN and/or the investigators develop intellectual property and/or commercialize products or services, directly or indirectly, based on the results of the research done with your data, there are no plans to provide you with any financial compensation.

Can I stop being in the study once I begin?
Yes. You can withdraw from this study at any time without affecting your access to care, education, or other services to which you are entitled. If you decide you would like to stop the study medication during the study, please let the study doctor know as soon as possible and we will help you discontinue it.

The investigators have the right to end your participation in this study if they determine that you no longer qualify to take part, if you do not follow study procedures (e.g., you do not abstain from alcohol prior to the follow-up visits or test positive for recreational drugs at the follow-up visits), or if it is in your best interest or the study's best interest to stop your participation. NIAAA may stop the study at any time.

What will happen if I am injured or become sick because I took part in this study?
If you are injured or become sick as a result of this study, any emergency treatment will be at your cost. Neither MRN nor UNM make a commitment to provide free medical care or money for injuries to participants in this study.

It is important for you to tell the Principal Investigator immediately if you have been injured or become sick because of taking part in this study. If you have any questions about these issues, or believe that you have been treated carelessly in the study, please contact the Office of the IRB at (505) 277-2644 for more information.

Refusal to Sign
If you choose not to sign this consent form, you will not be allowed to take part in the research study.

What if I have questions or complaints about this study?
If you have any questions, concerns or complaints at any time about the research study, Eric Claus, Ph.D., or his associates will be glad to answer them at 505-272-5028. If you would like to speak with someone other than the research team to obtain information or offer input, or if you have questions regarding your rights as a research participant, please contact the IRB. The IRB is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving people: UNM Office of the IRB, (505) 277-2644, irbmaincampus@unm.edu. Website: http://irb.unm.edu/

Consent
You are making a decision whether to participate in this study. Your signature below indicates that you read the information provided (or the information was read to you). By signing this consent form, you are not waiving any of your legal rights as a research participant.

OPTIONAL:
We would also like to request your permission to store all of the data that was collected in this study in The Mind Research Network Data Sharing Repository for other, future research. The stored data will include information such as your age and gender, as well as assessment data that were collected about you during the course of this study. It is possible that this information may remain linked to your name. It will be handled with the same care and confidentially as it is for the current study. Research done with information from the

data repository could lead to improved diagnostic and treatment interventions for illnesses and brain disorders. If published, results will be presented in summary form only and will not include your name or other identifying information. If MRN and/or the investigators develop intellectual property and/or commercialize products or services, directly or indirectly, based on the results of the research done with your data, there are no plans to provide you with any financial compensation.

You have my permission to store my data in the MRN Data Sharing Repository for future research. Please initial next to your choice below.
YES _____ Initials
NO _____ Initials

We would like to request your permission to contact you for participation in future studies at the Mind Research Network. If you agree, your contact information may be shared with other scientists at MRN.

You have my permission to contact me about participation in future research studies. Please initial next to your choice below.
YES _____ Initials
NO _____ Initials

Please read the sentence below and think about your choice. No matter what you decide to do, it will not affect your ability to participate in this study.

My DNA may be kept for future use in research. Please initial next to your choice below.

YES _____ Initials
NO _____ Initials

I have had an opportunity to ask questions and all questions have been answered to my satisfaction. By signing this consent form, I agree to participate in this study. A copy of this consent form will be provided to me.

_____ _____/_____
Name of Adult Participant (print) Signature of Adult Participant Date

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information in this consent form and freely agrees to participate.

_____ _____/ _____
Name of Research Team Member Signature of Research Team Member/Date