LIMIT Trial - Lidocaine with Intramuscular Injection of Benzathine Penicillin G for Treponema pallidum Treatment

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INFORMED CONSENT DOCUMENT

Project Title: LIMIT Trial - Lidocaine with Intramuscular Injection of Benzathine Pen G for Treponema pallidum Treatment

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This consent form describes the research study and helps you decide if you want to participate. It provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights and responsibilities as a research participant.

WHAT IS THE PURPOSE OF THIS STUDY?

This is a research study. We invite you to participate in this research study because you are an adult who has tested positive for syphilis and will be treated with Benzathine Penicillin G (BPG) intramuscular injection.

The purpose of this research study is to see if the addition of 0.5ml 1% lidocaine to prefilled BPG intramuscular injections reduces pain compared to the standard of care injection which will have 0.5ml normal saline solution added to the BPG as a placebo.

Benzathine Penicillin G is approved by the U.S. Food and Drug Administration to treat Treponema pallidum infections**.** However, the addition of 0.5ml 1% Lidocaine to prefilled syringes is considered investigational in this study.
Lidocaine is approved by the U.S. Food and Drug Administration to provide pain relief. However, the use of Lidocaine added to prefilled Benzathine Penicillin G syringes is considered investigational in this study.

Benzathine Penicillin G with 0.5ml 1% Lidocaine will be compared with a placebo of addition of normal saline to the prefilled syringe, which will represent standard of care and allow participants and clinicians to remain blinded to the results.

WHAT WILL HAPPEN DURING THIS STUDY?

1- If you have confirmed syphilis (RPR and treponemal test positive) and are receiving your first treatment injection of bicillin, you will be screened for participation in study. If you are willing to participate, trial team will be notified. (15-30 mins)

2- Trial team will assess for inclusion/exclusion criteria and ask if you would like to be part of clinical trial (5 min)
3- You will then be taken to an outpatient clinic room, be shown the study design form and consent form. Study design will be explained to you, including information on how you would be receiving the same treatment as normal but with one injection with 0.5 ml normal saline and one with 0.5 ml 1% lidocaine. You will then be asked if you have any questions and if you choose to consent, you will sign a physical consent form that will then be uploaded into your chart. (30-45 mins)
4- Trial staff will then obtain the two injections and administer them one in each gluteal muscle. You will then be left for 15 minutes, after which you will fill out a pain score 0-10 for each injection site at 10 minutes post injection (15-30 mins)
5- You will then be informed that you will receive an email survey (via RedCap) 24 hours from trial staff to answer the same pain scale questions at that time. Exit counseling will occur and then you will be free to go (15 mins)
6- Email will be sent from trial staff 24 hours after injection site to rate their pain from 0-10 at that time via online survey (RedCap), to ask if any other pain medication was used in the last 24 hours. You will fill this out as well as let us know if you have experienced any other symptoms/side effects. (5 min)

The study will all occur within the Washington University St. Louis Outpatient Infectious Diseases clinic.

You will be randomly assigned to receive one of the Lidocaine and Saline added to Benzathine penicillin G injection. This means that the study treatment you receive will be determined purely by chance, like flipping a coin. You will have a 100% chance of receiving any one of the study treatments as one injection will have saline and the other will have lidocaine, with it being randomized as to which buttocks the injection will be given. Neither you nor the research team will know which study treatment you are receiving in which injection site, but we will be able to get this information quickly if we need it to ensure your safety.
Each participant will receive one injection in each buttocks and then rate the pain at 10 minutes post injection and 24 hours post injection at each injection site, with the goal being to see if there is a different in the pain at each injection site, 10 minutes and 24 hours after injection. Pain will be rated from 0 (least pain) and 10 (most pain) on a continuous scale, and surveys will be filled asking your name and pain to be rated from 0-10, which will be filled on RedCap online survey. You will also be asked if you took any other pain medications in the last 24 hours and if you experienced any other symptoms/ side effects. You are free to skip any questions you would prefer not to answer.
With respect to past and present physical/mental health information, we will be collecting basic demographics including age, sex assigned at birth, gender identity, race/ethnicity, all de-identified, in order to increase the generalizability of the study results and to have adequate representation of the general public and to decrease confounding factors. The information that will be added to the participants medical record will not be different from that which normally is added with respect to treatment for syphilis, as this still falls in line with the standard treatment.
We plan to send the follow up survey via email 24 hours after injection and if you do not respond, a follow up email will be sent 48 hours after injection. If no response after that, you will be considered lost to follow up.

Identifying information may be removed from your data, so that the data cannot be connected it to

you. If this occurs, we may share your data with other researchers without asking you for additional consent.

HOW MANY PEOPLE WILL PARTICIPATE?

Approximately **48** people will take part in this study conducted by investigators at Washington University.

HOW LONG WILL I BE IN THIS STUDY?

If you agree to take part in this study, your involvement will last for 24-48 hours.
The length of time for one participant's participation is typically 24 hours but may go up to 48 hours if initial follow up email at 24 hours is left without response. The study involves 1 visit and 1 follow up email 24 hours after initial visit. The initial visit will take around 2 hours and the 24 hour follow up email/survey will take around 5-10 minutes to fill.

WHAT ARE THE RISKS OF THIS STUDY?

You may experience one or more of the risks indicated below from being in this study. In addition to these, there may be other unknown risks, or risks that we did not anticipate, associated with being in this study.

Risks are rare and mainly involve injection site pain, allergic reaction. Some risks described in this consent document, if severe, may cause death.

Likely / Common

Mild

- Pain at injection site (BPG)
- Headache(lidocaine)
- Transient pain(lidocaine)
- Edema(lidocaine)

Less Likely / Less Common

Mild

- Hypersensitivity Rash (BPG)
- Diarrhea (BPG)
- Agitation (lidocaine)
- Anxiety(lidocaine)
- Confusion(lidocaine)
- Dizziness(lidocaine)
- Lethargy(lidocaine)

- Tinnitus(lidocaine)

Rare

Life Threatening

- Hypersensitivity- anaphylaxis (BPG and Lidocaine)

Serious

- Neutropenia (BPG high doses)
- Hyperreflexia (BPG high doses)
- Myoclonus (BPG high doses)
- Seizure (BPG high doses)
- Acute interstitial nephritis (BPG high doses)
- Cardiac Arrhythmia (lidocaine)
- Hypotension (lidocaine)
- Seizure (lidocaine)
- Bronchospasm, dyspnea (lidocaine)

Mild

- Hyperkalemia (BPG)

Breach of Confidentiality

One risk of participating in this study is that confidential information about you may be accidentally disclosed. We will use our best efforts to keep the information about you secure. Please see the section in this consent form titled *"How will you keep my information confidential?"* for more information.

WHAT ARE THE BENEFITS OF THIS STUDY?

You may or may not benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because it may decrease the pain experienced by individuals being treated with BPG for syphilis infections.

WHAT OTHER TREATMENT OPTIONS ARE THERE?

Before you decide whether or not to be in this study, your doctor will discuss the other options that are available to you. Instead of being in this study, you could have standard treatment for syphilis including BPG without lidocaine.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

As part of this study you will receive tests and procedures that are similar to what you would receive during routine clinical care of your condition. Your health plan/insurance company will be billed for some or all of these costs, and you will be responsible for any co-pays and deductibles that are normally required by your health plan/insurance. Not all insurance plans cover the costs associated with being in

a study. Even if they do, you may be responsible for more out-of-pocket expenses, such as co-pays and deductibles, when there are more tests and procedures or more expensive tests and procedures involved in the study than if you were to receive routine clinical care outside the study.

If you wish to know whether there are more tests and procedures or more expensive tests and procedures in the study, you should ask your study doctor.

If you wish to know whether your insurance will pay, you should contact them directly, or speak with the study team about obtaining a financial pre-certification prior to enrolling in the study.

WILL I BE PAID FOR PARTICIPATING?

You will not be paid for being in this research study.

WHO IS FUNDING THIS STUDY?

The University and the research team are not receiving payment from other agencies, organizations, or companies to conduct this research study.

WHAT IF I AM INJURED AS A RESULT OF THIS STUDY?

Washington University investigators and staff will try to reduce, control, and treat any complications from this research. If you feel you are injured because of the study, please contact the investigator at **Joseph Cherabie 720-285-8096** and/or the Human Research Protection Office at 1-(800)-438-0445.

Decisions about whether payment for medical treatment for injuries relating to your participation in research will be made by Washington University**.** If you need to seek medical care for a research-related injury, please notify the investigator as soon as possible.

HOW WILL YOU KEEP MY INFORMATION CONFIDENTIAL?

Other people such as those listed below may become aware of your participation in this study and may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you. We will keep your participation in this research study confidential to the extent permitted by law.

- Government representatives (including the Office for Human Research Protections) to complete federal or state responsibilities
- The U.S. Food and Drug Administration
- Public health agencies to complete public health reporting requirements.
- Hospital or University representatives to complete Hospital or University responsibilities
- Information about your participation in this study may be documented in your health care records and will be available to anyone with access to your health care record, including your health

insurance company. This information may also be released as part of a release of information request.

- The last four digits of your social security number may be used in hospital or University systems to track billing information for research procedures.
- Washington University's Institutional Review Board (a committee that oversees the conduct of research involving human participants) and the Human Research Protection Office. The Institutional Review Board has reviewed and approved this study.

Any report or article that we write will not include information that can directly identify you. The journals that publish these reports or articles require that we share your information that was collected for this study with others to make sure the results of this study are correct and help develop new ideas for research. Your information will be shared in a way that cannot directly identify you.

To help protect your confidentiality, we will **be using our electronic medical record as well as communicating via secure email with surveys being filled on RedCap. That survey information will be de-identified and will be saved on a secure database ensuring confidentiality.**

Are there additional protections for my health information?

Protected Health Information (PHI) is health information that identifies you. PHI is protected by federal law under HIPAA (the Health Insurance Portability and Accountability Act). To take part in this research, you must give the research team permission to use and disclose (share) your PHI for the study as explained in this consent form. The research team will follow state and federal laws and may share your health information with the agencies and people listed under the previous section titled, "How will you keep my information confidential?".

Once your health information is shared with someone outside of the research team, it may no longer be protected by HIPAA.

The research team will only use and share your information as talked about in this form or as permitted or required by law. When possible, the research team will make sure information cannot be linked to you (de-identified). Once information is de-identified, it may be used and shared for other purposes not discussed in this consent form. If you have questions or concerns about your privacy and the use of your PHI, please contact the University's Privacy Officer at 866-747-4975.

Although you will not be allowed to see the study information, you may be given access to your health care records by contacting your health care provider.

If you decide not to sign this form, it will not affect

your treatment or the care given by your health provider.
your insurance payment or enrollment in any health plans.

any benefits to which you are entitled.
However, it will not be possible for you to take part in the study.

If you sign this form:

- You authorize the use of your PHI for this research
- This authorization does not expire.

You may later change your mind and not let the research team use or share your information (you may revoke your authorization).

- To revoke your authorization, complete the withdrawal letter found in the Participant section of the Human Research Protection Office website at hrpo.wustl.edu.
    - **If you revoke your authorization:**
        - ♣ The research team may only use and share information already collected for the study.
        - ♣ Your information may still be used and shared as necessary to maintain the integrity of the research, for example, to account for a participant's withdrawal from the research study or for safety reasons.
        - ♣ You will not be allowed to continue to participate in the study.

Can we contact you by email

We would like to contact you email for the purposes listed below. Some of these messages may contain health information that identifies you.

- **We will be asking about injection site pain rated 0-10, as well as adverse effects and any other pain medication use, 24 hours after BPG injection.**

Only the research team will have access to your email communications. We will only communicate in this method to send you the information listed above. If you have any questions, wish us to stop sending these messages or need to contact us for an urgent or emergent situation, please contact the research team member identified at the top of this document.

You should be aware that there are risks associated with sending your health information via **email.**

- Text messaging is not a secure communication method.
- There is always a risk that the message could be intercepted or sent to the wrong **email**. To avoid this, we will send a test message to ensure we have the correct **email address.**
- When using any computer you should be careful to protect your username and password. Make sure you log-out before getting up from the computer.
- If you share a home computer or cell phone with other family members, and do not want them to know you are participating in this study make sure you provide an email address that only you can access.
- Your employer will have access to any messages sent or received on any electronic devices used for work or through a work server.
- If you lose your phone, others may be able to access the messages that we send.

Do you agree to allow us to send your health information via email?

_____ **Yes** _____ **No**
Initials **Initials**

If you have a MyChart account we may use this as a way to communicate with you for the following purposes: Follow up if initial email is not responded to.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose not to take part at all. If you decide to be in this study, you may stop participating at any time. Any data that was collected as part of your participation in the study will remain as part of the study records and cannot be removed.

If you decide not to be in this study, or if you stop participating at any time, you won't be penalized or lose any benefits for which you otherwise qualify.

What if I decide to withdraw from the study?

You may withdraw by telling the study team you are no longer interested in participating in the study or you may send in a withdrawal letter. A sample withdrawal letter can be found in the Participant section of the Human Research Protection Office website at hrpo.wustl.edu.

If you decide to leave the study early, we will ask you to describe why you would like to withdraw including any side effects or other unintended consequences of the study.

Will I receive new information about the study while participating?

If we obtain any new information during this study that might affect your willingness to continue participating in the study, we'll promptly provide you with that information.

Can someone else end my participation in this study?

Under certain circumstances, the investigator might decide to end your participation in this research study earlier than planned. This might happen for no reason or because upon further review, you did not meet inclusion criteria or it would not be safe for you to continue based off past medical history.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact Joseph Cherabie 720-285-8096**.** If you experience a research-related injury, please contact:

Joseph Cherabie 720-285-8096.
If you have questions, concerns, or complaints about your rights as a research participant, please contact the Human Research Protection Office at 1-(800)-438-0445, or email hrpo@wustl.edu. General information about being a research participant can be found on the Human Research Protection Office web site, hrpo.wustl.edu. To offer input about your experiences as a research participant or to speak to someone other than the research staff, call the Human Research Protection Office at the number above.

This consent form is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by agreeing to participate in this study. As a participant you have rights and responsibilities as described in this document and including:

- To be given enough time before signing below to weigh the risks and potential benefits and decide if you want to participate without any pressure from the research team or others.
- To understand all of the information included in the document, have your questions answered, and receive an explanation of anything you do not understand.
- To follow the procedures described in this document and the instructions of the research team to the best of your ability unless you choose to stop your participation in the research study.
- To give the research team accurate and complete information.
- To tell the research team promptly about any problems you have related to your participation, or if you are unable to continue and wish to stop participating in the research study.

Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a signed and dated copy of this form.

Do not sign this form if today's date is after EXPIRATION DATE: 02/19/25.

_____ _____
(Signature of Participant) (Date)

_____
(Participant's name – printed)

Statement of Person Who Obtained Consent

The information in this document has been discussed with the participant or, where appropriate, with the participant's legally authorized representative. The participant has indicated that they understand the risks, benefits, and procedures involved with participation in this research study.

_____ _____

(Signature of Person who Obtained Consent) (Date)

_____

(Name of Person who Obtained Consent - printed)