Title of the Study: Does Stellate Ganglion Blockade (SGB) in Men Treated for Prostate Cancer Improve Hot Flashes? A Pilot Prospective Cohort Study

Informed Consent Form Version 1.2 09/07/2020

NCT03796195

# Permission to Take Part in a Human Research Study

***Do not sign this consent if today's date is later than the stated expiration date above.***

**Title of Research Study:** Does Stellate Ganglion Blockade (SGB) in Men Treated for Prostate Cancer Improve Hot Flashes? A Pilot Prospective Cohort Study

**Investigator:** David R. Walega, MD, MSCI

**Supported By:** This research is supported by the Department of Anesthesiology, Feinberg School of Medicine, Northwestern University

**Financial Interest Disclosure:** The following disclosure is made to give you an opportunity to decide if this relationship will affect your willingness to participate in this research study:

If your doctor is also the person responsible for this research study, please note that he is interested in both your clinical care and the conduct of this research study. You have the right to discuss this study with another person who is not part of the research team before deciding whether to participate in the research.

**Key Information:**

The first few pages of this document include a summary of this study to help you decide whether or not to participate. Detailed information is provided after the summary.

## Why am I being asked to take part in this research study?

We are asking you to take part in this research study because you are a patient with prostate cancer who experiencing bothersome hot flashes.

## What should I know about a research study?

- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you decide.

## Why is this research being done?

This study is being done to determine whether stellate ganglion block (SGB) with local anesthetic can reduce the number and severity of hot flashes in men with prostate cancer on ADT who have hot flashes. The stellate ganglion is a nerve located in the deep tissues on the front of the neck.

Hot flashes can have a significant impact on daily living, disrupt sleep, and lead to fatigue and irritability during the day. Hot flashes are the most common reason that women seek hormonal therapy. However, for some women this is not an option.

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We recently completed a study of SGB in women with natural or surgical menopause, in which we found a 52% decrease in moderate to very severe hot flashes in women who underwent a single SGB with bupivacaine, a local anesthetic, as compared to a 4% decrease in women in the control group who underwent an injection of saline. In this study, we would like to see if this same treatment that helps women could be helpful in men with prostate cancer who have hot flashes related to their cancer treatment.

The stellate ganglion injection (study procedure) has been in clinical use for more than 50 years in treating certain disease states and chronic pain. In the past, the study procedure has not been used to relieve hot flashes and the use of the study procedure with local anesthetic for the reduction of hot flashes is considered experimental.

## How long will the research last and what will I need to do?

We expect that you will be in this research study for approximately seven months.

We are studying the hot flashes that you report on a daily paper diary.

To study how hot flashes relate to other aspects of your life, like your quality of life, sleep, mood, you will be asked to complete questionnaires before the injection and weekly following the study procedure.

More detailed information about the study procedures can be found under the section **What happens if I say "Yes, I want to be in this research"?**

## Is there any way being in this study could be bad for me?

There are risks associated with participation in this study.

Stellate ganglion injection carries the potential very rare risk of infection at the injection site, bleeding or blood clot formation at the injection site, seizures (sudden, uncontrolled muscle spasms and loss of consciousness) related to the local anesthetic used for the injection procedure, and nerve injury which may present as temporary paresthesia (numbness) or weakness of the right arm or hand. All of these rare risks that are minimized with the use of fluoroscopic guidance (direct visualization with low dose x-ray).

Temporary voice hoarseness, temporary mild shortness of breath, temporary difficulty swallowing, and temporary changes in your blood pressure may occur after the stellate ganglion injection from the 0.5% bupivacaine numbing medicine. Possible reactions from the 0.5% bupivacaine used in this study last 6-8 hours. Minor soreness at the injection site could last 1-2 days.

There is a risk of allergic reaction to the dye used in the fluoroscopic guidance or the 1% lidocaine used to numb the skin before placement of the needle for the procedure.

The cumulative radiation exposure from the use of fluoroscopic guidance for the injection is considered small and is not likely to adversely affect you.

The questionnaires used in this study may make you feel emotionally uncomfortable.

There is a risk of loss of confidentiality.

In addition to these risks, this research may hurt you in ways that are unknown.

More detailed information about the risks of this study can be found under **"Is there any way being in this study could be bad for me? (Detailed Risks)"**

## Will being in this study help me anyway?

We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits include a reduction in the severity or frequency of hot flashes, an improvement in your overall feeling of well-being and quality of life. Of course, because individuals respond differently, no one can know in advance if it will be helpful in your particular case. Taking part in this study may help scientists to better understand treatments for hot flashes in men with prostate cancer.

## What happens if I do not want to be in this research?

Participation in research is completely voluntary. You decide whether or not to participate. If you choose to not participate, there will be no penalty to you or loss of benefit to which you are entitled.

Instead of being in this research study, there are alternative treatment options such as anti-depressants (selective serotonin reuptake inhibitors (SSRIs)) or membrane stabilizer/anti-seizure drugs (like Neurontin (gabapentin), Lyrica (pregabalin) to manage your hot flashes.

## Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to Dr. Walega or a member of the research team at 312-695-2500.They are available to speak to you M-F 8:00 am to 5:00 pm. If you have an urgent or serious issue that cannot wait, you may page Dr. Walega at 312-707-0328 if you need to speak to him.

This research has been reviewed and approved by an Institutional Review Board (IRB). You may contact them at (312) 503-9338 or irb@northwestern.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

## How many people will be studied?

We expect 18 people to be in this research study.

## What happens if I say "Yes, I want to be in this research"?

<u>Screening: Visit 1</u>

You will be asked to come to the Pain Medicine Center at 259 E. Erie Street, Suite 14-101 to sign and review the consent form. After we have reviewed the consent form with you and have answered your questions and you have signed the consent form, you will be interviewed to determine if you are a candidate for the study. We will ask you to provide information about yourself and your medical history.

<u>Recording of Hot Flashes</u>

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Before having the SGB procedure you will be asked to maintain a daily paper diary of your hot flashes, recording the number and severity using a scale that will be provided to you. You will be asked to do this for one week prior to the SGB procedure. You will also record any comments about the hot flashes you experience each day.

This visit will take approximately 1/2 hour.

You will be scheduled to receive the study procedure with Dr. David Walega in the Department of Anesthesiology at a separate visit.

Questionnaires

You will complete questionnaires about your everyday functioning, mood and sleep. You may refuse to answer any question that you don't wish to answer. If you become uncomfortable at any time and wish to stop, we will stop the tests. These forms are:

Hot Flash Related Daily Interference Scale (HFRDIS)
PROMIS SF4a (sleep)

The forms should take approximately 15-20 minutes to complete.

Visit 2

Stellate Ganglion Injection Procedure

You will be asked to go the Pain Medicine Center at 259 E. Erie Street, 14th floor for the SGB procedure. You will be interviewed to assess your health status and a brief physical exam will be performed by Dr. Walega. If you are determined to be a candidate for the procedure by Dr. Walega, you will receive the study procedure (stellate ganglion injection with 0.5% bupivacaine, a local anesthetic or numbing medication). There is no placebo or sham "fake" procedure as part of this study.

Before the injection procedure, a medication line will be inserted into a vein in your arm or hand. An oxygen monitor and blood pressure cuff will also be placed. You will be positioned on your back for this procedure. Your neck will be swabbed with disinfectant to clean the skin, and sterile equipment and technique will be used for the entire procedure. Your blood pressure will be checked every 5 minutes, and your pulse and oxygen level will be monitored continuously during the procedure. You will be asked to remain still for the procedure.

Low dose x-ray (fluoroscopy machine) will be used to help guide the injection at the region of the 6th bone in your neck (C6) on the right side of the neck. The injection site will be identified and 1% lidocaine (local anesthesia numbing medicine) will be injected to the skin overlying the target bone landmark to numb the injection site.

A small needle will be placed through the numbed skin on the front of the right side of the neck to make contact with the tissues over the C6 (neck) bone. The correct position of this needle will be confirmed by injecting a small amount of dye that can be seen by Dr. Walega under x-ray. Then 5 cc or about 1 teaspoon of 0.5% bupivacaine (local anesthesia numbing medicine) will be injected and the needle will be removed. A band aid will be placed at the needle placement site. You can remove the band aid later that day.

During the injection procedure, you will feel a sting or burn sensation on the skin where the numbing medicine is injected which lasts 5-10 seconds. You will feel the pressure of Dr. Walega's fingers on the right side of your neck while the needle is positioned for the stellate ganglion and this lasts about 60 seconds. You may feel a pressure or fullness sensation on the neck or throat when the medicine is injected and this sensation goes away after the needle is removed.

This procedure will take a few minutes. After the injection procedure is completed, you will be moved to the recovery room in the clinic and you will rest on a bed for about half an hour for observation. Your vital signs will be checked every 5 minutes. You will be offered juice or water after you have recovered. Prior to discharging you, Dr. Walega will evaluate you for side effects of the procedure.

You will be given written discharge instructions when you are ready to leave the clinic. You will be instructed to contact the study coordinator or Dr. Walega if you experience the following symptoms: swelling on the front of the right neck, abrupt weakness or progressive weakness in your legs, persistent numbness or pain at or near the injection site, rash, welts, or hives anywhere on your body, difficulty swallowing or pain with swallowing, chills or fever (101º F or greater), drainage or signs of infection at the injection site on your neck.

You can rest for the remainder of the day, or return to your normal activities like work. If you received sedation, you cannot drive a car, operate machinery, or make important legal decisions for the rest of the day. You will also be asked to have someone accompany you to your appointment. Even if you think you do not want sedation for your procedure, it is a good idea to bring someone with you in case you change your mind and decide to have sedation. You will have no other restrictions.

You will continue to complete your hot flash diary for the duration of the study. You will be asked to complete a weekly Hot Flash Related Daily Interference Scale (HFRDIS) questionnaire. The questionnaire takes 5 minutes to complete. At 1, 3, and 6 months after study procedure you will be asked to complete the following questionnaires in addition to providing your hot flash diaries. The questionnaires can be completed via email generated from REDcap (data collection site).

PROMIS SF4a (sleep)
Patient Global Impression of Change Score (PGIC)

The questionnaires take 15-20 minutes to complete. You can mail these or you may receive an email link that will allow you to complete these questionnaires electronically via email generated by REDCap (data collection server).

Your part in this study will last for approximately seven months and will involve 2 visits.

**Will I be told about new information that may affect my decision to participate?**
During the course of the study, you will be informed of any significant new findings (either good or bad), such as changes in the risks or benefits resulting from participation in the research or new alternatives to participation, that might cause you to change your mind about continuing in the study. If new information is provided to you, your consent to continue participating in this study will be re-obtained.

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## What are my responsibilities if I take part in this research?

If you take part in this research, you will be responsible to: complete your written hot flash diary for the duration of the study, follow the study doctor's pre-procedure instruction which will be given to you in writing.

## What happens if I say "Yes", but I change my mind later?

You can leave the research study at any time; it will not be held against you.

If you decide to leave the research, contact the research team so that we don't continue to call you or contact you for study visits and so we can pay you for your participation.

Choosing not to be in this study or to stop being in this study will not result in any penalty to you or loss of benefit to which you are entitled. Specifically, your choice not to be in this study will not negatively affect your right to any present or future medical treatment or your present or future employment

If you stop being in the research, already collected data may not be removed from the study database. You will be asked whether the investigator can collect data from your routine medical care. If you agree, this data will be handled the same as research data.

## Detailed Risks: Is there any way being in this study could be bad for me?

This research may hurt you in the following ways:

Stellate Ganglion Block with 0.5% bupivacaine local anesthetic (numbing medicine)

Stellate ganglion injection carries the potential very rare risk of infection at the injection site, bleeding or blood clot formation at the injection site, seizures (reversible, sudden, uncontrolled muscle spasms and loss of consciousness) and nerve injury which may present as temporary paresthesia (numbness) and/or weakness of the right arm.

All of these rare risks are minimized with the use of fluoroscopic guidance (visualization with a type of x-ray). Other complications related to the stellate ganglion injection that can occur are an allergic reaction to the dye used in the fluoroscopic guidance, the 1% lidocaine used to numb the skin before placement of the needle for the stellate ganglion procedure or the 0.5% bupivacaine used in the stellate ganglion injection. Temporary voice hoarseness, temporary mild shortness of breath, temporary difficulty swallowing, and temporary changes in your blood pressure may occur after the stellate ganglion injection from the 0.5% bupivacaine numbing medicine. Possible reactions from the 0.5% bupivacaine used in this study last 6-8 hours. Minor soreness at the injection site could last 1-2 days.

Risk of radiation from the x-ray

X –ray (fluoroscopy) will be used during this research study to guide placement of the needle during your injection procedure. The cumulative radiation exposure from these tests is considered small and is not likely to adversely affect you or your disease. Radiation risk is equal to what you would normally receive in a 24 hour daily exposure.

However, the effects of radiation add up over a lifetime. It is possible that having several of these X-rays may add to your risk of injury or disease. When deciding to enter this study, think

about your past and future contact with radiation. Examples of contact with radiation include x-rays or CT scans taken for any reason or radiation therapy for cancer treatment.

Questionnaires

Answering the questionnaires may make you feel emotionally uncomfortable. You might feel anxious, or experience emotional reactions to some of the questions we will be asking you. If the question bothers you you can move onto the next question.

Confidentiality Risks

This study involves the use of your identifiable, personal information and there is a chance that a loss of confidentiality could occur. The researchers have procedures in place to lessen the possibility of this happening. Certain measures are taken to protect all personal information and data, including keeping all data sheets under lock and key and entering data into a non-network database that requires a login ID and password made available only to immediate study personnel.
See the section titled: "What happens to the information collected for the research?".

Unknown Risks

In addition to these risks, this research may hurt you in ways that are unknown.

If you have experienced any of the above side effects or experienced an adverse event please contact the PI: David Walega at the Pain Center.

### *What do I need to know about reproductive health and/or sexual activity if I am in this study?*

The injection procedure does not have an effect on your reproductive health. There is no restriction to sexual activity for the injection procedure.

### Will it cost me anything to participate in this research study?

Taking part in this research study will not lead to any costs to you.

If you park in the hospital parking lot located on St. Clair Street, between Superior and Huron Streets, your parking ticket will be validated by the research staff and paid for up to six hours. This validation is only valid for this garage (also known as the Huron/St. Clair garage) and your ticket must be validated the day of your study visit. If you park in the Huron/St. Clair garage and do not get your parking ticket validated as described, the parking expenses will range from $12.50 for 20 minutes or less, up to $52.00 for 24 hours. You may enter the garage from either on Huron or Superior streets. Other parking garages in the area around the McGaw Medical Center may cost more, or less than this garage, but your parking ticket at these other locations will not be validated.

### Will being in this study help me in any way?

We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits include a reduction in the severity or frequency of hot flashes, an improvement in your overall feeling of well-being and ability to perform the functions of daily living impacted by hot flashes. Of course, because individuals respond differently, no one can know in advance if it will be helpful in your particular case.

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Taking part in this study may help scientists to better understand treatments for hot flashes in men with prostate cancer receiving treatment.

## What happens to the information collected for the research?

Efforts will be made to limit the use and disclosure of your personal information, including research study and medical records, to people who have a need to review this information. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the IRB and other representatives of this institution.

Study monitors, auditors, from the Institutional Review Board (IRB), the Northwestern University Office for Research Integrity, the US Office of Research Integrity (ORI), and the US Office for the Protection of Human Research Protections (OHRP), the US Food and Drug Administration (FDA) may be granted direct access to your medical records to conduct and oversee the research. By signing this document, you are authorizing this access. We may publish the results of this research. However, we will keep your name and other identifying information confidential.

A description of this clinical trial will be available at 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.

## Data Sharing

De-identified data from this study may be shared with the research community at large to advance science and health. We will remove or code any personal information that could identify you before files are shared with other researchers to ensure that, by current scientific standards and known methods, no one will be able to identify you from the information we share. Despite these measures, we cannot guarantee anonymity of your personal data.

## Can I be removed from the research without my OK?

The person in charge of the research study can remove you from the research study without your approval. Possible reasons for removal include the following: if it appears to be medically harmful to you, if you fail to follow directions for participating in the study, if it is later discovered that you do not meet the study eligibility requirements, at the discretion of the study doctor or, if the study is canceled.

We will tell you about any new information that may affect your health, welfare, or choice to stay in the research.

## What else do I need to know?

If you become ill or get injured as a result of this study (medications, devices or procedures), you should seek medical treatment through your doctor or treatment center of choice. You should promptly tell the study doctor about any illness or injury.

The hospital [university, researchers] will not pay for medical care required because of a bad outcome resulting from your participation in this research study. This does not keep you from seeking to be paid back for care required because of a bad outcome.

If you agree to take part in this research study, we will pay you $100.00 by check at study completion for your time and effort. The check will be mailed to your home.

**Permission to Take Part in a Human Research Study**
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The Accounting Services at Northwestern University will be given your name, address, and Social Security Number in order to issue a check for your study participation. Study payments are considered taxable income and reportable to the IRS. A Form 1099 will be sent to you if your total payments are $600 or more in a calendar year.

## HIPAA Authorization

We are committed to respect your privacy and to keep your personal information confidential. When choosing to take part in this study, you are giving us the permission to use your personal health information that includes health information in your medical records and information that can identify you. For example, personal health information may include your name, address, phone number or social security number. Your health information we may collect and use for this research includes:

- Results of physical examinations
- Medical history
- Lab tests, or certain health information indicating or relating to a particular condition as well diaries and questionnaires
- Records about study medication or drugs
- Records about study devices
- Billing information
- Substance Use Disorder information: current substance abuse is an exclusion to participate in this study.
- Mental Health information: from the questionnaires

All Information in a medical record

You have the right to inspect and copy the mental health and developmental disabilities records that will be collected as part of this study.

This consent expires on 09/30/2030. After this date, Northwestern University may not gather new information about you, use or disclose your personal health information collected in this study for any purpose other than the research study described in this consent unless Northwestern University obtains permission to do so from you. Illinois State Law permits use and disclosure of your mental health information only to the extent specified in this document.

During this study, you may be coming to a Northwestern Memorial Healthcare Corporation entity (for example, Northwestern Memorial Hospital, Prentice Women's Hospital) for research appointments or to get clinical services, such as lab tests, needed for the study. When that happens, you will be scheduled for these services through the NMHC computer system. When a clinical exam or lab is done by NMHC or one of its employees for the purpose of this research study, that information will be kept in both NMHC's clinical records and in the study records.

The following clinical providers may give the researchers information about you: all current and previous health care providers, including but not limited to the Shirley Ryan AbilityLab (SRALAB), Northwestern Medical Group (NMG), Northwestern Memorial Hospital (NMH), and Northwestern Lake Forest Hospital (NLFH).

Once we have the health information listed above, we may share some of this information with the following offices or entities outside of Northwestern University and its clinical partners (or affiliates): the Northwestern University Institutional Review Board Office and Office for

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Research Integrity; the US Office of Research Integrity; the US Office for Human Research Protections; the US Food and Drug Administration.

Any research information shared with outside entities will not contain your name, address, telephone or social security number or any other personal identifier unless disclosure of the identifier is necessary for review by such parties or is required by law or University policy [except that such information may be viewed by the Study sponsor and its partners or contractors at the Principal Investigator's office].

The following entities may receive your health information:

- Authorized members of the Northwestern University and the Shirley Ryan AbilityLab workforce, who may need to see your information, such as administrative staff members from the Office for Research, Office for Research Integrity and members of the Institutional Review Board.
- Clinical affiliates, including but not limited to the Shirley Ryan AbilityLab (SRALAB), Northwestern Medical Group (NMG), Northwestern Memorial Hospital (NMH), Northwestern Lake Forest Hospital (NLFH), and the Ann & Robert H. Lurie Children's Hospital of Chicago (Lurie Children's). Your participation in this clinical trial may be tracked in an electronic database and may be seen by investigators running other trials that you are enrolled in and by your healthcare providers.
- Clinical affiliates, including but not limited to Northwestern Medical Group (NMG), Northwestern Memorial Hospital (NMH), and Northwestern Lake Forest Hospital (NLFH), for purposes including, but not limited to, the affiliate's provision of care to you and/or the affiliate's scheduling of appointments and/or billing activities.
- Study monitors and auditors who make sure that the study is being done properly,
- Government agencies and public health authorities, such as the Food and Drug Administration (FDA) and the Department of Health and Human Services (DHHS).

Those persons who get your health information may not be required by Federal privacy laws (such as the Privacy Rule) to protect it. Some of those persons may be able to share your information with others without your separate permission.

Also, Federal law/42 CFR Part 2 prohibits unauthorized disclosure of these records.

The results of this study may also be used for teaching, publications, or for presentation at scientific meetings.

Unless you revoke your consent, it will expire 09/30/2030.

The results of this study may also be used for teaching, publications, or for presentation at scientific meetings.

Although you may revoke consent to participation in this research at any time and in any format, you must revoke authorization for use or disclosure of your health information in writing. To revoke your authorization, write to:

PI's Name: David R. Walega, MD, MSCI
Institution: Northwestern University, Feinberg School of Medicine
Department: Department of Anesthesiology

## Permission to Take Part in a Human Research Study

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Address: 251 E. Huron Street, F5-70, Chicago, Illinois, 60611

You do not have to authorize the use or disclosure of your health information; however, you will not be allowed to take part in this research study. If you do not authorize the use or disclosure of your health information, it will not affect your treatment by health care providers, or the payment or enrollment in any health plans, or affect your eligibility for benefits.

A copy of this signed consent document, information about this study, and the results of any test or procedure done may be included in your medical records and may be seen by your insurance company.

**Your signature documents your permission to take part in this research.**

You will be provided a copy of this signed document.

_____ _____
Signature of Participant Date

_____
Printed Name of Participant

_____ _____
Signature of Person Obtaining Consent Date

_____
Printed Name of Person Obtaining Consent

My signature below documents that the information in the consent document and any other written and information was accurately explained to, and apparently understood by, the participant, and that consent was freely given by the participant.

_____ _____
Signature of Witness to Consent Process Date

_____
Printed Name of Person Witnessing Consent Process