

Feasibility Testing of Transpelvic Magnetic
Stimulation as a Novel Intervention to Improve
Urogenital Function in Prostate Cancer
Survivors

NCT04488068

September 14, 2020

Human Protocol (Version 1.2)

General Information

***Please enter the full title of your study::**

Feasibility Testing of Transpelvic Magnetic Stimulation as a Novel Intervention to Improve Urogenital Function in Prostate Cancer Survivors

***Please enter the Study Number you would like to use to reference the study:**

Magnetic Stimulation - Human
* This field allows you to enter an abbreviated version of the Study Title to quickly identify this study.

Add departments

and Specify Research Location:

Is Primary?	Department Name
<input checked="" type="radio"/>	VASDHS - VASDHS

Assign key study personnel(KSP) access to the study

***Please add a Principal Investigator for the study:**

Rajasekaran, Mahadevan, PhD

3.1 If applicable, please select the Research Staff personnel

A) Additional Investigators

Albo, Michael E., MD
Co-Investigator
Bhargava, Valmik, PhD
Co-Investigator
Chang, Eric Y., MD
Co-Investigator
Sakamoto, Kyoko, MD
Co-Investigator

B) Research Support Staff

Cano Sanchez, Christopher
Study Coordinator
Sorkhi, Samuel
Study Coordinator

***Please add a Study Contact**

Bhargava, Valmik, PhD
Rajasekaran, Mahadevan, PhD

The Study Contact(s) will receive all important system notifications along with the Principal Investigator. (e.g. The project contact(s) are typically either the Study Coordinator or the Principal Investigator themselves).

**VASDHS IRB
Human Subjects Protocol
v20190121**

Section 1 - Preliminaries

Principal Investigator:

Mahadevan Rajasekaran, PhD

Protocol Title:

Feasibility Testing of Transpelvic Magnetic Stimulation as a Novel Intervention to Improve Urogenital Function in Prostate Cancer Survivors

IRB Protocol Number:

H200110

Protocol Nickname:

Magnetic Stimulation - Human

Form Template Version:

v20150115

Date Prepared:

08/03/2020

Please be advised that this protocol application form has changed as a result of the 2018 Common Rule. There are new questions and sections, and you may be required to provide additional information to previous sections.

1a) Is this study considered human research?

- ☒ Yes
☐ No
☐ I don't know

1b) Please select:

- ☐ This is an application for a NEW human subject research protocol
☒ This is a revision of an existing protocol

Was this study initially approved prior to January 21, 2019?

- ☒ Yes ☐ No

Were you instructed to convert to the 2018 Common Rule Requirements?

- ☒ Yes ☐ No

Section 2 - Research Subjects

2a) What is the total planned number of VA-consented subjects?

Include the total number of subjects who will prospectively agree to participate in the study (e.g., documented consent, oral consent, or other).

20

2b) What is the total number of VA subjects who WILL NOT be consented?

Include the total number of subjects that will be included without consent (e.g., chart review). *Note: Data about people are still considered "human subjects" by the IRB, so even if you do not intend to contact the patients whose charts you will review, you still should enter the number of charts as your "planned subjects."*

0

Section 2.1 Consented Subject Groups

2.1) For each of the subject categories listed below, indicate whether or not these subject groups will participate in the study:

2.1a) Children under the age of 18

Note: If neonates or children will be involved in this study, certification by the Medical Center Director will be required. Only minimal risk research may be performed with children. Only non-invasive monitoring and/or prospective observational and retrospective record review studies that are minimal risk can be conducted in VA involving neonates.

☐ Yes ☒ No

2.1b) Pregnant women

☐ Yes ☒ No

2.1c) Individuals with cognitive/decisional impairment

☐ Yes ☒ No

2.1d) Non-English-speaking individuals

☐ Yes ☒ No

2.1e) Prisoners of War (explicitly targeting this group)

☐ Yes ☒ No

2.1f) Non-Veterans (Note: Justification for inclusion of non-Veterans will be required)

☐ Yes ☒ No

2.1g) Incarcerated individuals (Note: VA CRADO approval will be required)

☐ Yes ☒ No

2.1h) VA employees - including VA paid, IPA, or WOC (Note: Union review and authorization may be required)

☐ Yes ☒ No

2.1i) Students of the institution (e.g., resident trainees) or of the investigator

☐ Yes ☒ No

2.1j) Patients with cancer (or high cancer risk) [explicitly targeting this group]

☒ Yes ☐ No

Section 3 - Study Features (these items default to "No" for convenience)

3) This section consists of several Yes/No questions addressing protocol characteristics. Click on *Save and Continue*.

Section 3.1 Protocol Basics

Select all that apply

3.1a) The research **intends to change** the participant.

☒ Yes ☐ No

3.1b) **Interactions** with living participants to collect data or specimens with no intent to change them.

☐ Yes ☒ No

3.1c) This is a study that **never** has any **subject contact and does not collect subject identifiers**

☐ Yes ☒ No

3.1d) This is a **chart review** study involving retrospective or prospective medical records.

☐ Yes ☒ No

3.1e) This is a **multi-site** study occurring in-part or in-full at other locations.

☐ Yes ☒ No

3.1f) There is an **international** component to this research. *International research includes sending or receiving human derived data or specimens (identifiable, limited data set, coded, or deidentified) to or from an international source. International research does not include studies in which VA is only one of multiple participating sites where the overall study-wide PI is not a VA investigator.*

☐ Yes ☒ No

3.1g) This study includes **off-station activity** (not including VA-leased space or CBOC clinics) conducted under VASDHS IRB approval. *Note: this does not include research conducted by a collaborator at their home institution under their institutional approval.*

☐ Yes ☒ No

3.1h) VA subjects will **participate** in part or in full **at other locations** (not including VA-leased space or clinics) under VASDHS IRB approval. *Note: if this study involves remote participation of subjects, please indicate "no" and describe their remote participation in section 9 of the application. This question is intended to understand whether participants must physically go to a non-VA location to participate in this VA research study.*

☐ Yes ☒ No

Section 3.2 Specimen Use and Data Repository

Indicate whether or not each of the following applies to this protocol

3.2a) Involves specimens that are left over from pathological or diagnostic testing (**non-research specimens**)

☐ Yes ☒ No

3.2b) Involves **specimens collected for research purposes only**

☐ Yes ☒ No

3.2c) This study includes **specimen banking** (specimens are retained for use outside of the purposes of this protocol)

☐ Yes ☒ No

3.2d) The study involves **DNA** genotyping or other **genetic analysis**

☐ Yes ☒ No

3.2e) Biological **specimens/material** will be sent outside of the VA.

☐ Yes ☒ No

3.2f) A **data repository** is maintained (data are retained after completion of the protocol for other uses, **IMPORTANT**: see ? before checking "yes")

☐ Yes ☒ No

3.2g) **Data will be shared outside** of the VA (identifiable, coded, limited data set, or deidentified)

☐ Yes ☒ No

Section 3.3 Treatment and Clinical Trials

Indicate whether or not each of the following applies to this protocol

3.3a) Includes a **treatment** component (a research treatment)

☒ Yes ☐ No

3.3b) Study is a **clinical trial**. *Note: A clinical trial is a research study in which one or more human subjects are prospectively assigned to one or more interventions (which may include placebo or other control) to evaluate the effects of the interventions on biomedical or behavioral health-related outcomes.*

☒ Yes ☐ No

3.3c) Has a data safety monitoring board (**DSMB**) or data safety monitoring committee.

☐ Yes ☒ No

3.3d) Has a **data safety monitoring plan** (but not a DSMB) (this is not the data security plan, it is a safety plan).

☒ Yes ☐ No

Section 3.4 Drugs and Devices

Indicate whether or not each of the following applies to this protocol

3.4a) **Drugs** that require **FDA** action such as an Investigational New Drug (IND) approval or exemption or 510 (k) approval.

☐ Yes ☒ No

3.4b) Other drugs, supplement, etc. that **do not require FDA** action for inclusion in the study.

☐ Yes ☒ No

3.4c) Medical **devices requiring FDA** IDE approval or waiver

☒ Yes ☐ No

3.4d) **Other** medical **devices**

☒ Yes ☐ No

Section 3.5 Risk and Hazards

Indicate whether or not each of the following applies to this protocol

3.5a) Study places subjects at **greater than minimal risk** (do not include risks that are due to standard care)

☐ Yes ☒ No

3.5b) Human subjects are exposed to **radioisotopes** (do not include standard care).

☐ Yes ☒ No

3.5c) Subjects have other **radiation exposure** (e.g., x-rays) (do not include standard clinical use).

☐ Yes ☒ No

3.5d) Target population has psychiatric diagnosis, behavioral complaint, or chronic pain.

☐ Yes ☒ No

Section 3.6 Clinical Facilities and Standard Care

Indicate whether or not each of the following applies to this protocol

3.6a) Study **uses VA clinical services** (e.g., adds required tests run in the VA lab for study purposes; research procedures concurrent with clinical care)

☒ Yes ☐ No

3.6b) Includes procedures or drugs that will be considered **part of standard care**.

☐ Yes ☒ No

3.6c) Involves **lab tests done for research** purposes.

☐ Yes ☒ No

Section 3.7 Subject Expenses and Compensation

Indicate whether or not each of the following applies to this protocol

3.7a) There may be expense or added **costs to the subject** or the subject's insurance.

☐ Yes ☒ No

3.7b) This is a **qualifying cancer treatment trial** and subjects may be billed for study drugs or procedures.

☐ Yes ☒ No

3.7c) This is a cancer treatment trial but **subjects will not be billed** for study drugs or procedures.

☐ Yes ☒ No

3.7d) Subjects will be **compensated** (either in cash or other means such as a gift certificate).

☒ Yes ☐ No

Section 3.8 Subject Activities

Indicate whether or not each of the following applies to this protocol

3.8a) Involves **surveys or questionnaires** completed by subjects

☒ Yes ☐ No

3.8b) Includes the use of **recruitment materials** such as flyers, advertisements, or letters

☐ Yes ☒ No

3.8c) Involves facial **photographs** or audio or video **recordings** of **patients**

☐ Yes ☒ No

Section 3.9 Sponsors and Collaboration

Indicate whether or not each of the following applies to this protocol

3.9a) This research is a funded research project (**commercial (industry) sponsor, NIH, VA, other**).

☒ Yes ☐ No

3.9b) Other **commercial (industry) non-financial support** is provided (e.g., drugs or supplies).

☐ Yes ☒ No

3.9d) The protocol has **Department of Defense** involvement (e.g., subjects or funding).

☐ Yes ☒ No

3.9c) The PI or other study staff member has a financial interest or other **real or potential conflict** related to this study.

☐ Yes ☒ No

3.9e) This study involves **collaborative** research activities (research conducted at other institutions under the authorities or approvals of the other institution/s). *Note: this may include other VA and/or non-VA institutions, but does not include off-site VA research.*

☐ Yes ☒ No

Section 4 - Estimated Duration

4) What is the estimated duration of the entire study? (From IRB approval to IRB closure)

3 years

Section 5 - Lay Language Summary

5) Provide a summary or synopsis of the proposed study using non-technical language (not more than 1 paragraph)

The overall purpose of this project is to improve the quality of life of prostate cancer survivors. Prostate cancer is most common in men over 50 years. With early diagnosis, patients can pursue potentially curative interventions that include surgical procedures. These surgical treatments lead to sexual dysfunction and leakage of urine. Although it is recognized that bladder control and sexual functions are important issues affecting quality of life, there has been only limited research into methods to prevent these forms of dysfunctions in cancer survivors. We are proposing a new preventive strategy using magnetic stimulation to strengthen the muscles that are responsible for maintaining these functions.

Section 6 - Specific Aims

6) Provide a statement of specific aims and hypotheses that serve as the basis for this protocol. Emphasize those aspects that justify the use of human subjects.

1) To show feasibility of recruitment of prostate cancer survivors, acceptability of transpelvic

magnetic stimulation (TPMS) intervention and retention of this Veteran population.

2) To test the feasibility of administering symptom scores in this population to detect severity and early recovery of functional impairment.

3) To test the feasibility of diagnostic imaging to establish: penile/pelvic floor muscle (PFM) blood flow, PFM anatomical and morphological changes before surgery, immediately after surgery, and after TPMS interventions.

Section 7 - Background and Significance

7) Provide a succinct discussion of relevant background information to justify performing the proposed study.

Literature suggests that prostate cancer is the most common type of cancer in men over 50 years old, with an estimated 218,000 new cases each year. This cancer's incidence is especially prevalent (29%) among VA patients¹³. Surgical therapy for prostate cancer is a significant risk factor for urogenital complications which dramatically affect the quality of life for male Veterans, such as erectile dysfunction (ED), or the inability to initiate or maintain adequate erection for intercourse, and urinary incontinence 20-80% of these men will never regain normal erectile function and 31% will have urinary incontinence. Transpelvic magnetic stimulation (TPMS) for Urogenital and Pelvic Floor Disorders: Recently, TPMS therapy has been recognized as beneficial in treating nerve and muscle injuries. TPMS acts by strong pulsing magnetic fields that depolarize neural elements, resulting in improved muscle contraction. Repetitive contraction and relaxation of normal skeletal muscle results in increased muscle strength, endurance, and circulation. Previous studies showed beneficial effects of TPMS in UI in females. However, these studies were inconclusive. Apparently, these clinical studies attempted to reverse the established neuropathy and muscle dysfunction in symptomatic patients. Our proposed studies will evaluate the preventive potential of TPMS in acute neuropraxia related penile and sphincter muscle dysfunction. Recent reports showing efficacy of TPMS for skeletal muscle regeneration after surgical trauma clearly supports our claim. TPMS does not cause adverse effects but improves muscle function by minimizing post-injury inflammation, atrophy and scar formation. Based on published reports and taking advantage of muscle regeneration potential, we propose TPMS after surgery (as acceptable to the urologic surgeon) to enable systematic evaluation of its potential to prevent muscle dysfunction, i.e., immediate muscle recovery prior to fibrosis onset (never attempted before). Furthermore, TPMS treatment will lead to muscle strengthening. In addition, low intensity (5-10% amplitude) TPMS improves blood flow as shown in our laboratory (AUA 2018 oral presentation by Kim, et al- TRANSPELVIC MAGNETIC STIMULATION (TPMS) AS A NOVEL THERAPY TO ENHANCE PENILE MICRO AND MACRO CIRCULATION, J Urology, Vol. 199, No. 4S, Supplement, Saturday, May 19, 2018), and higher intensity (30-50% amplitude- based on the amplitude that results in patient feeling the muscle activity) helps muscle regeneration and function by minimizing post-injury inflammation, atrophy and scar formation. Based on these observations, we hypothesize that TPMS: (a) will prevent pelvic floor muscle atrophy and result in improved strength and (b) will decrease muscle fibrosis by improving penile and pelvic muscles blood flow leading to accelerated recovery after injury. TPMS has been employed as a nonsurgical intervention for stress UI in females since 1998. For treatment with TPMS, an embedded magnetic coil positioned on the chair generates pulsed electromagnetic fields that can penetrate into the pelvic floor muscles, leading to nerve stimulation and muscle contractions. Pelvic floor muscle blood flow can be non-invasively measured simultaneously using Doppler probe placed on the penile skin as is done routinely for clinical diagnosis. Pelvic floor muscle changes can be non-invasively measured by MR imaging. The proposed mechanism is to increase pelvic muscle strength and endurance through repetitive contractions. Proposed TPMS may result in increased urethral pressure and may strengthen muscles to prevent venous leak. Non-invasive TPMS has several advantages and has never been tried in post-prostatectomy patients.

Recently, application of neuromodulation using **repetitive magnetic stimulation** (rMS) has shown to be a safe, effective, and preferred approach of treatment for muscular and neurological injuries of several conditions, including urinary incontinence^{1,2} as it is non-invasive and relatively pain free. In addition, rMS displays potential to improve blood flow³, muscle regeneration and function by minimizing post-injury inflammation, atrophy and scar formation⁴.

We plan to use MagVenture R30 device and associated coils/paddles for which we are attaching 510Ks, users manual and brochures. In addition, please see online link: <https://www.magventure.com/en-gb/Products/MagPro-magnetic-stimulators/MagPro-R30> for more details.

All parameters are within the FDA approved range for pulse frequency, amplitude and duration. Magnetic stimulation device MagVenture's R30 (FDA approved for peripheral stimulation) that targets pelvic floor muscles will be used. We propose 10 Hz (for blood flow stimulation) and 30

Hz (for pelvic muscle strengthening), in an 8 seconds on- 4 seconds off pulsing manner TPMS that encompass previously employed range of frequencies in humans for pelvic floor stimulation (based on published methodology -Lim et al, J Urol 197:1302, 2017, attached). Number of trains will be about 50. no of pulses in train would be about 240. Each cycle will be of total 20 minutes duration, followed by 20 min of coil cooling period before the second cycle. Based on our preliminary studies in 2 subjects for about 8 weeks, this protocol was well tolerated. Both subjects felt the sensations at the high frequency 30 Hz. In these preliminary studies performed in two cancer survivors using a previously approved protocol, we observed a significant improvement in continence function (number of pads used) after 4 -6 weeks of TPMS.

1. Almeida FG, Bruschini H, Srougi M. Urodynamic and clinical evaluation of 91 female patients with urinary incontinence treated with perineal magnetic stimulation: 1-year followup. J Urol 2004;171:1571-4; discussion 4-5.
2. Lim R, Liong ML, Leong WS, et al. Pulsed Magnetic Stimulation for Stress Urinary Incontinence: 1-Year Followup Results. J Urol 2017;197:1302-8.
3. Liu P, Gao J, Pan S, et al. Effects of High-Frequency Repetitive Transcranial Magnetic Stimulation on Cerebral Hemodynamics in Patients with Disorders of Consciousness: A Sham-Controlled Study. Eur Neurol 2016;76:1-7.
4. Stolting MN, Arnold AS, Haralampieva D, et al. Magnetic stimulation supports muscle and nerve regeneration after trauma in mice. Muscle Nerve 2016;53:598-607.

Section 9 - Design and Methods

9) Describe the research design and the procedures to be used to accomplish the specific aims of the project. Provide a precise description of the planned data collection (include what systems or databases will be used/accessed to gather data), analysis and interpretation. For chart review studies, include the timeframe of collection. Address sample size, inclusion of women and minorities. Define in clear terms exactly what will be done to the human subjects.

This is a previously approved protocol-*H180085- "Development of a Novel Method to Strengthen Pelvic Floor Muscles Using Magnetic Stimulation"* with some minor modifications. TPMS will be performed at the Urology Suite, SCI section, I floor of the main hospital.

Our specific aims are:

- 1) To show feasibility of recruitment of prostate cancer survivors, acceptability of transpelvic magnetic stimulation (TPMS) intervention and retention of this Veteran population.
- 2) To test the feasibility of administering symptom scores in this population to detect severity and early recovery of functional impairment.
- 3) To test the feasibility of diagnostic imaging to establish: penile/pelvic floor muscle (PFM) blood flow, PFM anatomical and morphological changes before surgery, immediately after surgery, and after TPMS interventions.

Patient Recruitment: Our co-investigator, Dr Sakamoto will recruit patients from her urology clinic men over 50 years old who are enrolled for prostate surgery (n=20). After recruitment, 20 male patients will be assigned 1:1 to either age-matched control (G1; sham TPMS) or age-matched intervention (G2; TPMS) groups using computer-generated randomization, and baseline parameters (continence, sexual functions-using standardized questionnaires (please see attachments for reference) , PRM, ICM and penile morphology- by MRI, blood flow- using laser Doppler measurement) will be established. All patients will be instructed (Dr. KS) to perform standard of care pelvic floor exercise for the duration of the study. Patients will undergo three month TPMS treatment every week (2-visits per week from 0- 12 weeks as shown in Figure) starting when she feels the patient is ready for this treatment (after catheter removal). Patients will be evaluated (symptom score, MRI and blood flow) at baseline and at the end of the study (timeline attached). All enrolled patients will undergo TPMS treatment in addition to standard clinical- pelvic floor exercise. The study will be conducted after removal of the in dwelling catheter on patients who: had robotic assisted laparoscopic radical prostatectomy and have no evidence of metastasis and postoperative PSA < 0.2. The TPMS operator will not be blinded but those analyzing the IIEF, IQIC scores, and evaluating Doppler blood flow and MRI findings will be blinded to the assignment.

Impact of COVID-19 Pandemic: Due to on-going COVID-19 pandemic, proposed timeline may be impacted due to the restrictions on human research. The scheduling for this research study will be based on availability of SCI suite for exclusive research study use when there are no other patients at that time. Research study patient will be the only patient in the suite at that time of the research study. All facility mandated sanitization and social distancing protocols will be strictly implemented and followed.

TPMS Treatment: Magnetic stimulation device MagVenture's R30 (FDA approved for peripheral stimulation) that targets pelvic floor muscles will be used. We propose 10 Hz (for blood flow stimulation) and 30 Hz (for pelvic muscle strengthening), in an 8 seconds on- 4 seconds off

pulsing manner TPMS that encompass previously employed range of frequencies in humans for pelvic floor stimulation (based on published methodology -Lim et al, J Urol 197:1302, 2017, attached). Number of trains will be about 50. no of pulses in train would be about 240. Each cycle will be of total 20 minutes duration, followed by 20 min of coil cooling period before the second cycle. Based on our preliminary studies in 2 subjects for about 8 weeks, this protocol was well tolerated. Both subjects felt the sensations at the high frequency 30 Hz. Same TPMS device will be used for the control (G1: sham) group, but with a sham magnetic coil. Sham coil is designed to provide <5% energy during sham TPMS. The treatment regimen will involve two 20-minute sessions/visit and 2 -visits per week as follows: Weeks: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 (final monitoring at 24 weeks). TPMS will be administered by a trained clinical coordinator under the supervision of an urologist. The coordinator will not be involved in subject's assessment. We will apply first low amplitude (5%) to improve blood flow followed by high amplitude (30-50 %) TPMS, to strengthen muscles. Symptom scoring using questionnaires and blood flow (Doppler) will be performed at: baseline (before starting TPMS), and at weeks 4,8, 13, 24 after starting TPMS as shown in the attached figure: IRB Methods: Timeline. At the initial visit, subjects will receive education about TPMS and anatomy and the role of TPMS in increasing pelvic blood flow and muscle strength. This protocol will allow us to quantify the direct beneficial effect of TPMS on muscle strengthening. Patients will also get standard clinical care and training for pelvic floor exercise.

Chair & Parameters Used: The coil will be placed on a chair manufactured by MagVenture with additional sponge to make the coil comfortable to sit on. This coil will be energized to provide magnetic stimulation at the identified amplitude, frequency and duration. The magnetic field generated during stimulation will subsequently stimulate the tissue in its field.

Data Analysis & Interpretation:

Feasibility Outcomes: We will estimate: 1) Numbers of potentially eligible patients, number invited, number attending a pre-operative assessment clinic and consent rates (target recruitment is 24 or 3 participants per month over an initial 8-month recruitment period). 2) Patient concerns about the proposed therapy sessions/week and study duration. 3) Feasibility of recruiting in other clinics in which staff are interested in participating in a future main trial. 4) Retention, acceptability rates including response to treatment, questionnaires and imaging. 5) Intervention fidelity and adherence using study coordinator-completed case responses. 6) Determining the sexual function and continence improvement by assessing and comparing sensitivity to change. 7) Participant satisfaction with the interventions on a rating (Likert) scale. 8) Participant confidence to undergo a longer duration TPMS study. 9) Identification of barriers and enablers to adherence. 10) Establishment of outcome measures that best reflects the participants' rehabilitation goals.

Data Analysis & Interpretation: We will analyze qualitative interview data using atlas.ti, qualitative data analysis software, and the quantitative data using the SPSS version 24. We will start by coding, a process in which quotes are marked and labeled. The labeled quotes are then sorted and grouped, so that categories, then concepts, then themes can be developed. As is often standard practice for qualitative data analysis, analysis will be concurrent with data acquisition. Quantitative data will be examined initially for missing values. The primary aims of our data analytic strategy will be directed toward the adherence, retention and any guidance to inform modification of our method. We will focus our analyses on a feasibility of conducting a larger study and report our findings with this limitation in mind. Our goal is to collect important data regarding our method, our ability to implement recruitment strategies, and the feasibility of the treatment and measurements. Information derived from our research will lead to better-designed full-scale studies and informed decisions regarding whether it is worthwhile to commit additional resources to future treatment development. For quantitative data, descriptive statistics will be used to summarize the variables as well as detect outliers and data entry errors. When applicable, normality of the distribution will be examined for outcome variables. Chi-squared and Analysis of Variance will be used to assess the effectiveness of the randomization procedures by comparing participants in each treatment condition on baseline variables. Due to our small sample size our statistical analytical finding will be interpreted with caution. Other preliminary analyses will include evaluation of patterns of missing data, dropout rates, distributional properties of variables, and correlations among measures. Although there are important limitations associated with the analysis of our data, we do propose to conduct limited statistical analyses. First, keeping in mind the theoretical and practical issues reviewed above, all analyses will be considered preliminary. We will calculate an estimated effect size for our primary outcome, though it will be interpreted with caution, and in the context of the 95% confidence interval that surrounds it. It will also be interpreted within the context of other important information such as the clinical significance of study findings, and existing data from prior relevant research studies. For aims 2-3, All potential covariates (e.g., age, duration of cancer) will be summarized with descriptive statistics and graphs to determine whether a continuous, categorical, or interval representation is most appropriate. Second, effect of any systematic differences between dropouts and completers will be explored by including the variable of concern to the model as a covariate. Third, any comparison can be adjusted for subject-specific characteristics (e.g., covariates found in initial analyses). Furthermore, group by time interaction will be included in all models. For Aim 2-3, descriptive statistics and exploratory graphing such as frequencies, means, standard deviations, box and whisker plots, stem and leaf diagrams, and scatter plots will be used

to assess normality of the data. If necessary, the continuous outcome data will be transformed appropriately. Prior experience leads us to expect that for all variables, the distributions will be skewed and the variances will not be homogeneous. Similarly, potential covariates will be summarized with descriptive statistics and graphs to determine whether a continuous, categorical or an interval representation is the most appropriate approach. Missing data will be examined to assess randomness. Analysis of variance will be used to test our hypothesis. We will adjust p-values for multiple testing using a Bonferroni correction. Data will be analyzed using a Mixed Effect Model. This method allows the inclusion of subjects with missing data or those who terminated early without relying on data imputation procedures. Denominator degrees of freedom will be calculated using the Kenward-Roger small sample correction. Data will be analyzed from all randomized subjects for whom we have a baseline assessment and at least one post-baseline evaluation. Effect of these mediator variables will be tested using the same mixed model. To test for mediation effect, we will utilize the analytic strategy. The multiple-mediation model includes a multiple-path mediating effect through both mediators which allows one mediator to causally affect the other. We will conduct a Sobel test to check for significant mediation. Next, we will use the formula provided by MacKinnon to determine the percentage of the intervention condition to primary outcome path that was accounted for by change in our mediator. Based on our ongoing studies, we expect a dropout rate of <10% after baseline assessment. Primary outcomes will be tested using an intent-to-treat framework. The data will be analyzed by a "Mixed Effect Model." As we mentioned above, due to our small sample size our statistical analytical finding will be interpreted with caution.

Possible Risks: Based on available literature (see references in section 7) it is unlikely that TPMS will result in any other complications suggested by the reviewer.

Abbreviations used in the figure/text: LSCI- Laser speckle contrast imaging; PW - Pad weight, RMS- Repetitive magnetic stimulation, TPMS- Transpelvic pelvic magnetic stimulation, UI - Urinary incontinence, UTE- Ultrashort echo time, UPP- Urethral pressure profile, LPP- Leak point pressure, HDM- High definition manometry, DTI- Diffusion tensor imaging and UTI-Urinary tract infections.

Section 9.4 Devices

9.4) For each research device, state the status of the device, the PI's determination as to whether the device is a significant or non-significant risk device, and provide justification for this determination. A copy of determinations from the FDA should be attached. - Also, for investigational devices describe how and by whom the device will be received, stored, secured and dispensed.

Magnetic Stimulation device is a device that is FDA approved for both peripheral and CNS stimulation. The FDA approved applications for this specific model Magpro R30 model is to treat depression. The proposed application i.e. improving blood flow and strengthening pelvic muscles in post-prostatectomy men is an off-label use. This device generates magnetic pulses whose amplitude and frequency can be controlled. The device is non-invasive and has been shown to be safe with no side effects. When a muscle is stimulated it can cause slight tingling. It is commercially available for clinical use and is being used in Anesthesiology and Psychiatry at the San Diego VA Hospital for pain management and depression therapy. Doppler device is also standard non-invasive FDA approved device used for imaging in cardiology and radiology to measure blood flow in blood vessels/tissue. We determined that the magnetic stimulation device is a non-significant risk device based on FDA guidance provided in the link: <https://www.fda.gov/media/75459/download>

Section 9.8 Questionnaires & Surveys

9.8) Provide the name and a reference for questionnaires/surveys that are standard or identify them here and attach a copy of the questionnaire/survey. *Questionnaires or surveys that are not clinical standard references must be uploaded. Reference the help link for additional information related to surveys administered to VA personnel and approved platforms for web-based surveys.*

Primary symptom scores will be assessed using International Index of Erectile Function (IIEF-5) and International Consultation of Incontinence Questionnaire (ICIQ) symptom scores. Both of these questionnaires will take about 15-20 minutes to answer. Both questionnaires will be given in hard copy only. Electronic copies of these questionnaire have been attached to the application.

Section 9.9 Data Safety Monitoring Board or Plan

9.9) Provide a Data Safety Monitoring Plan (DSMP) or the details of a Data Safety Monitoring Board; if a written plan is available, attach a copy of the plan to the submission form.

This is a feasibility study using an non-invasive, previously FDA approved device. We will monitor for any adverse effects and report these to the IRB within 5 days following the guidelines provided in our internal policy (SOP Document 67) -Adverse event /unanticipated outcome. Local Research Deaths. We ensure oral notification of the Institutional Review Board (IRB) immediately upon becoming aware of any local research death that is both unanticipated and related to the research.

Local Serious Adverse Event (SAEs). We will ensure written notification of the IRB within 5 business days after becoming aware of any local SAE that is both unanticipated and related to the research.

Serious Problems. We will ensure written notification of the IRB within 5 business days after becoming aware of any serious problem that is both unanticipated and related to the research.

Section 10 - Human Subjects

10) Describe the characteristics of the proposed subject population. Include age, gender, ethnicity, and health status as appropriate. *Note: Data about people are still considered “human subjects” by the IRB, so even if you do not intend to contact the patients whose charts you will review, you still describe the characteristics related to the subjects whose charts you will review.*

- **Provide inclusion and exclusion criteria as appropriate. Provide a statement how non pregnancy is confirmed if pregnancy is an exclusion criteria.**
- **For multisite studies, provide the total number of subjects from all sites and include description of the local site's role as a coordinating center if applicable.**
- **Indicate the number of VA participants to be studied.**
- **Indicate the estimated number of consented subjects that will fail the screening process, if any.**

20 male patients who are enrolled for prostate cancer surgery (age 50-80 years). All ethnicity will be included. Patients who have pacemakers and any other implants in the pelvic region will be excluded from the study.

Section 11 - Recruitment

11) Describe, step-by-step, the plans for recruitment of subjects (or selection of subjects as in record review). This description must include how, when, and where potential subjects are approached as well as procedures for identifying potential participants (through medical records, physician referral, third-party sources, etc.). Include how selection is equitable. Indicate if vulnerability to coercion may be present and if so plans to ensure voluntary participation.

Dr. Sakamoto sees and treats this group of patients in her clinic. She will identify potential patients from her clinic who meet the inclusion criteria. The recruitment plan is summarized below. Potential participants listed for radical nerve sparing prostatectomy & suitability confirmed by the surgeon (KS) are identified from the VASDHS urology surgical (waiting) list by PI (MR). Patients will be approached by the PI or one of the study coordinators for recruitment.

Dr. Sakamoto will not be involved in consenting process to avoid any coercion.

Section 12 - Informed Consent

12) Indicate whether or not each category of consent is involved in this study:

12a) Will the study team obtain information or biospecimens for the purpose of screening, recruiting, or determining the eligibility of prospective subjects without (or prior to) obtaining informed consent of the prospective subject or the prospective subject's LAR?

☒ Yes ☐ No

Check one or both of the below boxes if they apply to this study:

Information will be obtained through oral or written communication with the prospective subject or the subject's Legally Authorized Representative (LAR) and this is not a FDA regulated study.

☐ Yes ☒ No

Identifiable information or biospecimens will be obtained by accessing records or stored identifiable biospecimens and this is not an FDA regulated study.

☐ Yes ☒ No

Since both boxes were checked "no", a request for an informed consent waiver is needed.

12b) **Signed** informed consent

☒ Yes ☐ No

12c) Waiver of documented consent (e.g., **oral** consent) for all or part of the study.

☐ Yes ☒ No

12d) Request for a **waiver** of consent for all or some study activities.

☒ Yes ☐ No

12e) Alteration of **other required elements** of consent.

☐ Yes ☒ No

12f) **Child** assent to participate (Director approval will be required)

☐ Yes ☒ No

12g) Will any language **other than English** be used by those obtaining consent and understood by the prospective participant or the legally authorized representative?

☐ Yes ☒ No

12h) **Decisional Capacity Assessment** to determine if participants have the capacity to consent for themselves.

☐ Yes ☒ No

12i) **Surrogate** consent (legally authorized representative)

☐ Yes ☒ No

Section 12.1 Informed Consent Process

12.1a) Will consent be obtained before any study procedures are performed (including screening procedures except screening procedures with Consent and/or HIPAA waiver when required)?

☒ Yes ☐ No

12.1b) Will the information being communicated to the participant or legally authorized representative during the consent process include exculpatory language through which the participant or legally authorized representative is made to waive or appear to waive any of the participant's legal rights or release or appear to release the Researcher, Sponsor, the VA or its agents from liability for negligence.

☐ Yes ☒ No

12.1c) A master list of all VA subjects consented (written or not) under this protocol will be maintained.

☒ Agree ☐ Disagree

12.1d) Identify the circumstances under which consent will be obtained including where the process will take place; any waiting period between describing the research and obtaining consent including sufficient time for the prospective participant to consider participation, and any steps taken to minimize the possibility of coercion or undue influence.

The patients will be recruited in Dr Sakamoto's clinic and the consent form will be provided and patient consent obtained prior to surgery (during pre-op visit) by a staff member. No attempt to coerce the patient will be made, the patient will be consented by a staff member other than the treating physician.

Section 12.4 Waiver of Informed Consent

12.4a) Is it practicable to conduct the research without the waiver or alteration of consent?

☐ Yes ☒ No

12.4b) Does the research examine public benefit or service programs and is subject to state or local government approval?

☐ Yes ☒ No

12.4c) Will the research involve greater than minimal risk?

☐ Yes ☒ No

12.4d) Will waiving or altering informed consent adversely affect the subjects' rights and welfare?

☐ Yes ☒ No

12.4e) Is it appropriate to provide pertinent information to subjects later BUT this information will NOT be provided?

☐ Yes ☒ No

12.4f) Identify to what aspects of the study you are requesting a waiver of consent (i.e., full study or specific aspects). Describe the waiver or alteration needed and why it can be granted (include why the research is not practical without the waiver or alteration and how the waiver enables conducting the study).

Waiver of informed consent or alteration of consent elements may be allowed if the IRB documents these findings and approves waiver or alteration.

Waiver of consent to review medical records for inclusion/exclusion criteria that will help identify potential candidates for study recruitment.

12.4g) Explain why the research could not practicably conducted without using identifiable information.

Without review medical records for inclusion/exclusion criteria it is not possible to identify potential candidates for study recruitment.

Section 12.9 HIPAA Authorization

For each category below, indicate whether or not this study involves the indicated process:

12.9a) Signed HIPAA Authorization. ***New Template is available in the ? Help section***

☒ Yes ☐ No

12.9b) HIPAA waiver to cover the entire study

☐ Yes ☒ No

12.9c) HIPAA waiver for recruitment, screening, and/or for a portion of the study.

☒ Yes ☐ No

12.9d) HIPAA Authorization or waiver is **not required** for some or all of the study subjects (e.g. no health data).

☐ Yes ☒ No

Section 12.10 HIPAA Waivers and Alterations

12.10a) Describe the purpose/nature of the HIPAA waiver or alteration and list specifically, what identifiers and health information are being requested under the waiver/alteration and identify whether the waiver is for access, use, and/or collection of this information.

Dr. Sakamoto will be reviewing medical records for inclusion/exclusion criteria for this study prior to seeking HIPAA authorization. We are requesting a waiver of HIPAA for this screening procedure. Name, SSN, clinical appointments and inclusion/exclusion criteria will be reviewed.

12.10b) The proposed access, use, and/or disclosure of PHI involves no more than a minimal risk to the privacy of individuals.

☐ Agree ☒ Disagree

12.10c) The plan to protect the identifiers from improper use and disclosure is adequate.

☒ Agree ☐ Disagree

Describe the plan

Dr. Sakamoto will be reviewing medical records only for inclusion/exclusion criteria for this study. Patient identifiers will be coded to protect improper use.

12.10d) An adequate plan to destroy the identifiers at the earliest opportunity consistent with conduct of the research, unless there is a health or research justification for retaining the identifiers or such retention is otherwise required by law.

☒ Agree ☐ Disagree

12.10d2) Describe the plan:

All records will be handled record control schedule #10.

12.10e) By signing this protocol for submission, the PI is providing written assurance that the PHI will not be reused or disclosed to any other person or entity, except as required by law, for authorized oversight of the research project, or for other research for which the use or disclosure of protected health information would be permitted by the Privacy Rule. 38 U.S.C. 7332 Information: If the waiver of HIPAA authorization is for the use of 38 USC 7332 information (applicable to drug abuse, alcohol abuse, HIV infection, and sickle cell anemia records), by signing this protocol for submission the PI is providing written assurance that the purpose of the data is to conduct scientific research and that no personnel involved may identify, directly or indirectly, any individual patient or subject in any report of such research or otherwise disclose patient or subject identities in any manner. (Ref: 38 U.S.C. 7332(b)(2)(B))

☒ Agree ☐ Disagree

12.10f) The research could not practicably be conducted without the waiver or alteration.

☒ Agree ☐ Disagree

12.10f2) Describe how the waiver/alteration enables the research to be conducted

This waiver is required for reviewing medical records only for inclusion/exclusion criteria for recruitment purpose.

12.10g) The research could not practicably be conducted without access to and use of the PHI.

☒ Agree ☐ Disagree

12.10g2) Describe why it would be impracticable to conduct this research without the PHI described 12.10a. (v3 /8/18)

Without this waiver, review of medical records can not be accomplished for recruitment purposes.

Section 13 - Alternatives to Participation

13) Describe the alternatives to participation in this research study (see ? for guidance)

Alternative to this study is to follow the clinicians instruction for pelvic floor exercise, as usually done for prostate surgery patients.

Section 14 - Potential Risks

14) Describe any potential or known risks or discomforts and assess their likelihood and seriousness (see ? for guidance)

Magnetic stimulation, MRI and Doppler blood flow are non-invasive and non-risk devices. With the use of magnetic stimulation there may be slight tingling when the muscles are stimulated.

Section 15 - Risk Management

15) Describe the procedures for protecting against or minimizing any potential risks/discomforts, and the adequacy of resources for conducting the study and resources participants may need as a consequence of the research. When applicable, include detail of the following safety measures: (a) The type of safety information to be collected, including AEs; (b) Frequency of safety data collection; (c) Frequency or periodicity of review of cumulative safety data; (d) Statistical tests for analyzing the safety data to determine if harm is occurring; and (e) Conditions that trigger an immediate suspension of the research. See ? for further requirements.

There are no additional risks associated with these devices. There is a limited risk of maintaining confidentiality. This will be minimized by de-identifying the patients by providing a code for each subject and the identification code linking the subject to their medical record will be maintained in a separate file kept in PI's office in room 6058 under lock and key.

Section 17 - Potential Benefits

17) Discuss benefits that may be gained by the subject as well as potential benefits to society in general (see ? for guidance)

The subject may have reduction in their incontinence and improvement in sexual function, leading to improved quality of life.

Section 18 - Risk/Benefit Analysis

18) Discuss why the risks to subjects are reasonable in relation to the anticipated benefits to subjects and in relation to the importance of the knowledge that may reasonably be expected to result.

Risk to benefit ratio is low as there are no known risks and may have significant improvement in quality of life and may result in lowering the clinical costs associated, if the subject remained untreated.

Section 20 - Compensation for Participation

20) Provide all details and justifications of the compensation plan. See ? for detailed requirements.

We will reimburse transportation expenses (to a maximum of \$10/visit) incurred by the subject that would not be incurred in the normal course of receiving treatment and which are not reimbursed by any other mechanism. This will be provided as vouchers.

Section 21 - Responsibilities and Qualifications

Here are the identified study staff members

Mahadevan Rajasekaran, PhD

Eric Y. Chang, MD, Kyoko Sakamoto, MD, Michael E. Albo, MD, Valmik Bhargava, PhD, Christopher Cano Sanchez, Samuel Sorkhi

21) For each staff member listed above, describe their role and qualifications. Also indicate which of the study staff are authorized to obtain consent, when applicable to the study.

Drs Raj Rajasekaran and Bhargava are responsible for protocol design and data analysis, Drs. Kyoko Sakamoto, & Michael Albo (certified urologists at the VA) will help with patient recruitment and follow-up.
For TPMS, Dr. Bhargava (is an electrical engineer) is trained and will train other staff members before the start of study. Dr. Bhargava will also be performing data analysis.
Dr. Eric Chang (radiologist) will support Doppler and MRI studies.
Study coordinators (Chris Cano-Sanchez, BS and Sam Sorkhi, BS) will help with the informed consent process. They will be trained by Dr. Rajasekaran to obtain informed consent.

Section 22 - Bibliography

22) List relevant articles that the IRB can use to provide necessary background for the protocol. Do not include an extensive NIH-grant-style bibliography. (Up to 5 recommended, but use more if needed to support the protocol or citations above.)

1. Lim R, Liong ML, Leong WS, et al. Pulsed Magnetic Stimulation for Stress Urinary Incontinence: 1-Year Followup Results. J Urol 2017;197:1302-8.
2. Liu P, Gao J, Pan S, et al. Effects of High-Frequency Repetitive Transcranial Magnetic Stimulation on Cerebral Hemodynamics in Patients with Disorders of Consciousness: A Sham-Controlled Study. Eur Neurol 2016;76:1-7.
3. Stoltzing MN, Arnold AS, Haralampieva D, et al. Magnetic stimulation supports muscle and nerve regeneration after trauma in mice. Muscle Nerve 2016;53:598-607.
4. Almeida FG, Bruschini H, Srougi M. Urodynamic and clinical evaluation of 91 female patients with urinary incontinence treated with perineal magnetic stimulation: 1-year followup. J Urol 2004;171:1571-4; discussion 4-5.
5. Penson DF, McLerran D, Feng Z, et al. 5-year urinary and sexual outcomes after radical prostatectomy: results from the Prostate Cancer Outcomes Study. J Urol 2008;179:S40-4.

Section 23 - Sponsors and Collaborators

23) Clarify any industry financial or other support (e.g., NIH funds the study or Company X provides the assay kits). Identify non-VA Research collaborators and their role in this protocol, including whether or not they have access to subjects or identified data.

Funded by VA Rehab R&D SPiRE award (F3455-P) to Dr. Rajasekaran.

In the submission form, upload a copy of the grant, subaward, CRADA, etc. as applicable to the study.

Section 25 - Impact on Clinical Services

25a) Which VA Clinical Services participate in the performance of the project? (NOTE: All clinical trials and any use of clinical services will require project review and approval by the Office of Research Agreements Management (ORAM) to assure availability of those clinical resources. Prior discussion with the appropriate clinical service chief is strongly encouraged)

Check all that apply

- ☐ Pharmacy
- ☐ Laboratory
- ☐ Cardiology
- ☒ Radiology
- ☐ Nursing
- ☐ Pathology
- ☐ Nuclear Medicine
- ☐ MAS (Charts)
- ☒ Other (list below)

List others here

Urology

25b) Describe the specific impact or service that will be provided for this protocol.

We will perform the proposed pelvic magnetic stimulation and the ultrasound imaging (for blood flow) in the Spinal Cord Injury clinic space assigned to Urology service in the first floor of VASDHS. We will work with clinic manager/ service chief (Dr. Sakamoto) before we plan for the proposed studies to ensure that our proposed research will not impact the routine clinical services performed in that area. Dr. Chang (Radiology) will support the proposed MRI and Doppler studies. We do not anticipate any other impact to other clinical services.

Section 27 - Privacy, Confidentiality, and Information Security

27a) Provide a brief description of how participant privacy and confidentiality will be protected in this study. Describe the circumstance under which it may be possible for a research team member to identify subjects and any related protections or assurances to prohibit or avoid identification. Describe how the number of people with access to identifiers for research purposes is limited in order to protect a participant's privacy.

All the research records will be labeled with a code number. The list that matches your name with the code number will be saved as a file behind the secure VASDHS computer firewall. All patient information will be coded and saved in the R-drive. Only Dr. Rajasekaran, Dr. Bhargava and Chris Cano Sanchez will have access to R-drive. Only coded information will be provided to the research staff. Code key will be kept under a locked cabinet. We will only need SSN for processing payment for transport reimbursement.

27.b) Entry of a CPRS Research Informed Consent Note is required when subjects will be admitted as inpatients or treated as an outpatients for research and the study involves research medical care or may affect medical care.

- *If a Research consent Note is required, then a Research Progress Note should also be entered for each procedure or intervention.*
- *Scanning the Consent and HIPAA Authorization into CPRS is not required. Linking the Consent to the Research Informed Consent Note may be permitted and can be useful for trials involving the Research Pharmacy or when research will be performed in conjunction with clinical procedures.*
- *For Non-Veterans, if Research Informed Consent Notes are entered, then the NOPP Acknowledgment must be scanned into the record. Otherwise a copy of the signed NOPP must be retained with the Investigator's research records and a copy sent to the Privacy Officer; see the ? Help for more information.*

27.b1) Is entry of CPRS notes required based on the above criteria?

- ☒ CPRS notes are needed for ALL subjects
- ☐ CPRS notes are needed for SOME subjects
- ☐ CPRS notes are NOT needed for any subjects

27c) Select the VA Sensitive Information (VASI) use category

- ☐ This study does not collect or use any VASI
- ☐ This study uses but does not save, collect, copy, or record VASI
- ☒ This study does collect or record VASI

Section 27.1 VA Sensitive Information (VASI)

27.1a) For each type of VASI, indicate all that apply:

Indicate which of the following will be collected/recorded:

- ☒ Protected Health Information (PHI)
- ☒ Names
- ☐ Device identifiers and serial numbers
- ☐ E-mail addresses
- ☐ Medical record numbers
- ☐ URLs (Universal Resource Locator)
- ☐ All elements of dates (except year) or any age over 89
- ☐ Health plan beneficiary numbers
- ☐ IP Addresses (Internet Protocol)
- ☐ Telephone numbers
- ☐ Account numbers
- ☐ Biometric Identifiers including finger and voice print
- ☐ Fax numbers
- ☐ Certificate or license numbers
- ☐ Full face photographic images and comparable images
- ☐ All geographic subdivisions smaller than a state
- ☐ Vehicle ID and serial numbers including license plate numbers
- ☒ Social security numbers or scrambled SSNs (describe below)
- ☐ Other unique identifying number, characteristic, or code (describe below)

27.1a1) Describe why SSN are needed for this study

Access to the clinical record for a note etc.

27.1b) Consent Forms and/or HIPAA Authorization

☒ Yes ☐ No

27.1c) Images with personal identifiers are used for this study (x-rays, MRI images with patient names, record numbers, dates, etc.)?

☐ Yes ☒ No

27.1d) Photos with faces or audio video recordings are used for this study.

☐ Yes ☒ No

27.1e) Biological specimens with identifiers are used for this study.

☐ Yes ☒ No

Section 27.2 Data Collection, Tools, and Resources

27.2a) Will any specially obtained software be used?

☐ Yes ☒ No

27.2b) Will any mobile devices (laptop, tablet, portable hard-drive, etc.) be used in support of this study?

☐ Yes ☒ No

27.2c) Does the study require use of an electronic data capture system?

☐ Yes ☒ No

27.2d) Will any other web-based applications be used (e.g., for recruitment, completing online questionnaires, or processing data)?

☐ Yes ☒ No

27.2e) Will coded data that excludes personal identifiers be used? Coded data excludes *all* HIPAA identifiers (per VHA Handbook 1605.1 Appendix B), including dates

☒ Yes ☐ No

27.2e1) Identify where the code key is stored and in what format (electronic, paper).

R:\Rajasekaran\Magnetic Stimulation

Section 27.3 Data Sharing and Transportation

27.3a) Does this study involve collecting, sharing or transporting any type of data outside of the local VA?

☐ Yes ☒ No

Section 27.4 Research Record Storage and Retention

For each type of record, indicate whether it is collected for this study

27.4a) Hardcopy records/data (includes paper, pictures, film, etc.)

☒ Yes ☐ No

27.4a1) Identify precisely where hardcopy data will be stored to include physical site, building, and room number, etc. For each location identify whether VASI or non-sensitive information is stored at that location. For VASI, identify how the data is secured.

Hardcopies will be stored in PI's office (Building I, room 6058, VASI in a locked cabinet).

27.4a2) Are all of the above locations at VA?

☒ Yes ☐ No

27.4b) Electronic study records (includes computer files, removable disk files, digital files, etc.).

☒ Yes ☐ No

27.4b1) Identify precisely where *non-sensitive* electronic records/data will be stored to include the full map drive, network location/server name, etc., and a brief description of what data/information is stored at each location.

R:\Rajasekaran\Magnetic Stimulation

27.4b2) Identify precisely where *VASI* electronic records/data will be stored to include the full map drive, network location/server name, etc., and a brief description of what data/information is stored at each location.

If no VASI is collected or recorded for this study, simply indicate that the “Study does not collect or record VASI”.

R:\Rajasekaran\Magnetic Stimulation

27.4b3) Are any of the locations described in 27.4b outside of the VA Secure Network? *Note: this includes storage on a computer local hard drive.*

☐ Yes ☒ No

27.4c) Record Retention - VHA requires compliance with Records Control Schedule (RCS-10) for retention of electronic and hard copy records. Following study closure, these temporary records must be retained for six years and then destroyed. Longer retention may be permitted if required by other Federal regulations or requirements. Will RCS-10 requirements be followed (i.e., 6-year retention)?

☒ I will adhere to VHA Records Control Schedule-10 requirements
☐ I request an exception to RCS-10 requirements

Section 27.5 Additional Privacy or Information Security Details

Provide any other privacy or information security details here.

none

Section 27.6 Attestations

In the event of real or suspected breach of security, the Information Security Officer, Privacy Officer, VA Police (if appropriate), and the individual’s supervisor will be notified within one hour of learning of the event.

☒ Agree ☐ Disagree

Study staff will be up to date on any required VHA Privacy Policy and Information Security training or they will not be allowed access to VA Sensitive Information.

☒ Agree ☐ Disagree

Access to research sensitive information, if any, will be removed when study personnel are no longer part of the research team.

☒ Agree ☐ Disagree

At least one copy of all study records (whether sensitive or non-sensitive) will be retained under VA control and only destroyed in compliance with the approved Records Control Schedule

☒ Agree ☐ Disagree

The VA retains ownership of the research data. Should the investigator leave the VA, custody of the research records will be assigned to another investigator and the Research Service notified in writing, or custody of the research records will be transferred to the Research Service.

☒ Agree ☐ Disagree

Section 28 - Protocol Association to New or Existing Project

28) Is this a new R&D Project? Before you go on to complete the *Initial Review Submission Form* (which is used for attachments), please address the association of this Protocol to an R&D Committee Project. This Protocol may represent a new R&D Project, or it may be an additional Protocol under an existing R&D Project (such as when a single grant supports multiple Protocols). Will this Protocol be submitted to the R&D Committee as a new Project?

☒ Yes ☐ No

The Protocol Application is now complete for a Protocol that will also be a new R&D Committee Project.

Next you will go on to the Initial Review Submission Form which is used to package up the Protocol Application and any needed attachments and submit them to the IRB.

Click on *Save and Continue*