BIOMEDICAL RESEARCH PROTOCOL
UNIVERSITY OF MISSOURI

Project Title: Perioperative pregabalin as part of a multimodal treatment plan for pain after ureteroscopy with stent placement: a pilot

IRB Number: 2013680
Version Number: 1.1
Version Date: 2/6/2019
Principal Investigator: Katie Murray, DO
Funding Source: Departmental
Clinical Trial Phase: Not Phased
Clinicaltrials.gov Number: NCT03927781
Study Drug/Study Device: Pregabalin

Principal Investigator	Katie Murray, DO	Department of Surgery Urology Division
Co-Investigator	Geoffrey Rosen, MD	Department of Surgery Urology Division
Consenting Professional(s) Department	Department of Surgery-Urology	

University of Missouri University Hospital
Department of Surgery Urology Division
1 Hospital Drive
Columbia, MO 65212

Table of Contents

PROTOCOL SUMMARY AND/OR SCHEMA

We propose a pilot clinical trial on the use of perioperative pregabalin in order to decrease ureteral stent related symptoms and decrease opioid usage after ureteroscopy with stent placement. Patients undergoing ureteroscopy with stent placement will receive a single dose of 300 mg pregabalin PO in the preoperative area. We will assess safety and feasibility of studying this regimen at our institution, with the aim of performing a randomized, placebo-controlled, double-blinded study in the future.

OBJECTIVES AND SCIENTIFIC AIMS

Primary Hypothesis

It is safe and feasible to study perioperative pregabalin in ureteroscopy with stent placement at our institution.

Exploratory Hypotheses

We hypothesize that the use of the perioperative pregabalin will:

- decrease ureteral stent related symptoms at 3 days post-op
- decrease the probability of a patient requiring narcotic pain medication
- decrease the total amount of narcotic pain medication used
- decrease the unplanned contact between the patient and the healthcare system related to the stent
- improve patient satisfaction after ureteroscopy with stent placement

Primary Endpoints

The primary endpoints will be as follows:

- Adverse events related to study drug
- Verified correct administration of study drug
- Correct use of study instruments

Secondary Endpoints:

Secondary endpoints include the following:

- Ureteral Stent Related Symptom Questionnaire (USSQ) [1] score at 3 days post op
- Monitored prescribing of narcotic pain medication
- Number of patients taking narcotic pain medication at several time points
- Oral morphine equivalents the patient has used at several time points
- Number of unplanned contacts between the patient and the healthcare system within 30 days
- Score on standardized evaluation of patient satisfaction

BACKGROUND AND STUDY DESIGN/INTERVENTION

The prevalence of urolithiasis is greater than 8% and increasing in the United States (US) [2]. There are several treatment options, including ureteroscopy (with or without laser lithotripsy), extracorporeal shock wave lithotripsy, and percutaneous nephrolithotomy. A recent study in California demonstrated that ureteroscopic treatment was employed in more than 40% of interventions [3], with some nationwide estimates up to 59% [4]. At least 300,000 stone

interventions are performed yearly in the US on working age adults [5], thereby, at least 120,000 ureteroscopies are. There are several other indications for ureteroscopy, including diagnosis of structural anomaly and diagnosis and management of ureteral and renal pelvic tumors.

Depending on the specifics of the procedure, it may be advisable to place a ureteral stent intraoperatively [6]. The most commonly used variety of stent is the double J stent [7], which has long been known to cause post-operative pain in around 80% of patients, as well as irritative symptoms in a sizeable portion [8, 9]. A validated questionnaire (the Ureteral Stent Symptom Questionnaire [USSQ]) exists to evaluate symptoms of ureteral stents and their effects of quality of life [1].

Alpha-blockers decrease ureteral stent discomfort when compared to placebo [10, 11]. Anti-muscarinic medications (specifically tolteridine) have also been shown to be helpful with stent related discomfort independently, or in addition to alpha blockade [12], though the evidence is mixed [13]. A recent systematic review failed to find any studies of other medications for stent related discomfort that met inclusion criteria [14]. Subsequently, a well-designed study demonstrated the utility of mirabegron for indwelling stent symptoms [15].

Recent guidelines recommend the use of multimodal treatment strategies in the management of postoperative pain [16]. In several contexts gabapentin or pregabalin have been shown to be a beneficial part of such a strategy. For example, in percutaneous nephrolithotomy, a randomized, placebo-controlled, double-blind study demonstrated that a single dose of 600mg of oral gabapentin 1 hour before surgery significantly decreased catheter-related bladder discomfort, number of patients requiring opioid pain relief, and amount of opioid pain relief when used [17]. Similarly, outside urology, several well-designed trials demonstrate the positive effects of perioperative pregabalin or gabapentin in the elective, outpatient surgery setting [18-20]. Several reviews and meta analyses have also supported the use of perioperative gabapentin or pregabalin in various settings [21-24]. The principal side effects of pregabalin are temporary cognition/coordination changes, with a very low risk of serious side effects [25]. No well-constructed studies to date have examined the perioperative use of gabapentinoids in post-ureteroscopy ureteral stent related symptoms.

We propose a study to extend the literature base on the use of perioperative pregabalin to ureteroscopy with stent placement through a prospective, randomized controlled trial. In order to ensure safety and feasibility of this future study, we will first perform a small pilot. We will administer study medication and study questionnaires. There will be additional components of study evaluation. This will be used to inform the design of a future trial.

CRITERIA FOR SUBJECT ELIGIBILITY

Subject Population

Undergoing elective ureteroscopy with stent placement by Dr. Murray at University of Missouri Hospital and affiliated facilities

Subject Inclusion
Age ≥ 18 years

Subject Exclusion
- Renal insufficiency (eGFR < 30 mL/minute/1.73 m^2
- Chronic indwelling ureteral stent
- Chronic opioid use
- History of opioid abuse
- Chronic gabapentinoid use
- Plan for inpatient hospitalization
- Pregnancy
- Inability of the patient to consent for themselves in English
- Allergy to gabapentinoid
- Liver failure or hepatic dysfunction

OVERVIEW OF STUDY DESIGNATION

Design
This is a pilot clinical trial on the use of perioperative pregabalin in order to decrease ureteral stent related symptoms and decrease opioid usage after ureteroscopy with stent placement. Patients undergoing ureteroscopy with stent placement will receive a single dose of 300 mg pregabalin PO in the preoperative area.

Pre-op standardized care
After obtaining written consent, patients will be enrolled. All patients will be told the following by a member of the study staff:
"We will be administering several medications before, during, and after your procedure to help with pain. We expect that you will be able to go home with just non-steroidal pain medication." They will also be counseled on the risks and benefits of non-steroidal anti-inflammatory drugs (NSAIDS).

Subsequently, all patients will be given a single dose of pregabalin 300 mg PO with a sip of water approximately one hour before surgery. This will be administered per standard intuitional practice. It will be recorded in the regular medical chart of the patient.

Post-op standardized care
Perioperative care, surgery and anesthesia, for all subjects will be per standard hospital protocol.

A standardized post-operative regimen will be used, consisting of a single belladonna & opium suppository, a single dose of ketorolac 30mg IV, and ondansetron 4mg IV. A single dose of hydrocodone 5mg with acetaminophen 325mg PO will be available PRN pain.

To qualify for discharge from the PACU, all patients will have had to have met a standardized set of discharge criteria. They will have to have ambulated, voided, tolerated PO intake, and have pain subjectively adequately controlled.

On PACU discharge, patients will be given a prescription for 20 tablets of 50mg diclofenac, 20 tablets of acetaminophen 650mg to be taken on a scheduled basis every 6 hours, and mirabegron 50mg once daily PO to be taken until stent removal [15]. There is no universal standard of care discharge regimen after ureteroscopy, but a similar one to this has been shown to be safe and effective [26]. Patients will receive a standardized sheet of return precautions. They will receive packets of questionnaires to be completed along with pre-addressed and pre-stamped envelopes. They will be instructed to only seek pain medication from the urology team for the next month. Should they have need for further pain medication, patients will be instructed to call the clinic [see supplementary material]. They will be offered their choice of another 3 days of NSAID or oxycodone 5mg q6h PRN pain 6 tablets. Further treatment will be at provider discretion. The clinic staff will be instructed to record these prescriptions.

THERAPEUTIC AND DIAGNOSTIC AGENTS

Pregabalin is an oral agent approved for use in fibromyalgia and neuropathic pain. A single dose of 300mg PO will be given to all patients.

RECRUITMENT PLAN

Patients will be recruited from the practice of Dr. Murray in the Division of Urology, Department of Surgery. The study will be introduced to every eligible patient scheduled for ureteroscopy with stent placement by the participating consenting physicians from the Department of Surgery-Urology Division and a written consent obtained prior to surgery by the consenting research personnel. Candidate subjects will be provided time to consider the study, to read the informed consent document at their convenience, and discuss the study with family and others, as desired. It will be clearly indicated that non-enrollment in the study will not negatively affect the patient's care.

PRETREATMENT EVALUATION

This study does not require any additional pretreatment evaluations other than those which are part of current clinical care standards for a patient undergoing ureteroscopy with stent placement at University of Missouri. Preoperative evaluations typically include the following:

- Routine history and physical examination to include documentation of any comorbidities, medications (including complementary and alternative medications), family history, social history (alcohol and tobacco usage), height, body weight
- Past medical history including previous treatment for addiction
- Past surgical history including other uses of stents in the patient's lifetime
- Evaluation of renal function
- Any woman of child bearing age who believes she may be pregnant receives a pregnancy test

SURGICAL PLAN

The technique of surgery will have been determined to be ureteroscopy with stent placement based on the discretion of the surgeon and patient. None of the techniques utilized in the study are considered experimental and all are considered standard therapeutic options for patients with

indications for this procedure. Typical indications include nephroureterolithiasis and evaluation for malignancy.

The operating team will consist of surgeons on faculty at University of Missouri Department of Surgery-Urology Division. The procedures are performed under standardized general anesthesia with standard intraoperative vital sign monitoring.

EVALUATION DURING TREATMENT/INTERVENTION

Not part of usual care
This protocol requires several evaluations outside those typically used. These are all questionnaires.

Timing	Questionnaire	Respondent
Day of surgery	Screening questionnaire	Study staff
	Baseline surgery	Patient
	Post-op surgeon	Treatment staff
	PACU	Patient/PACU nurse
	Aldrete	PACU nurse
	Evaluation of trial	Patient
	Evaluation of trial	PACU nurse
3 days post op	Early patient questionnaire	Patient
	USSQ	Patient
	Evaluation of trial	Patient
7 days post op	Early patient questionnaire	Patient
	Evaluation of trial	Patient
30 days post op	30 days post op study	Study staff
	Late patient questionnaire	Patient
	Evaluation of trial	Patient
90 days post op	Late patient questionnaire	Patient
	Evaluation of trial	Patient
6 months post op	Late patient questionnaire	Patient
	Evaluation of trial	Patient
1-year post op	Late patient questionnaire	Patient
	Evaluation of trial	Patient
Untimed	Unanticipated contact	Study staff/Treatment staff
	Evaluation of trial	Patient

Usual care
Routine evaluation and management for those undergoing ureteroscopy with stent placement include:
ASA classification, assigned by the anesthesiologist
Deep venous thrombosis prophylaxis per standardized pathway
Estimated blood loss
Use of intraoperative fluids (crystalloid, colloid, blood products)

TOXICITIES/SIDE EFFECTS

Various symptoms have been associated with the administration of pregabalin in the perioperative setting. The risk of serious adverse events in this use of pregabalin is low [25] and the potential benefits of this treatment may outweigh the risks. This will be recorded in the PACU side effect and PACU nursing questionnaires.

Surgical complications will be assessed prospectively and retrospectively and reviewed using the institutional standard for complications reporting for all surgical patients as followed by the Department of Surgery. Standardized graded complications and adverse effects at UM utilize the five-point modified Clavien-Dindo system. Grade I include complications requiring monitoring but no intervention; Grade II requires bedside or medical treatment; Grade III constitute adverse events requiring surgical or procedural intervention with return to normal functioning; Grade IV includes disabling, life-threatening complications with resulting functional loss and grade V is death of the patient. This is a modification of the Clavien-Dindo system for reporting complications with defined, categorized and classified events that will be segregated into time periods of ≤30 days, 31-90 days and > 90 days after surgery and includes medication complications following NCI CTCAE version 5 guidelines.

CRITERIA FOR THERAPEUTIC RESPONSE/OUTCOME ASSESSMENT

If the surgery is aborted for any reason before placement of a ureteral stent, the patient will be removed from the study and replaced. Based on past experience these issues are rare events.

The intraoperative period is defined as the period from anesthesia induction to the extubation of the trachea. The surgical time is determined from the incision to the final skin closure.

The postoperative period is defined as the period from the extubation to various study endpoints.

Blood loss is defined as the estimate accounted from the suction device and absorptive sponges during the procedure, as described and agreed upon by the surgeon, anesthesiologist, circulating nurse, and surgical technician as covered by institutional guidelines.

The patient's pain will be evaluated with a visual analogue scale of pain [27]. This may either be done digitally or by paper [28].

A validated questionnaire (the Ureteral Stent Symptom Questionnaire [USSQ]) exists to evaluate symptoms of ureteral stents and their effects of quality of life [1]. This will be used to evaluate how patients tolerate the stents.

Patient satisfaction will be assessed at PACU discharge as part of the patient's PACU discharge questionnaire. Similarly, satisfaction will be evaluated via questionnaires at subsequent time points.

CRITERIA FOR REMOVAL FROM STUDY

Patients will be withdrawn from the study if they express a desire to do so, if it is determined to be in the patient's best interest to do so, or if they do not undergo initiation of their surgical procedure as stipulated previously. For this pilot, if a patient fails to receive the study drug, they will be withdrawn from the study and analysis of this failure will be undertaken.

BIOSTATISTICS

Sample Size

The primary purpose of this study is to evaluate safety and feasibility of studying perioperative pregabalin at our institution, with the aim of performing a randomized, placebo-controlled, double-blinded study in the future. 10 patients will complete the study. This is a number that will allow for evaluation of potential serious side effects and feasibility. This number is also small enough that it will not waste resources or delay the future larger study. We estimate that 20 patients will need to be enrolled so that 10 will complete the study. This number of patients will be enrolled over 3 months.

Analysis

Descriptive statistics will be used in reporting patient outcomes in this pilot study. As there is no control group, significance tests will not be performed. Several questionnaires have narrative components which will be compiled and analyzed in a systematic method.

Proposed Analyses

Pre-specified parameters to be reported include the following:

- Serious adverse events
- All adverse events
- Proportion of enrolled patients completing the study
- Adverse events related to study drug
- Ureteral Stent Related Symptom Questionnaire (USSQ) [1] score at 3 days post op
- Monitored prescribing of narcotic pain medication
- Number of patients taking narcotic pain medication at several time points
- Oral morphine equivalents the patient has used at several time points
- Number of unplanned contacts between the patient and the healthcare system within 30 days
- Score on standardized evaluation of patient satisfaction

RESEARCH PARTICIPANT REGISTRATION AND RANDOMIZATION PROCEDURES

Research Participant Registration

We will confirm eligibility as defined in the section entitled Criteria for Patient/Subject Eligibility.

We will obtain informed consent, by following procedures defined in section entitled Informed Consent Procedures.

DATA MANAGEMENT ISSUES

The research team will be responsible for project compliance, data collection, abstraction and entry, data reporting, IRB correspondence, problem resolution and prioritization and coordination of the protocol study team activities. The data collected for this study will be entered into a secure departmental server or will be stored online in the university approved resource, REDCap [29]. Source documentation and regulatory binders will be stored in a locked filing cabinet within a locked department office space. These sites are exclusively used for research documents and only members of the research team will have access to files for this study.

Quality Assurance

Routine data quality reports will be generated to assess missing data and inconsistencies. Accrual rates, and extent and accuracy of evaluations will be monitored throughout the study period. Potential problems will be brought to the attention of the study team for discussion and action.

Data and Safety Monitoring

The MU Health Care Data and Safety Monitoring Plans can be found online.

There are several different mechanisms by which clinical trials are monitored for data, safety and quality. There are institutional processes in place for quality assurance (e.g., protocol monitoring, compliance and data verification audits, therapeutic response and staff education on clinical research QA) and departmental procedures for quality control, plus institutional committees that are responsible for monitoring the activities of the clinical trials program.

PROTECTION OF HUMAN SUBJECTS

Benefits and Risks

The experimental intervention (perioperative pregabalin administration) is currently used at University of Missouri Hospital through the ERAS protocol. Numerous studies have shown significant patient benefits in all fields, including Urology. Several reviews have demonstrated the efficacy and safety of perioperative gabapentinoid administration. The principal side effects of pregabalin are temporary cognition/coordination changes, with a very low risk of serious side effects. Therefore, we do not believe that the therapeutic aspects of this trail pose any serious risk different from patients undergoing ureteroscopy with stent placement under standard procedures.

Toxicities and side effects

Adverse outcomes are not anticipated with the regimen of pregabalin used in this study. Patients are closely monitored during the perioperative period and any serious events will be immediately brought to the attention of the study staff. All potential side effects will be recorded in questionnaires.

Alternatives / Therapeutic options

The alternative to participation in the trial would be to undergo ureteroscopy with stent placement according to the surgeon's standard practice and not to participate in the study. The

patient may or may not receive pregabalin in this case. No other aspect of patient care would differ.

Financial Costs and Burdens
Subjects will not be compensated for their participation. The cost involved in this study is study medication and administration. As these are potentially part of standard treatment, these will be billed to patients as other hospital charges.

Privacy and Confidentiality
We will keep the study records confidential. No identifiers will be used in any reports or publications resulting from the study.

Volunteering Nature of the Study
Participation is entirely voluntary. All aspects of patient's care and monitoring will be unaffected by whether the patient chooses to consent for the study.

Serious Adverse Event (SAE) Reporting
Any SAE will be reported to the IRB as soon as possible, but no later than 5 calendar days. The reporting procedure will be followed as outlined in the University of Missouri protocol found in the "Core Standard Operating Procedure for Event Reporting.".

INFORMED CONSENT PROCEDURES

Before protocol-specified procedures are carried out, consenting professionals will explain full details of the protocol and study procedures as well as the risks involved to participants prior to their inclusion in the study. Participants will also be informed that they are free to withdraw at any time. All participants must sign and date an IRB approved informed consent form indicating their consent to participate. This consent form meets the requirements of the Code of Federal Regulations and the Institutional Review Board.

Before any protocol-specific procedures can be carried out, the consenting professional will fully explain the aspects of patient privacy concerning research specific information. In addition to signing the IRB Informed consent, all patients must agree to the Research Authorization component of the informed consent form.

Each participant and consenting professional will sign the consent form. The participant will receive a copy of the signed informed consent form. A copy of the signed informed consent form will be placed in the participant's chart and subsequently scanned into the electronic medical record under Research Consents.

REFERENCES

1. Joshi, H.B., et al., *Ureteral stent symptom questionnaire: development and validation of a multidimensional quality of life measure.* J Urol, 2003. **169**(3): p. 1060-4.

2. Scales, C.D., et al., *Prevalence of Kidney Stones in the United States.* European Urology, 2012. **62**(1): p. 160-165.
3. Raheem, O.A., et al., *Contemporary Trends in the Ambulatory Surgical Treatment of Urolithiasis: Population-Based Analysis.* Journal of Endourology, 2015. **29**(10): p. 1189-1192.
4. Oberlin, D.T., et al., *Contemporary Surgical Trends in the Management of Upper Tract Calculi.* Journal of Urology, 2015. **193**(3): p. 880-884.
5. Saigal, C.S., et al., *Direct and indirect costs of nephrolithiasis in an employed population: Opportunity for disease management?* Kidney International, 2005. **68**(4): p. 1808-1814.
6. Pais, V.M., Jr., et al., *Does Omission of Ureteral Stents Increase Risk of Unplanned Return Visit? A Systematic Review and Meta-Analysis.* J Urol, 2016. **196**(5): p. 1458-1466.
7. Finney, R.P., *Experience with new double J ureteral catheter stent.* J Urol, 1978. **120**(6): p. 678-81.
8. Joshi, H.B., et al., *Indwelling ureteral stents: evaluation of symptoms, quality of life and utility.* J Urol, 2003. **169**(3): p. 1065-9; discussion 1069.
9. Bosio, A., et al., *How bothersome double-J ureteral stents are after semirigid and flexible ureteroscopy: a prospective single-institution observational study.* World J Urol, 2018.
10. Kwon, J.K., et al., *The beneficial effect of alpha-blockers for ureteral stent-related discomfort: systematic review and network meta-analysis for alfuzosin versus tamsulosin versus placebo.* BMC Urol, 2015. **15**: p. 55.
11. Lamb, A.D., et al., *Meta-analysis showing the beneficial effect of alpha-blockers on ureteric stent discomfort.* BJU Int, 2011. **108**(11): p. 1894-902.
12. Tehranchi, A., et al., *Effects of terazosin and tolterodine on ureteral stent related symptoms: a double-blind placebo-controlled randomized clinical trial.* Int Braz J Urol, 2013. **39**(6): p. 832-40.
13. Sivalingam, S., et al., *Does Combination Therapy with Tamsulosin and Tolterodine Improve Ureteral Stent Discomfort Compared with Tamsulosin Alone? A Double-Blind, Randomized, Controlled Trial.* J Urol, 2016. **195**(2): p. 385-90.
14. Betschart, P., et al., *Prevention and treatment of symptoms associated with indwelling ureteral stents: A systematic review.* Int J Urol, 2017. **24**(4): p. 250-259.
15. Tae, B.S., et al., *Does mirabegron relieve ureteric stent-related discomfort? A prospective, randomized, multicentre study.* BJU Int, 2018.
16. Chou, R., et al., *Management of Postoperative Pain: A Clinical Practice Guideline From the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists' Committee on Regional Anesthesia, Executive Committee, and Administrative Council.* J Pain, 2016. **17**(2): p. 131-57.
17. Agarwal, A., et al., *An evaluation of the efficacy of gabapentin for prevention of catheter-related bladder discomfort: a prospective, randomized, placebo-controlled, double-blind study.* Anesth Analg, 2007. **105**(5): p. 1454-7, table of contents.
18. Gonano, C., et al., *The anxiolytic effect of pregabalin in outpatients undergoing minor orthopaedic surgery.* J Psychopharmacol, 2011. **25**(2): p. 249-53.

19. Ittichaikulthol, W., et al., *Effects of pregabalin on post operative morphine consumption and pain after abdominal hysterectomy with/without salphingo-oophorectomy: a randomized, double-blind trial.* J Med Assoc Thai, 2009. **92**(10): p. 1318-23.
20. Hegarty, D.A. and G.D. Shorten, *A Randomised, Placebo-controlled Trial of the Effects of Preoperative Pregabalin on Pain Intensity and Opioid Consumption following Lumbar Discectomy.* Korean J Pain, 2011. **24**(1): p. 22-30.
21. Straube, S., et al., *Single dose oral gabapentin for established acute postoperative pain in adults.* Cochrane Database Syst Rev, 2010(5): p. CD008183.
22. Zhang, J., K.Y. Ho, and Y. Wang, *Efficacy of pregabalin in acute postoperative pain: a meta-analysis.* Br J Anaesth, 2011. **106**(4): p. 454-62.
23. Eipe, N., et al., *Perioperative use of pregabalin for acute pain-a systematic review and meta-analysis.* Pain, 2015. **156**(7): p. 1284-1300.
24. Jiang, H.L., et al., *Preoperative use of pregabalin for acute pain in spine surgery: A meta-analysis of randomized controlled trials.* Medicine, 2017. **96**(11).
25. Zaccara, G., et al., *The adverse event profile of pregabalin: a systematic review and meta-analysis of randomized controlled trials.* Epilepsia, 2011. **52**(4): p. 826-36.
26. Large, T., et al., *Initial Experience with Narcotic-Free Ureteroscopy: A Feasibility Analysis.* J Endourol, 2018. **32**(10): p. 907-911.
27. Ahles, T.A., J.C. Ruckdeschel, and E.B. Blanchard, *Cancer-related pain--II. Assessment with visual analogue scales.* J Psychosom Res, 1984. **28**(2): p. 121-4.
28. Delgado, D.A., et al., *Validation of Digital Visual Analog Scale Pain Scoring With a Traditional Paper-based Visual Analog Scale in Adults.* J Am Acad Orthop Surg Glob Res Rev, 2018. **2**(3): p. e088.
29. Harris, P.A., et al., *Research electronic data capture (REDCap)-A metadata-driven methodology and workflow process for providing translational research informatics support.* Journal of Biomedical Informatics, 2009. **42**(2): p. 377-381.

APPENDICES

Appendix 1 – REDCap instruments
Appendix 2 – USSQ
Appendix 3 – Aldrete
Appendix 4 – Post-op study specific instruction
Appendix 5 – Written consent and HIPAA authorization
Appendix 6 – HIPAA waiver of authorization

Appendix 1 – REDCap instruments

Screening questionnaire

Study identifier:	_____
What is the patient's age?	_____
Before this episode, did the patient have a ureteral stent in place?	◯ Yes ◯ No
Before this episode, did the patient use narcotic pain medications at home on a regular basis? This includes medications such as Percocet, Norco, tramadol, and others.	◯ Yes ◯ No
Has the patient ever had an issue with addiction or dependence to narcotic pain medication?	◯ Yes ◯ No
Does the patient take gabapentin or pregabalin at home?	◯ Yes ◯ No
Has the patient ever had an issue with addiction or dependence to gabapentin or pregabalin?	◯ Yes ◯ No
Has the patient ever had an allergic reaction to gabapentin or pregabalin?	◯ Yes ◯ No
Is the patient pregnant or is there any possibility the patient could be pregnant?	◯ Yes ◯ No
What is the patient's eGFR?	_____
Is the patient comfortable consenting to this procedure in English?	◯ Yes ◯ No
Is there a pharmacy we can send the patient's prescriptions to electronically?	◯ Yes ◯ No
Does the patient have a phone number they can be reached at regularly?	◯ Yes ◯ No
Does the patient want to participate want to be excluded from this study?	◯ Yes ◯ No
This patient is not eligible for this study	

Baseline Surgery

Surgery date:	_____
Medical record number:	_____
Last name:	_____
First name:	_____
Date of birth:	_____
What is the patient's gender identity?	◯ Male ◯ Female ◯ Other
What is the indication for procedure?	◯ Stone disease ◯ Diagnosis of stricture ◯ Diagnosis/treatment of tumor ◯ Other
What side is the procedure predicted to be done on?	◯ Right ◯ Left ◯ Bilateral
What is the patient's preferred phone number?	_____
Would the patient be comfortable getting email reminders to fill out surveys?	◯ Yes ◯ No
Email is not a fully secure method of transmitting information. If someone intercepts an email from us, they may know that the patient is participating in this trial. Knowing this, would it be okay for us to contact the patient by email with survey reminders?	◯ Yes ◯ No
What is the patient's email address?	_____
What kind of pain control does the patient anticipate they will need at home after the procedure?	◯ Opioids ◯ Non-opioid pain control only

Post-op Surgeon

On what side was a stent placed?	◯ Right ◯ Left ◯ Bilateral ◯ None
Was a string left on the stent?	◯ Yes ◯ No
On what side was ureteroscopy performed?	◯ Right ◯ Left ◯ Bilateral ◯ None
Was the patient extubated in the OR?	◯ Yes ◯ No
What was the planned disposition for the patient?	◯ Home from PACU ◯ Floor ◯ ICU

Pacu Discharge

At one hour post op: How much pain is the patient in?	No pain ——— Most pain *(Place a mark on the scale above)*
Where is the patient going after PACU discharge?	◯ Home from PACU ◯ Floor ◯ ICU
How long was it (in minutes) from when the patient arrived in the PACU until they went home?	_____

Please indicate if the patient experienced any of the following since surgery. A check indicates that the patient did experience this adverse event.

	Yes
Dizziness	☐
Vertigo	☐
Incoordination	☐
Balance disorder	☐
Ataxia	☐
Diplopia	☐
Blurred vision	☐
Amblyopia	☐
Tremor	☐
Somnolence	☐
Confusional state	☐
Distubance of attention	☐
Thinking abnormality	☐
Euphoria	☐
Edema	☐
Peripheral edema	☐
Asthenia	☐
Fatigue	☐
Dry mouth	☐
Constipation	☐
Amnesia	☐
Back pain	☐
Contusion	☐
Depersonalization	☐
Diarrhea	☐
Fall	☐
Headache	☐
Hyperhidrosis	☐
Increased appetite	☐
Infection	☐
Memory impairmet	☐
Nausea	☐
Nervousness	☐
Neuropathy	☐
Pain	☐
Paresthesia	☐
Sinusitis	☐

Upper RTI	☐
Vomiting	☐

What are the patient's expectations regarding post-operative pain?	◯ There will be minimal pain regardless of treatment ◯ The pain regimen being given for discharge will be sufficient ◯ More pain medication will be required
What pain control does the patient believe they will need in addition?	◯ Opioid pain medication ◯ Non-opioid pain medication only

Aldrete

Time to Aldrete 9 or 10:

_____

(Number of minutes from arrival in PACU to modified Aldrete score of 9 or 10. In 15 minute increments)

Early patient questionnaire

Date form was filled out:	_____
How satisfied are you with your urology team?	◯ very dissatisfied ◯ dissatisfied ◯ satisfied ◯ very satisfied
How satisfied are you with your pain control as related to your urologic procedure?	◯ very dissatisfied ◯ dissatisfied ◯ satisfied ◯ very satisfied
Do you still have a stent in place?	◯ No ◯ Yes - the one from your initial surgery on [surg_date] ◯ Yes - the stent is from a different procedure
How satisfied are you with your stent related symptoms?	◯ very dissatisfied ◯ dissatisfied ◯ satisfied ◯ very satisfied
Please tell us the pain medications you have taken since surgery. For each, please list the name of the medication, the dosage, and the total number. Use a new line for each new medication.	_____

Evaluation of trial

Please complete the survey below.

Thank you!

84) Date: _____

85) Evaluator is:
- ◯ Patient
- ◯ Treatment Doctor
- ◯ Treatment Nurse
- ◯ Study Staff

86) What could be done to make the study better? Was there anything important to you that was not evaluated? _____

Evaluation of trial PACU nurse

Date: _____

What could be done to make the study better? Was there anything important to you that was not evaluated? _____

30 Days Post Op Study

How many pills of oxycodone 5mg did the patient have prescribed?	_____
What other narcotics was this patient prescribed? Please include the name of the narcotic along with dosage and number of pills.	_____
How many total ED visits or hospitalizations did the patient have?	_____
How many ED visits or hospitalizations did the patient have related to their ureteroscopy?	_____
How many contacts with the urology team did the patient have?	_____
For how many days was the stent in place? Indicate 31 for stent still in place at 30 days post-op.	_____

Unanticipated Contact

Date of unanticipated contact:	_____
What kind of unanticipated contact did you have with the patient?	◯ Phone ◯ Email or chart message ◯ Regularly scheduled clinic appointment ◯ In clinic but not at a regularly scheduled appointment ◯ In the emergency department ◯ As an inpatient ◯ Other
What was the unanticipated contact?	_____
Was this related to stent discomfort?	◯ Yes ◯ No
Was pain medication prescribed?	☐ Yes - an NSAID was prescribed ☐ Yes - the study opioid was prescribed ☐ Yes - another opioid was prescribed ☐ Yes - another pain medication was prescribed ☐ No
What was the other pain medication prescribed?	_____
The patient's disposition will be:	◯ Home - they do not need to be evaluated ◯ Clinic - they will be in clinic in the next 3 business days for evaluation ◯ Emergency department - they require evaluation in the emergency department ◯ Hospital - they will be directly admitted ◯ Other
What is the patient's disposition?	_____
Does this constitute something that should be brought to the attention of the study physicians? In addition to submitting this form, you must email the study physicians	◯ Yes ◯ No (Examples would include: serious adverse event related to study medication, serious change in health status, serious patient concern)

Late patient questionnaire

Date form was filled out:

_____

Do you regularly take narcotic pain medication?

◯ Yes
◯ No

Have you had any issues related to your procedure on [surg-date] that has not yet been recorded?

◯ Yes
◯ No

Please describe the issue:

_____

USSQ

Date completed: _____

Urinary index score: _____

Pain index score: _____

General health index score: _____

Appendix 2 – USSQ

We are unable to include this due to copyright.

Appendix 3 – Aldrete

PACU Discharge form

Subject ID: _____ Baseline BP: _____ /_____

Date: _____ / _____ /_____

Record the first Aldrete score at 15 min and take off O2 mask

Aldrete	**15 min**	**30 min**	**45 min**	**60 min**	**75 min**	**90 min**	**115 min**	**120 min**	**Comments**
Respiration									
O2 Saturation									
Consciousness									
Circulation									
Activity									
Total									

Time when Aldrete score is 9 or 10: _____ : _____ (record time or call anesthesia attending)

Chart 1. The 'modified' Aldrete Scale

RESPIRATION	2	1	0
	Able to take deep breath and cough	Dyspnea/Shallow Breathing	Apnea
O2 SATURATION	2	1	0
	Maintains > 92% on room air	Needs O2 inhalation to maintain O2 saturation > 90%	Saturation < 90% even with supplemental O2
CONSCIOUSNESS	2	1	0
	Fully awake	Arousable on calling	Not responding
CIRCULATION	2	1	0
	BP ± 20mmHg pre op	BP ± 20-50mmHg pre op	BP ± 50mmHg pre op
ACTIVITY	2	1	0
	Able to move 4 extremities voluntarily or on command	Able to move 2 extremities voluntarily or on command	Able to move 0 extremities voluntarily or on command

Appendix 4 – Post-op study specific instruction

Post-Operative Supplementary Instructions

Thank you very much for participating in our study. Please see your other discharge forms for details of when to return to regular activity and when you need to contact a provider urgently.

An important part of this study is to keep track of how you are doing. We will also be keeping track of any pain medicine you require.

You should get a packet of questionnaires to leave with. Please complete these on the dates indicated. For some forms, we will either email you (if you provided authorization) or call you to ensure that you have done the questionnaire.

You are being discharged with a pain regimen that we anticipate will be able to control your pain. If you need other pain medication, we ask that for the **first 30 days after your procedure you only get this from the study team**.

To do this, please contact us as follows:
During regular business hours, please call **573-884-8768**
After hours or if unable to reach anyone at the above number, please call **573-882-4141** and ask for the **urology resident on call**

If you have feedback on the study at any time, please contact us

If you have any major medical changes, please contact us

If you have any issues related to your procedure or participation in this study, please contact us

---

INVESTIGATOR'S NAME: **KATIE MURRAY, DO**
PROJECT # 2013680

Study Title: Perioperative pregabalin as part of a multimodal treatment plan for pain after ureteroscopy with stent placement: a pilot

---

Appendix 5 – Written consent and HIPAA authorization

CONSENT FORM AND HIPAA AUTHORIZATION

FOR PARTICIPATION IN A RESEARCH STUDY

INVESTIGATOR'S NAME: KATIE MURRAY, DO

PROJECT IRB #: 2013680

STUDY TITLE: PERIOPERATIVE PREGABALIN AS PART OF A MULTIMODAL TREATMENT PLAN FOR PAIN AFTER URETEROSCOPY WITH STENT PLACEMENT: A PILOT

We invite you to take part in this research study. This consent form tells you why we are doing the study, what will happen if you join the study, and other important information about the study.

Please take as much time as you need to read this consent form. You can discuss it with your family, friends, or personal doctor. If there is anything you do not understand, please ask us to explain. Then you can decide if you want to take part in the study or not.

The Principal Investigator (also called the study doctor) is **Katie Murray, DO**. The people working with her on this study are called the study team.

This study is not being sponsored by any corporation.

Research studies help us to learn new things and test new ideas about treating certain conditions/diseases. Taking part in a research study is voluntary. You decide if you want to take part, and you can stop taking part at any time.

We are doing this study to see if a drug called pregabalin is an effective way of treating pain and other problems following stent placement surgery. We hope the results of this study will show that pregabalin should be routinely added to the treatment plan for future patients undergoing the same surgery as you.

There is no guarantee that taking part in this research will result in any improvement in your condition.

We will only include you in this study if you give us your permission first by signing this consent form.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

About 10 people will take part in this study at this institution.

WHY ARE THE RESEARCHERS DOING THIS STUDY?

We are doing this study to see if a drug called pregabalin is an effective way of treating pain and other problems following stent placement surgery. Pregabalin is approved by the FDA for use in treating pain in other conditions, and it is widely used here and at other institutions to treat post-operative pain. We hope the results of this study will show that pregabalin should be routinely added to the treatment plan for future patients undergoing the same surgery as you.

WHAT WILL HAPPEN IF I TAKE PART IN THIS STUDY?

If you take part in this study, you will receive one dose of pregabalin one hour before your surgery. This will be one pill that you will swallow with a mouthful of water. We will also ask you to complete 2 questionnaires before your surgery.

You will then have your scheduled surgery, which would be done even if you were not in the study. All of your post-operative care is standard care that you would receive without being in the study.

After your surgery, we will give you a packet of questionnaires to take home with you along with pre-addressed, pre-stamped envelopes. These questionnaires are for the research only. We will ask you to complete and return these questionnaires to us at least 6 times:

- 3 days after surgery
- 7 days after surgery
- 30 days after surgery
- 90 days after surgery
- 6 months after surgery
- 1 year after surgery

HOW LONG WILL I BE IN THE STUDY?

You will be in this study for about a year.

CAN I STOP BEING IN THE STUDY?

You can stop being in the study at any time without giving a reason. If you stop being in the study, your regular medical care will not change. Leaving the study will not affect your future medical care at the University of Missouri.

There is no penalty to you if you do not join the study or if you leave it early. You will not lose any benefits you are entitled to if you leave the study.

The study doctor may decide to take you off this study at any time, even if you want to stay in the study. The study doctor will tell you the reason why you need to stop being in the study. These reasons may be:

- If it is in your best interest
- You do not follow the study rules
- The whole study is stopped
- New information becomes available about pregabalin

If necessary, the study doctor will arrange for you to continue your medical care with your regular doctor.

WHAT HEALTH RISKS OR PROBLEMS CAN I EXPECT FROM THE STUDY?

There are risks to taking part in any research study. There may be problems caused by the study that we do not know about yet. If we learn about new important risks and side effects, we will tell you. We will tell you about any new information we learn that may affect your decision to continue taking part in the study.

We will closely watch everyone in the study for problems. You need to tell the study doctor immediately if you have any problems related to the procedures in the study. Dr. Murray's telephone number is 573-884-8768. For more information about risks ask the investigator or contact the University of Missouri Institutional Review Board (which is a group of people who review the research studies to protect participants' rights) at (573) 882-3181.

Risks and side effects related to the drug we are studying include:

Very likely: None

Less likely but serious: serious allergic reaction, dizziness, being off balance, blurred vision, tremor, being more tired or confused than normal, leg swelling, dry mouth, and constipation.

Reproductive risks: The effects of the pregabalin on the developing fetus are unknown but could cause harm. For this reason, you cannot be part of this study if you are pregnant. If you a woman who is capable of becoming pregnant, we will ask you to take a urine pregnancy test. A man's sperm count may decrease temporarily after taking the study medication. It does not otherwise affect the sperm and is temporary. If you have any questions about the reproductive issues please discuss them with the investigator or your doctor.

ARE THERE BENEFITS TO TAKING PART IN THE STUDY?

We don't know if this study will help you. Your condition may get better, but it could stay the same or even get worse. We hope that this study will help us to learn more about pregabalin and

to develop new treatments for stent related symptoms in the future. The possible benefits of taking part in the study include a decreased need for pain medications, especially opioid medications, and fewer stent related problems.

WHAT OTHER CHOICES DO I HAVE?

You do not have to take part in this study. You are free to say yes or no. If you do not want to join this study, your doctor will discuss other choices with you.
Instead of being in this study, you have these options:

- Undergoing usual care with ureteroscopy and stent placement
- No therapy at this time with care to help you feel more comfortable

You may get pregabalin even if you do not take part in the study.
An alternative is to not participate in this research study.
Please discuss these and other options with the investigator and your doctor.

WHAT ABOUT PRIVACY AND CONFIDENTIALITY?

The study team needs to access some of your health/personal information. This information comes from questions we ask you, forms you fill out, and your medical record. One risk of taking part in a research study is that more people will handle your personal health information. We are committed to respecting your privacy and to keeping your personal information confidential. The study team will make every effort to protect your information and keep it confidential to the extent allowed by law. However, it is possible that an unauthorized person will see it.

State and federal privacy laws (HIPAA) protect the use and release of your health information. If you decide to take part in this study, you also give us your permission to use your private health information, including the health information in your medical records and information that can identify you.
You have the right to refuse to give us your permission for us to use your health information. However, doing so would mean that you could not take part in this study.

The following identifiers will be obtained from your health records:

☒Name
☒Address
☒Dates related to you
☒Telephone number(s)
☒Email Address
☒Medical Record Number
☒Any other characteristic that could identify you

The following is the type of protected health information that will be used in the study:

☒Discharge Summaries
☒Consultations
☒Progress Notes
☒Medications
☒History and Physical Exams
☒Emergency Medicine Reports
☒Operative Reports
☒Demographics (age, race, etc.)
☒Questionnaires, Surveys, Diaries
☒Other: Information regarding phone conversations, information regarding conversations through the electronic medical record

We may share any of this information with the following:

- Authorized members and staff of the University of Missouri Institutional Review Board (IRB).
- Laboratories and other individuals and organizations that may need to see your health information in connection with this study.
- Study monitors and auditors who make sure that the study is being done properly.

Any research information shared with outside entities will not contain your name, address, telephone or social security number, or any other personal identifier unless it is necessary for review or required by law.

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

Your permission for us to use and/or release your information will not expire unless you cancel your permission.

You can cancel your permission at any time by contacting to:
Investigator's Name: Katie Murray, DO
Institution: University of Missouri
Department: Surgery, Division of Urology
Address: 1 Hospital Dr, Columbia, MO 65212

The information we have already collected may still be used for this research study, but we will not collect anymore information after we receive your letter.

You will not be allowed to access your protected health information that is obtained or created during this research project until the end of the study.

If you have not already received a copy of the University of Missouri Healthcare Privacy Notice, you may request one. If you have any questions or concerns about your privacy rights, you may contact the Privacy Officer at 573-882-9054.

We will scan a copy of this consent form into your medical record. We may also record your research information, including the results of tests and procedures, in your medical record. The medical information produced by this study will become part of your hospital medical record, and people allowed to look at your medical records may see this research information.

Information that does not become part of your medical record will be stored in the investigator's electronic/computer or paper files. Computer files are protected with a password and the computer is in a locked office that only study team members can open. Paper files are kept in a locked drawer in a locked office that only study team members can open.

Your records will be given a code number and will not contain your name or other information that could identify you. The code number that connects your name to your information will be kept in a separate, secure location. Information that may identify you may not be given to anyone who is not working on this study without your written consent, or if required by law.

The people who may use and/or release your research information include:

- Those working on the study team at the University of Missouri
- The members of the University of Missouri Institutional Review Board (IRB)
- Those who check on research activities to make sure it is being done correctly and safely
- Other government or inspection agencies

If the study investigator is not your regular doctor, he/she must ask your permission before contacting your regular doctor for your health history.

We may present the results of this study in public talks or written articles, but we will not use information that can identify you.

ARE THERE ANY COSTS TO BEING IN THE STUDY?

All tests and procedures done during this study, except the questionnaires, are routine care for your surgery. You would receive these tests and procedures even if you weren't in this study. You and/or your health plan/insurance will be billed for all the tests and procedures in this study, except for the questionnaires. Some health plans/insurance companies will not pay for these costs for people who are in research studies. Check with your health plan/insurance company to find out what they will pay for.

WILL I BE PAID FOR TAKING PART IN THIS STUDY?

There is no payment to you for taking part in this study.

WHAT HAPPENS IF I AM INJURED DURING THE STUDY?

It is not the policy of the University of Missouri to compensate human subjects in the event the research results in injury. The University of Missouri, in fulfilling its public responsibility, has provided medical, professional and general liability insurance coverage for any injury in the event such injury is caused by the negligence of the University of Missouri, its faculty and staff.

The University of Missouri also will provide, within the limitations of the laws of the State of Missouri, facilities and medical attention to subjects who suffer injuries while participating in the research projects of the University of Missouri.

In the event you have suffered injury as the result of participation in this research program, you are to contact the Risk Management Officer, telephone number (573) 882-1181, at the Health Sciences Center, who can review the matter and provide further information.
This statement is not to be construed as an admission of liability.

WHAT ARE MY RIGHTS AS A STUDY PARTICIPANT?

Taking part in this study is voluntary. You do not have to take part. Your present or future medical care will not be affected if you decide not to take part.

If you do decide to take part, you can change your mind and drop out of the study at any time. This will not affect your current or future care at the University of Missouri Hospitals and Clinics. There is no penalty for leaving the study and you will not lose any benefits that you are entitled to receive.

If the study investigator decides to take you off the study, she will explain the reasons and help arrange for your continued care by your own doctor, if needed.

We will tell you about any new information discovered during this study that might affect your health, welfare, or change your mind about taking part.

WHO CAN ANSWER MY QUESTIONS ABOUT THE STUDY?

You may ask more questions about the study at any time. For questions about the study or a research-related injury, contact Dr. Katie Murray or Dr. Geoff Rosen.

During regular business hours, please call **573-884-8768**

After hours or if unable to reach anyone at the above number, please call **573-882-4141** and ask to have Dr. Murray or Dr. Rosen paged

You may also contact the University of Missouri Institutional Review Board (IRB) if you:

- Have any questions about your rights as a study participant;
- Want to report any problems or complaints; or
- Feel under any pressure to take part or stay in this study.

The IRB is a group of people who review research studies to make sure the rights of participants are protected. Their phone number is 573- 882-3181.

If you want to talk privately about your rights or any issues related to your participation in this study, you can contact University of Missouri Research Participant Advocacy by calling 888-280-5002 (a free call), or emailing MUResearchRPA@missouri.edu.

We will give you a copy of this consent form. Please keep it where you can find it easily. It will help you to remember what we discussed today.

SIGNATURE OF STUDY PARTICIPANT OR LEGALLY AUTHORIZED REPRESENTATIVE

Consent to Participate in Research

By signing my name below, I confirm the following:

- I have read/had read to me this entire consent form.
- All of my questions were answered to my satisfaction.
- The study's purpose, procedures, risks and possible benefits were explained to me.
- I voluntarily agree to take part in this research study. I have been told that I can stop at any time.

Subject's Signature	**Date**

Signature of Witness (if applicable)*	**Date**

*The presence and signature of an impartial witness is required during the entire informed consent discussion if the patient or patient's legally authorized representative is unable to read.

SIGNATURE OF STUDY REPRESENTATIVE

I have explained the purpose of the research, the study procedures, identifying those that are investigational, the possible risks and discomforts as well as potential benefits and have answered questions regarding the study to the best of my ability.

Signature of Study Representative	**Date**

Appendix 6 – HIPAA waiver of authorization

UNIVERSITY OF MISSOURI – COLUMBIA
INSTITUTIONAL REVIEW BOARD

Waiver or Alteration of Health Information Portability and Accountability Act (HIPAA) Authorization for the Use and/or Disclosure of Protected Health Information (PHI) Resulting from Participation in a Research Study

PRINCIPAL INVESTIGATOR NAME: Murray, Katie
IRB PROJECT #: 2013680
PROJECT TITLE: Perioperative pregabalin as part of a multimodal, opioid-sparing treatment plan for ureteral stent symptoms after ureteroscopy: a pilot

Please check whether you are requesting a HIPAA waiver or alteration:
☒ Waiver
☐ Alteration
If you selected alteration, indicate what is being altered:
____

Why do you need this waiver or alteration? Select all that apply:
☒ **Pre-Screening** of health care records to identify potential subjects for the research.
☐ **Retrospective review** of records that exist at this time, to obtain information without the subject's written authorization.
☐ **Prospective review** of records to obtain information that is still being collected or that will be collected in the future, without the subject's written authorization.

Justification for a Waiver or Alteration:
To obtain approval for a waiver or alteration of Health Information Portability and Accountability Act (HIPAA) authorization for the use and/or disclosure of Protected Health Information (PHI) resulting from participation in a research study, the project must meet the criteria listed below. Please explain how your study meets these criteria.

1. Check the identifiers to be collected:

☒ Name	☐ Address
☒ Elements of Dates related to an individual	☒ Telephone numbers
☐ Fax Number	☒ Email Address
☐ Social Security Number	☒ Medical Record Number
☐ Health plan beneficiary number	☐ Account numbers
☐ Certificate or license numbers	☐ Any vehicle or other device serial number
☐ Web URL	☐ Internet Protocol (IP) Address numbers
☐ Biometric identifiers (finger or voice print)	☐ Photographic image – (Not limited to images of the face)

☒ Any other characteristic that could uniquely identify the individual

2. Check the type of information to be collected:

☒ Radiology Images	☐ Discharge Summaries
☐ Radiology Imaging Reports	☐ Health Care Billing or Financial Records
☐ EKG	☒ Consultations
☐ Progress notes	☐ Medications
☒ History and Physical exams	☒ Emergency Medicine reports
☒ Operative Reports	☐ Dental Records
☐ Pathology Reports	☐ Demographic information such as age, race, etc.
☐ Laboratory Reports	☐ Questionnaires, Surveys and/or Subject Diaries
☐ Photographs and or Videotapes	☐ Audiotapes

☐ Social Security Number (*This is only collected for billing purposes and not shared with the sponsor*)

☐ Other (List Here):_____

IRB USE ONLY
Approved Date: March 13, 2019

3. List the source(s) of the PHI.

☐ Paper record in clinical areas ☒ Electronic Medical Record (EMR)
☐ Data being extracted from an MU databank
☐ Electronic databases in ancillary units (lab/pathology, radiology, pharmacy, etc.)
☐ Other – Describe: _____

4. Provide a brief explanation of why the research activity to be permitted by this waiver or alteration involves no more than minimal risk to the subjects.

The minimum amount of information required for research purposes will be used. Only collection of this information will be covered by the waiver. This portion of the study represents a retrospective examination of information gathered for clinical purposes. There is no chance of physical harm or discomfort to the subject.

5. Explain why this waiver or alteration will not adversely affect the privacy rights and welfare of the subjects.

All data will maintained according to university policy. This will be in a secure online or physical repository. Only the necessary staff will have research to the data. If used, the data will be reported without any identifiers. This use of data is very unlikely to result in harm, insult, injury to relationship, loss of johb or insurance, or well being of the patient.

6. Demonstrate the research involves no more than minimal risk to the privacy of subjects by describing the plans requested below:

a. Describe the plan to protect the identifiers from improper use and disclosure.
No identifiable data will be reported.

b. Indicate where the PHI will be stored.
PHI will be stored according to university policy in an online secure repository or in a physically secure location.

c. Indicate who will have access to this information.
Only research staff who require access to this information will have it.

d. Describe the plan to destroy the identifiers at the earliest opportunity consistent with the conduct of the research. Include how and when identifiers will be destroyed. If there is a health or research justification for retaining the identifiers or such retention is otherwise required by law, provide the reason to retain identifiers.

In accordance with recordkeeping requirements for the pilot study, identifiers must be retained.

Timeline to Destroy:

☐ End of Study ☒ Months or years after end of study – Specify #: 7 years
☐ Other – Specify: _____

7. Explain how your research meets both of the following criteria for a waiver or alteration:

a. The research could not practicably be conducted without the waiver or alteration [indicate why it is very difficult to obtain authorization from the participants (inconvenience, time, resources are not acceptable criteria)].

This is for pre-screening to find patients for a larger study. It is not possible to have all patients consent to this.

b. The research could not practicably be conducted without access to and use of PHI.

This is for pre-screening which requires access to PHI.

As the Principal Investigator or the PI's designee, I confirm the information I have provided in this request is accurate and complete; the PHI I am requesting is the minimum amount of identifiable private information necessary for my research project; and the PHI will not be reused or disclosed to any other person or entity, except (a) as required by law, (b) for authorized oversight of the research study, or (c) for other permitted uses or disclosures according to federal regulations.

Katie Murray 02/19/2019
Principal Investigator Digital Signature Date
(A typed name is accepted as a digital signature)

IRB USE ONLY
Approved Date: March 13, 2019