

Pilot Study to Improve Therapeutic Outcomes for Dysphagia After Radiation  
Therapy

NCT Number: NCT02564887

Protocol Version Approved/Reviewed June 7, 2018



University of Pittsburgh

# OSIRIS

Date: Thursday, June 7, 2018 10:10:56 PM

View: T1.0 - 2.0

Print

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## Triage Section

**Provide a short title for this study** (200 characters or less):

### Pilot Study for Dysphagia after Radiation Therapy

#### T1.0 **Select the type of application:**

New Research Study

#### T2.0 **Is the proposed research study limited to the inclusion of deceased individuals?**

\* No

The review and approval of proposed innovative practices are not subject to IRB review and approval. The introduction of innovative procedures or therapies into clinical practice (i.e., independent of a research activity approved by the IRB) should be reviewed with the applicable department chairperson and the UPMC Technology Assessment Committee/Innovative Practices Sub-Committee prior to their implementation. The contact person is **Mary Gardner at 412-647-6883**.

#### T2.1 **Are any research activities being conducted at the VA Pittsburgh Healthcare System or with VA funds?**

\* No

Respond to the following questions to determine the IRB-of-record:

**Research is conducted using only VA records and/or subjects recruited thru the VA:**

**University or UPMC facilities are not engaged in research:**

**University or UPMC funds are not expended in direct support of research:**

If all **true**, then the VA is the IRB-of-record and UPitt IRB review is not required.

If all **false**, only UPitt IRB review is required.

Otherwise, dual review from both the VA and UPitt IRB is required.

**Please select the external IRB of record:****Provide the name of the Central IRB:**

Quality assurance projects are not subject to IRB review and approval. UPMC has adopted an oversight process that requires the submission of all quality assurance projects for review. At UPMC, submissions are reviewed by the Quality Improvement Review Committee (QRC). You can contact the QRC at [askqrc@upmc.edu](mailto:askqrc@upmc.edu).

Research studies that are limited to the inclusion of deceased individuals are not subject to IRB review and approval. Research performed on individuals who have been declared legally dead and/or research involving the collection of tissues from deceased individuals is not subject prior review and approval by the University of Pittsburgh IRB.

There are, however, ethical issues associated with research conducted on or involving deceased individuals. To address these ethical issues, all University faculty who desire to perform research on or involving deceased individuals must submit a project application for review and approval by the Committee for Oversight of Research and Clinical Training Involving the Dead Research Involving the Dead ([CORID](#)). Note that, as per UPMC policies, research involving the medical records of deceased individuals is subject to obtaining the written consent of the decedents' next-of-kin or the executors of the decedents' estates.

For studies that include **BOTH** living and deceased subjects, IRB review and approval **is required**.

Emergency Use is the use of a test article on a human subject in a life-threatening situation in which no standard acceptable treatment is available, and in which there is not sufficient time to obtain IRB approval [21 CFR312.310]. Detailed information on the submission process is available on the IRB website under the A-Z Guidance, [Emergency Use](#).

**All of the following conditions must exist to justify the emergency use of an unapproved investigational drug, biologic, or device. Check all the boxes that apply:**

Selections

There are no items to display

View: T3.0

### **Triage Section**

#### **T3.0 What is the anticipated risk to the research participants?**

Minimal Risk

#### **T3.1 Why do you feel that all aspects of this research study, including screening and follow-up, involve no more than minimal risk to the research subjects?**

The research procedures consist of the following: questionnaire completion and the use of the Iowa Oral Performance Instrument (IOPI). This device measures tongue strength and endurance and can also be used to exercise/strengthen the tongue and palate.

#### **T4.0 Does the proposed study qualify for 'exempt' IRB review or for a determination of either 'not research' or 'no human subject' involvement?**

\* No

#### **T5.0 Does the proposed research study qualify for 'expedited' IRB review status?**

\* No

View: CS01.0 - 01.1.1

### **Cover Sheet Section**

#### **CS1.0 What is the reason for this submission?**

New Research Protocol Submission

#### **CS1.1 Has this research study been approved previously by the University of Pittsburgh IRB?**

\* No

If the **study expired**, you are required to upload the completed [Renewal Report Form](#) and a Data and Safety Monitoring Report.

Upload the Renewal Report Form and Data and Safety Monitoring Report:

Name

Modified Date

Previous IRB #:

CS1.1.1 **Has this research study (or a substantially similar research study) been previously disapproved by the University of Pittsburgh IRB or, to your knowledge, by any other IRB?**

\* No

If **Yes**, identify the IRB, IRB number if Pitt IRB disapproved, and the primary reasons for disapproval:

View: CS02.0 - 02.1

### Cover Sheet Section

CS2.0 **Title of Research Study:**

**Pilot Study to Improve Therapeutic Outcomes for Dysphagia after Radiation Therapy**

CS2.0.1 Use the textbox below to list any language or documents to be displayed in the approval letter. List only those items submitted for review with *this submission*.

Documents to be displayed may include items such as versions of investigator brochures, consent forms, and advertisements.

If specific language is not required in the approval letter, leave the textbox blank (**do not write 'None'**).

**Requested approval letter wording:**

CS2.1 **Research Protocol Abstract:**

Patients with head and neck cancer treated with chemoradiation, often develop a treatment associated dysphagia. The common complaint is foods sticking in the pharynx. This study seeks to test the Iowa Oral Performance Instrument (IOPI) in the management of treatment induced dysphagia following chemoradiation for oral, pharyngeal, laryngeal, hypopharyngeal cancer. This pilot study seeks to compare standard exercise therapy plus

IOPI to standard exercise alone to determine if recovery is enhanced and to determine if rate of recovery is accelerated.

**CS2.2 Select the category that best describes your research:**

View: CS03.0 - 03.9

**Cover Sheet Section**

**CS3.0 Name of the Principal Investigator:**

[Jonas Johnson](#)

Note: Adjunct faculty of the University, including lecturers and instructors, are not permitted to serve as a PI or Faculty Mentor but may serve as co-investigators. Refer to [Chapter 4](#) on the HRPO website for more information.

**CS3.1 Affiliation of Principal Investigator:**

UPitt faculty member

If your answer was **Other**, fill in the Principal Investigator's affiliation:

If you chose any of the **Pitt options**, please indicate the specific campus:

[Main Campus - Pittsburgh](#)

If you chose the UPitt faculty member option, provide the PI's **University Faculty Title:**  
Chairperson

**CS3.1.1 Indicate below the name of the qualified University faculty member or UPP or UPMC staff member who will serve as a mentor and provide supervision or guidance regarding the conduct of this research study.**

**CS3.2 Address of Principal Investigator:**

EEI Suite 500  
Pittsburgh, PA 15213

**CS3.3 Recorded Primary Affiliation of the Principal Investigator:**

U of Pgh | School of Medicine | Otolaryngology

**CS3.4 Identify the School, Department, Division or Center which is responsible for oversight of this research study:**

[U of Pgh](#) | [School of Medicine](#) | [Otolaryngology](#)

**CS3.5 Telephone Number of Principal Investigator:**

412-647-2130

**CS3.6 Recorded Current E-mail Address of Principal Investigator to which all notifications will be sent:**

johnsonjt@upmc.edu

**CS3.7 Fax Number:**

412-647-2080

**CS3.8 Does this study include any personnel from Carnegie Mellon University, and/or use any CMU resources or facilities (e.g., Scientific Imaging and Brain Research Center (SIBR)?**

\* No

**CS3.9 Is this your first submission, as PI, to the Pitt IRB?**

\* No

View: CS04.0

**Cover Sheet Section****CS4.0 List of Co-Investigators:**

Last	First	Organization
Coyle	James	U of Pgh   School of Health and Rehabilitation Sciences   Communication Science and Disorders
Hathaway	Bridget	U of Pgh   School of Medicine   Otolaryngology
Kim	Seungwon	U of Pgh   School of Medicine   Otolaryngology
Smith	Libby	U of Pgh   School of Medicine   Otolaryngology
Wasserman	Tamara	Physician Services Division (UPP and CMI)   UPP   Other

View: CS05.0 - CS06.3

**Cover Sheet Section**



**CS5.0 Name of Primary Research Coordinator:**

[Christine Harrison](#)

**CS5.1 Address of Primary Research Coordinator:**

1400 Locust Street-Suite 2100  
Pittsburgh, PA 15219

**CS5.2 Telephone Number of Primary Research Coordinator:**

412-232-9097

**CS6.0 Name of Secondary Research Coordinator:****CS6.1 Address of Secondary Research Coordinator:****CS6.2 Telephone Number of Secondary Research Coordinator:****CS6.3 Key Personnel/Support Staff (Only list those individuals who require access to OSIRIS):**

Last First Organization  
There are no items to display

View: CS07.0

**Cover Sheet Section****CS7.0 Will this research study use any Clinical and Translational Research Center (CTRC) resources?**

No

**CS7.1 Please select the sites you intend to use:**

There are no items to display



View: CS08.0

### Cover Sheet Section

**CS8.0 Select the entity responsible for scientific review.**

**Department Review** - (a dean, department chair, division chief, or center head)

Note: **DoD funded studies** require departmental review

**CS8.1 Select the school, department or division which is responsible for scientific review of this submission.**

[U of Pgh](#) | [School of Medicine](#) | [Otolaryngology](#)

**CS8.1 Select the CTRC which is responsible for scientific review of this submission**

View: CS09.0 - 10.0

### Cover Sheet Section

**CS9.0 Does this research study involve the administration of an investigational drug or an FDA-approved drug that will be used for research purposes?**

\* No

**CS9.1 Do you plan to utilize the Investigational Drug Service (IDS) to dispense the drug?**

\*

**CS10.0 Is this research study being conducted under a University of Pittsburgh-based, sponsor-investigator IND or IDE application?**

\* No

*If YES, you are required to submit the IND or IDE application and all subsequent FDA correspondence through the Office for Investigator-Sponsored IND and IDE Support (O3IS). Refer to applicable University policies posted on the O3IS website ([www.O3IS.pitt.edu](http://www.O3IS.pitt.edu)).*

**CS10.1 Append to this application:**

(1) Copy of the current version of the clinical protocol submitted with the IND or IDE

application which corresponds to this IRB submission:

Name Modified Date

(2) Copy of the FDA's letter which acknowledges receipt of the application and assignment of the IND or IDE number:

Name Modified Date

View: CS11.0

### **Cover Sheet Section**

**CS11.0 Use the 'Add' button to upload one or more of the following:**

- **the sponsor protocol (including investigator initiated studies) and/or other brochures**
- **the multi-center protocol and consent form template, *if applicable***

Name Modified Date

**Is this research study supported in whole or in part by industry? This includes the provision of products (drugs or devices).**

\* No

**Is this a multi-centered study?**

\* No

View: CS12.0 - 14.0

### **Cover Sheet Section**

**CS12.0 Does your research protocol involve the evaluation or use of procedures that emit ionizing radiation?**

\* No

## **HUSC GUIDANCE REQUIREMENTS FOR THE REVIEW OF HUMAN SUBJECT RESEARCH PROTOCOLS BY THE HUMAN USE SUBCOMMITTEE (HUSC), RADIATION SAFETY COMMITTEE**

**For Research Protocols Involving the Evaluation of Use of Diagnostic Procedures that Emit Ionizing Radiation:**

Formal HUSC review/approval is required if the research protocol involves **any** of the following:

1. The use or evaluation of a radioactive agent or procedure that is not currently approved (i.e., for any clinical indication) by the FDA
2. The evaluation (i.e., for safety and/or effectiveness) of a FDA-approved radiopharmaceutical or procedure for an “off label” indication<sup>1</sup>; or the use of a FDA-approved radiopharmaceutical or procedure for an “off label” indication if such use is experimental (i.e., not routinely performed in clinical practice).
3. Individuals (e.g., healthy volunteers) who would not be undergoing the procedure in association with the diagnosis or treatment of a disease or condition

Formal HUSC review/approval is not required if the diagnostic procedure is being performed, in a standard clinical manner and frequency, for screening or to evaluate the outcome of a treatment regimen. This would include diagnostic procedures for off-label uses that are routinely performed in clinical practice.<sup>2,3</sup>

**For Research Studies Involving the Use or Evaluation of Therapeutic Procedures that Emit Ionizing Radiation:**

Formal HUSC review/approval is required if parameters (e.g., total radiation dose, dose fractionation scheme, etc.) of the radiation therapy procedure(s) are defined by the research protocol.

<sup>1</sup>An “off-label” indication is a clinical indication which is not currently specified in the FDA-approved product labeling.

<sup>2</sup>The risks of radiation exposure associated with the diagnostic procedure must continue to be addressed in the protocol and consent form using the HUSC-accepted wording.

<sup>3</sup>The University of Pittsburgh IRB, at its discretion, may request formal HUSC review of the research protocol.

**For any questions related to these requirements or their application, contact the Chair of the HUSC (412-383-1399) or the University’s Radiation Safety Office (412-624-2728)**

**CS12.1 After reviewing the HUSC guidance above, does your research protocol require HUSC review?** (Note: University of Pittsburgh’s Radiation Safety Committee oversight is limited UPMC Presbyterian-Shadyside, Magee Women’s Hospital of UPMC, Children’s

Hospital of Pittsburgh-UPMC, and Hillman Cancer Center. If other sites, you will be required to obtain approval from your radiation safety officer. Please contact [askirb@pitt.edu](mailto:askirb@pitt.edu) for more information.)

Upload Radiation Forms:

Name                      Modified Date

**CS13.0 Does this research study involve the deliberate transfer of recombinant or synthetic nucleic acid molecules into human subjects?**

\* No

Upload Appendix M of NIH Guidelines:

Name                      Modified Date

**CS14.0 Are you using UPMC facilities and/or UPMC patients during the conduct of your research study?**

\* Yes

If Yes, upload completed Research Fiscal Review Form:

Name                      Modified Date

[FRIAR IOPL.docx](#)                      9/2/2015 11:44 AM

View: CS15.0 - CS15.0.1(a)

### **Cover Sheet Section**

**CS15.0 Indicate the sites where research activities will be performed and/or private information will be obtained.**

Choose all sites that apply and/or use **Other** to include sites not listed:

Sites:

UPMC

University of Pittsburgh

**Campus:**

There are no items to display

List university owned off-campus research sites if applicable:

**UPMC**

Sites:

UPMC Presbyterian

UPMC Montefiore

UPMC Shadyside

**UPMC Cancer Network Sites:**

Site

There are no items to display

If you selected **School**, **International** or **Other**, list the sites:

**\*For research being conducted at non Pitt or UPMC sites, upload a site permission letter granting the researcher permission to conduct their research at each external site:**

Name Modified Date

CS15.1 **Have you, [Jonas Johnson](#) , verified that all members of the research team have the appropriate expertise, credentials, and if applicable, hospital privileges to perform those research procedures that are their responsibility as outlined in the IRB protocol?**

\* Yes

CS15.2 **Describe the availability of resources and the adequacy of the facilities to conduct this study:**

\* The UPMC Dept. of Otolaryngology treats individuals with qualifying diagnoses for this research at both UPMC Shadyside and UPMC Presbyterian/Montefiore. Each clinical office has board certified

clinicians in their respective fields that are extremely qualified in treating patients with swallowing difficulties. Additionally, clinicians have extensive research experience. Each clinic has both physicians and speech language pathologists who will be able to identify, educate, enroll and implement the minimal amount of research procedures necessary for the conduct of this research during clinical appointments of potential subjects. The study team has access to protected servers for data security and information protection whenever data is generated, collected, or stored.

View: CS16.0

### Cover Sheet Section

CS16.0 **Special Research Subject Populations:**

Categories

None

View: CS17.0

### Cover Sheet Section

CS17.0 **Does your research involve the experimental use of any type of human stem cell?**

\* No

View: Clinical Trial Study

### NIH Definition of a Clinical Trial

*A research study<sup>1</sup> in which one or more human subjects<sup>2</sup> are prospectively assigned<sup>3</sup> to one or more interventions<sup>4</sup> (which may include placebo or other control) to evaluate the effects of those interventions on health related biomedical or behavioral outcomes.<sup>5</sup>*

<sup>1</sup> See Common Rule definition of research at [45 CFR 46.102\(d\)](#) .

<sup>2</sup> See Common Rule definition of human subject at [45 CFR 46.102\(f\)](#) .



<sup>3</sup> The term “prospectively assigned” refers to a pre-defined process (e.g., randomization) specified in an approved protocol that stipulates the assignment of research subjects (individually or in clusters) to one or more arms (e.g., intervention, placebo, or other control) of a clinical trial.

<sup>4</sup> An intervention is defined as a manipulation of the subject or subject’s environment for the purpose of modifying one or more health-related biomedical or behavioral processes and/or endpoints. Examples include: drugs/small molecules/compounds; biologics; devices; procedures (e.g., surgical techniques); delivery systems (e.g., telemedicine, face-to-face interviews); strategies to change health-related behavior (e.g., diet, cognitive therapy, exercise, development of new habits); treatment strategies; prevention strategies; and, diagnostic strategies.

<sup>5</sup> Health-related biomedical or behavioral outcome is defined as the pre-specified goal(s) or condition(s) that reflect the effect of one or more interventions on human subjects’ biomedical or behavioral status or quality of life. Examples include: positive or negative changes to physiological or biological parameters (e.g., improvement of lung capacity, gene expression); positive or negative changes to psychological or neurodevelopmental parameters (e.g., mood management intervention for smokers; reading comprehension and /or information retention); positive or negative changes to disease processes; positive or negative changes to health-related behaviors; and, positive or negative changes to quality of life.

CS18.0 \* **Based on the above information, does this study meet the NIH definition of a clinical trial?**

☐ Yes ☐ No

If Yes, click Save and then [Click Here For Study Team's CITI Training Records](#) . Please ensure all personnel's training is up to date

View: 1.1 - 1.4

## **Section 1 - Study Objective, Specific Aims, Background and Significance**

**1.1 Objective: What is the overall purpose of this research study?** (Limit response to 1-2 sentences.)

To determine the effectiveness of the IOPI in the management of treatment induced dysphagia following chemoradiation for oral pharyngeal cancer.

**1.2 Specific Aims: List the goals of the proposed study (e.g., describe the relevant hypotheses**



**or the specific problems or issues that will be addressed by the study).**

To compare standard exercise therapy plus IOPI to standard exercise alone to determine if recovery is enhanced and to determine if rate of recovery is accelerated.

**1.3 Background: Briefly describe previous findings or observations that provide the background leading to this proposal.**

The IOPI device is one of the most commonly used measurement techniques available to measure tongue strength and endurance. Some research studies have indicated that it can be used to investigate influences of age, gender and medical condition on tongue strength and speech.

**1.4 Significance: Why is it important that this research be conducted? What gaps in existing information or knowledge is this research intended to fill?**

This is a pilot study designed to look at any enhancement the IOPI device might have, when paired with standard therapy for dysphagia following chemoradiation.

View: 2.01

**Section 2 - Research and Design Methods**

**2.1 Does this research study involve the use or evaluation of a drug, biological, or nutritional (e.g., herbal or dietary) supplement?**

\* No

**2.1.1 Does this research study involve an evaluation of the safety and/or effectiveness of one or more marketed nutritional (e.g., herbal or dietary) supplements for the diagnosis, prevention, mitigation or treatment of a specific disease or condition or symptoms characteristic of a specific disease or condition?**

\*

**2.1.1.1 List each of the marketed nutritional supplements being evaluated in this research study. Specify for each supplement the corresponding IND number or attach FDA correspondence specifying that an IND is not required.**

Marketed nutritional supplement  
There are no items to display

IND number

**Upload FDA correspondence specifying that an IND is not required, if applicable:**

Name Modified Date Version

View: 2.02

**Section 2 - Research Design and Methods**

2.2 Will this research use or evaluate the safety and/or effectiveness of one or more devices?

\* Yes

2.2.1 Does this research study involve an evaluation of the safety and/or effectiveness of one or more devices not currently approved by the FDA for general marketing?

\* No

If YES, describe your **plan to prevent unauthorized use of the investigational device:**

2.2.1.1 List each of the unapproved devices being evaluated in this research study.

Specify for each listed device the corresponding Investigational Device Exemption (IDE) number or provide a justification for why you feel that this device and its use, as proposed in this research study constitute a non-significant risk (i.e., to include potential failure of the device) to the research subjects:

Unapproved device	IDE #	Non-significant risk justification
There are no items to display		

View: 2.02.2 - Involve evaluation of safety/effectiveness of one or more devices FDA-approved

**Section 2 - Research Design and Methods**

2.2.2 Does this research study involve the use or evaluation of the safety and/or effectiveness of one or more devices approved by the FDA for general marketing?

\* Yes

2.2.2.1 Does this research study involve an evaluation of one or more FDA-approved devices

for a clinical indication, subject population, and/or operational parameter that is **not** specified in the current FDA-approved product labeling for that device (i.e., for an “off-label” indication)?

\* No

- 2.2.2.1.1 **List each of the devices being evaluated for an “off-label” indication. Specify for each listed device the corresponding Investigational Device Exemption (IDE) number for this device/research study; or provide a justification for why you feel that this device and its “off-label” use, as proposed in this research study (i.e., to include potential failure of the device) constitute a non-significant risk to the involved research subjects.**

\*

Device	IDE #	Non-significant risk justification
There are no items to display		

View: 2.03 - Summarize general classification

## Section 2 - Research Design and Methods

- 2.3 **Summarize the general classification (e.g., descriptive, experimental) and methodological design (e.g., observational, cross-sectional, longitudinal, randomized, open-label single-blind, double-blind, placebo-controlled, active treatment controlled, parallel arm, cross-over arm) of the proposed research study, as applicable.**

Randomized, observational, longitudinal, descriptive, crossover

- 2.3.1 **Does this research study involve a placebo-controlled arm?**

\* No

View: 2.04

## Section 2 - Research Design and Methods

- 2.4 **Will any research subjects be withdrawn from known effective therapy for the purpose of participating in this research study?**

\* No

- 2.4.1 **Provide a justification for discontinuing subjects from known effective therapy for the**

**purpose of study participation.**

- 2.4.2 Describe the risks to subjects associated with discontinuing them from known effective therapy for the purpose of study participation.

View: 2.05

**Section 2 - Research Design and Methods**

- 2.5 Will screening procedures (i.e., procedures to determine research subject eligibility) be performed specifically for the purpose of this research study?

\* No

- 2.5.1 List the **screening** procedures that will be performed for the purpose of this research study. Do NOT include the inclusion/exclusion criteria in this section as they will be addressed in section 3; questions 3.13 and 3.14.
- 2.5.2 What steps will be taken in the event that a clinically significant, unexpected disease or condition is identified during the conduct of the screening procedures?

Addressed below:

Participants will be under the clinical care of a member of the Department of Otolaryngology. Any disease or condition identified during the course of this research will be addressed following standard clinical procedure.

View: 2.06

**Section 2 - Research Design and Methods**

- 2.6 Provide a detailed description of all research activities (e.g., all drugs or devices; psychosocial interventions or measures) that will be performed for the purpose of this research study.

This description of activities should be complete and of sufficient detail to permit an assessment of associated risks.

At a minimum the description should include:

- **all research activities**
- **personnel (by role) performing the procedures**
- **location of procedures**
- **duration of procedures**
- **timeline of study procedures**

Individuals seen by Department of Otolaryngology physicians/clinicians, having developed treatment associated dysphagia after completing non-operative treatment with chemoradiation or radiation therapy alone, for oral, oropharyngeal, hypopharyngeal or laryngeal cancer, will be approached for participation during the course of usual clinical care in the Dept. of ENT clinical offices designated in this protocol.

Once enrolled through written informed consent, research participants will be assigned to either "standard therapy" or to "standard therapy with IOPI" treatment group by a clinical investigator. This assignment will be in an alternating fashion based on date of enrollment. IOPI treatment consists of 10 repetitions of the IOPI exercises, three times a day on three days per week for 8 weeks. It will take 30 minutes to train the subject on how to do the exercises and record them and that it takes 5-10 minutes to complete 30 repetitions of the exercise. Subjects will be completing a diary related to their exercise regimen.

Subjects will undergo a standard of care modified barium swallow study by clinical staff prior to the onset of therapy to obtain baseline measurements of airway protection and oropharyngeal kinematic function. They will also be asked to complete a Visual Analog Scale (VAS) to rate their dysphagia prior to initiation of therapy, therapy by marking an "X" on a 100mm line indicating their perception of the severity of their dysphagia (0 = least severe, 100 = most severe). They will also be asked to complete a dietary assessment tool/questionnaire consisting of 10 items (EAT-10). Tongue isometric pressure generation (strength) will be measured with the IOPI. This requires the subject to press a small plastic air-filled bulb between the tongue and hard palate, which transfers isometric pressure on the IOPI. The Functional Oral Intake Scale (FOIS) will be used by the clinician to rate current level of oral intake. Finally subjects will be weighed.

Approximately 8 weeks after the initiation of therapy ("standard" or "standard w/ IOPI") individuals will be asked to complete the VAS and the EAT-10, and the clinician will repeat the FOIS and weigh the subjects, once again at their 8-week standard of care clinical follow up visit. 8 weeks is the usual standard of care follow up visit. A modified barium swallow (MBS) test will also be performed as part of standard of care at about the 8 week time point (after therapy). Finally isometric pressure (tongue strength) will be measured at this point.

At 8 weeks, individuals who were assigned to the "standard therapy only" group, who still require swallowing therapy, will be asked if they would like to add the IOPI to their therapy



program (crossover). If they agree, they will be trained to use the IOPI and use it together with their "standard therapy" program for an additional 8 weeks. Lingual strength with the IOPI, weight, FOIS, VAS and EAT-10 will be collected both before and after the initiation of this addition to their therapy. A standard of care MBS will again be performed after 8 weeks of therapy with IOPI in this group. Those who still require swallowing therapy and do not wish to add the IOPI to their standard of care therapy program will continue in their standard therapy program.

Individuals (in either group) who do not require additional swallowing therapy at the end of study participation will discontinue their standard of care therapy program altogether.

### 2.6.1 Will blood samples be obtained as part of this research study?

\* No

\*If submitting a protocol for expedited review, it should be clear that the planned blood draws are within the parameters described here: <http://www.hhs.gov/ohrp/policy/expedited98.html> (see Expedited Research Category #2)

If **Yes**, address the frequency, volume per withdrawal, the total volume per visit, and the qualifications of the individual performing the procedure:

The purpose of the flowchart is to enhance and not replace the detailed description for all research activities in question 2.6.

It is the *responsibility of the PI to ensure consistency of the content within the entire IRB application* which includes all uploaded documents (e.g., sponsor protocol, consent, flow charts).

#### Study Flow Chart:

Name

[Flow Chart](#)

Modified Date

9/1/2015 10:10 AM

View: 2.07 - 2.07(b)

## Section 2 - Research Design and Methods

**2.7 Will follow-up procedures be performed specifically for research purposes? Follow-up procedures may include phone calls, interviews, biomedical tests or other monitoring procedures.**

\* Yes

Detailed procedures listed in the textbox below:

The follow up procedures outlined in 2.6. The modified barium swallow, FOIS, and patient weight are routinely performed with clinical patients. Among the procedures in this study the only ones used for research purposes are: the visual analog scale, the EAT-10, and the measurement of tongue strength with the IOPI.

Approximately 8 weeks after the initiation of therapy ("standard" or "standard w/ IOPI") individuals will be asked to complete the VAS and the EAT-10, and the clinician will repeat the FOIS and weight the subjects, once again at their 8-week standard of care clinical follow up visit. 8 weeks is the usual standard of care follow up visit. A modified barium swallow (MBS) test will also be performed as part of standard of care at about the 8 week time point. Finally isometric pressure (tongue strength) will be measured at this point.

View: 2.08

**Section 2 - Research Design and Methods**

**2.8 Does this research study involve the use of any questionnaires, interview or survey instruments?**

\* Yes

**Upload a copy of all materials except for the SCID or KSADS which are on file at the IRB. The use of all instruments must be addressed in question 2.6 and/or question 2.7 (except for an exempt submission where they should be addressed on the appropriate uploaded exempt form).**

Name	Modified Date
<a href="#">FOIS scale</a>	9/1/2015 9:15 AM
<a href="#">EAT-10.docx</a>	8/27/2015 4:25 PM
<a href="#">VAS-dysphagia IOPI.docx</a>	8/27/2015 4:28 PM

**Previously the name and publisher for commercially available materials were listed in the textbox below but effective 9/1/2015, all materials (except for the SCID and KSADS) must**



**be uploaded using the Add button above.**

Belafsky PC, Mouadeb DA, Rees CJ, Pryor JC, Postma GN, Allen J, Leonard RJ. Validity and Reliability of the Eating Assessment Tool (EAT-10). Annals of Otolaryngology & Rhinology & Laryngology 2008;117(12):919-924.

View: 2.09 - 2.10

## **Section 2 - Research Design and Methods**

### **2.9 If subjects are also patients, will any clinical procedures that are being used for their conventional medical care also be used for research purposes?**

\* yes

If **Yes**, describe the clinical procedures (and, if applicable, their frequency) that will be used for research purposes:

Information contained in their electronic medical record related to their qualifying diagnosis and swallowing difficulty will be accessed for this research. Specifically, MBS evaluations will be accessed/reviewed as part of the assessment process for the specific aims of this research.

2.10 The blood sample question was moved to 2.6.1.

View: 2.11

## **Section 2 - Research Design and Methods**

### **2.11 What is the total duration of the subject's participation in this research study across all visits, including follow-up surveillance?**

\* Approximately 8 weeks for IOPI plus standard therapy. Approximately 16 weeks for the crossover group.

View: 2.12

## **Section 2 - Research Design and Methods**

### **2.12 Does this research study involve any type of planned deception?**

If Yes, you are required to request an alteration of the informed consent process (question 4.7)

\* No

#### **2.12.1 Describe the planned deception:**

\*

**2.12.2 Provide a justification for this planned deception:**

\*

**2.12.3 Describe when and how subjects will be debriefed:**

\*

View: 2.13 HB

**Section 2 - Research Design and Methods****2.13 Does this research study involve the use of UPMC/Pitt protected health information that will be de-identified by an IRB approved "honest broker" system?**

\* No

**2.13.1 Identify the name of the honest broker system:****2.13.2 Specify the IRB-assigned honest broker system number (e.g., HB123456):****2.13.3 Specify the names of the individuals who will provide the honest broker services:**

Last First Organization

There are no items to display

**Previous inputted information for Question 2.13.3:****2.13.4 Upload the signed honest broker assurance agreement:**

Name Modified Date

There are no items to display

View: 2.14

**Section 2 - Research Design and Methods****2.14 Will protected health information from a UPMC/Pitt HIPAA covered entity be accessed for research purposes or will research data be placed in the UPMC/Pitt medical record?**

\* Yes

If you answer **Yes**, you are required to submit this study to the Center for Assistance in Research using e-Record (CARE). Per UPMC Policy HS-RS0005, all research projects that access or involve UPMC electronic protected health information (e-PHI) must be submitted to CARE, with the exception of clinical trials that are contracted through the UPMC Office of Sponsored Programs and Research Support (OSPARS).

Complete the online submission form at <https://care.upmc.com/request.aspx>. After the study is submitted in OSIRIS, a CARE representative will conduct a review. You will be notified once your CARE review is complete or if anything further is needed.

Studies that will access only paper-based medical records (not in combination with any electronic records) do not need to be submitted to CARE.

For additional information, please see <https://care.upmc.com>.

**Describe the medical record information that will be collected from the UPMC/Pitt HIPAA covered entity and/or the research-derived information that will be placed in the medical records.**

Information to be collected:

1. site and staging of qualifying head/neck cancer.
2. modified barium swallow video data
3. medical history of pneumonia, feeding tubes
4. patient age and gender, date of completion or cancer treatment, type of chemotherapy and total radiation therapy dosage

Research information to be placed into medical records would include:

1. Outcomes of therapy (including IOPI results/tongue strength)
2. Changes of research outcome measures pertinent to patient clinical care.
3. Type of exercise regimen the participant used.

2.14.1 **Will protected health information from a non-UPMC/Pitt HIPAA covered entity be obtained for research purposes or will research data be placed in the non-UPMC/Pitt medical record?**

\* No

**If Yes, describe how the HIPAA requirements will be met:**

**I, Jonas Johnson , certify that any member of my research team accessing, reviewing and/or recording information from medical records have completed the CITI Privacy & Information Security course or, if completed within the past year, the Internet-Based Studies in Education and Research (ISER) HIPAA for Researchers (Formerly RPF Module 6). The HIPAA certificates must be available for review if audited but do not need to be uploaded into this OSIRIS application.**

\* Yes

**2.14.2 Are you requesting a waiver of the requirement to obtain written HIPAA authorization for the collection of the PHI?**

\* No

View: 2.15

## **Section 2 - Research Design and Methods**

**2.15 Does this research study involve the long-term storage (banking) of biological specimens?**

\* No

**2.15.1 Broadly describe the intended future use of the banked biological specimens:**

**2.15.2 Indicate the planned length of storage of the banked biological specimens:**

\*

**2.15.3 Will biological specimens be stored **without** identifiers or linkage codes?**

**If you answer Yes, the samples will not be stored with any identifiers or linkage codes and it is highly unlikely to be linked back to the individual.**

**If you answer No, the samples will be stored with an identifier or linkage code and can be linked back to the individual.**

\*

View: 2.16

**Section 2 - Research Design and Methods**

2.16 **Will research participants be asked to provide information about their family members or acquaintances?**

\* No

2.16.1 **Describe what information about the third party will be obtained from the participant:**

2.16.2 **If the information about the third party is of a private nature, can the identity of the third party be readily ascertained or associated with this information?**

\*

Describe the **private information** that will be collected and recorded about the third party:

View: 2.17 - 2.18

**Section 2 - Research Design and Methods**

2.17 **What are the main outcome variables that will be evaluated in this study?**

1. Tongue pressure generation (strength).
2. Airway protection during swallowing (penetration-aspiration scale score of MBS data).
3. Pharyngeal residue after swallowing (pharyngeal retention scale rating of MBS data).
4. Swallowing impairment based on EAT-10, VAS, FOIS.
5. Swallow kinematic measures of MBS data on a swallow by swallow basis (videofluoroscopic image analysis with image processing software):
  - a. oral transit duration (duration of bolus transit through the oral cavity)
  - b. stage transition duration (measure of pharyngeal onset delay time)
  - c. duration of impaired oral containment (measure of bolus control in the oral cavity)
  - d. pharyngeal transit duration (duration of bolus transit from oral cavity to inferior pharynx)
  - e. pharyngeal response duration (duration of hyoid bone maximal movement during the swallow)
  - f. duration of upper esophageal sphincter opening
  - g. laryngeal closure duration (duration of airway closure)
  - h. we may analyze the magnitude of epiglottic inversion (rotation of the epiglottis during swallows which relates to laryngeal closure)



i. we may analyze the magnitude of hyoid displacement (distance traveled by the hyoid bone during swallows)

## 2.18 Describe the statistical approaches that will be used to analyze the study data.

\* Addressed below:

We will perform t-tests to compare the dependent variable values from each measure (penetration-aspiration scores, pharyngeal retention scores, swallow kinematic measures, tongue pressure scores, EAT-10 scores, VAS scores, and patient weight. We may also perform ANOVAs and post hoc analyses to determine the main effect of treatment condition on the dependent variables, and to determine the presence of any interaction effects, and single subject analyses using the C statistic, to determine individual effect sizes for individual participants. Analyses will be designed to compare performance at the following time points:

1. between groups comparisons at time 1 (start of treatment) and at 2 (end of treatment) to evaluate differences between groups at the start and end of 8 weeks of therapy.
2. within groups comparisons between time 1 and 2 (standard therapy vs. standard therapy + IOPI) to evaluate the magnitude of differences from beginning to end of therapy.
3. within group comparison (standard treatment crossover only) at time 1 and time 3 (8 weeks after crossover of standard treatment subjects into standard therapy + IOPI) to evaluate the magnitude of differences from beginning of therapy to end of second phase of therapy (combined standard therapy, with crossover to standard + IOPI).

View: 2.19 - 2.19.6

### Section 2 - Research Design and Methods

2.19 **Will this research be conducted in (a) a foreign country and/or (b) at a site (e.g., Navajo Nation) where the cultural background of the subject population differs substantially from that of Pittsburgh and its surrounding communities?**

\* No

Note that copies of training records, licenses, certificates should be maintained in the study regulatory binder and are subject to audit by the Research Conduct and Compliance Office (RCCO).

In addition, individuals planning to conduct human subject research outside the United States must complete an optional module on the CITI training website: International Studies. [Click here](#) to access the instruction sheet for accessing optional CITI modules.

**2.19.1 Address the following for each of the foreign/culturally different sites where this research will be conducted:**

- Name of site
- Name of authorized individual (e.g., IRB Chair) from the local IRB or other human subject protections entity that is responsible for the review and approval of the project; upload approval letter with an English translation, if applicable
- Name and qualifications of the site collaborator responsible for the conduct of the research (e.g., site PI)
- The anticipated number of subjects that will be enrolled at that site
- If Federally funded, provide the Federalwide Assurance number (FWA) assigned to the site

\*

Site                      Date Modified  
There are no items to display

**2.19.1.1 Provide a description of the context of cultural norms and local laws and highlight differences between U.S. culture in all areas relevant to your study, including, at a minimum:**

- Age of majority of participants to be enrolled
- If study includes minors or decisionally impaired subjects, summarize laws on guardianship
- If your study involves any invasive medical procedure (including blood draws), provide assurance that the individuals undertaking those procedures for research purposes are appropriately credentialed.
- If your study involves the administration of a drug, device or biologic for research purposes, describe the process for shipping, labeling, storing and dispensing, and indicate how these are consistent with all relevant local (and US) laws, including those requiring import / export permits.
- If your study involves collection of biological specimens, describe the process for shipping, labeling, storing and using such samples. Identify any special local consent requirements, and any special permits that may be required by local law.



\*

- 2.19.1.2 **Describe any aspects of the local cultural, political or economic climate that might increase the risks of harm for either local participants or researchers. Describe the steps you will take to minimize these risks. UPitt Faculty, Staff, and Students must access the **Travel Registry** page. Go to my.pitt.edu and the link is displayed under My Resources.**

\*

- 2.19.2 **Will all individuals being recruited to participate in this research study be able to read and comprehend English**

If **No**, describe how consent will be obtained. Explain provisions for culturally appropriate recruitment and consent accommodations such as, translations or involvement of native language speakers, especially if literacy is not widespread in this country.

- 2.19.2.1 **If translated documents are used, upload a signed translator certification form and back translations (if applicable):**  
(Translator Certification Form is available under the *Resources* tab located to right of this item)

Name    Modified Date

There are no items to display

- 2.19.3 **Will all of the research procedures described in this IRB application be conducted at the foreign/culturally different sites?**

\* ☐ Yes ☐ No

If **No**, describe the subset of research procedures to be performed at the sites:

- 2.19.4 **To what extent do the local site requirements to protect subject confidentiality and privacy differ from US standards. If applicable, explain how those will be addressed by this research team:**

\*

- 2.19.5 **If the researcher is a student, describe how the student will communicate with the advisor during the conduct of the research and how the advisor will oversee the research:**

View: 2.21

## **Section 2 - Research Design and Methods**

- 2.21 **Will this research study be conducted within a nursing home located in Pennsylvania?**

\* No

- 2.21.1 **Does this research involve a medical procedure or an experimental treatment?**

\*

- 2.21.2 **Does the research study involve the exposure of nursing home residents to pain, injury, invasion of privacy, or ask the resident to surrender autonomy?**

\*

If **Yes to either question**, upload the Pennsylvania Department of Health approval letter. 28 PA Code Section 201.29 (o) specifies that prior to the initiation of research, and in addition to IRB approval, any study that includes experimental research or treatment conducted in a nursing home must be approved by the Pennsylvania Department of Health. A signed consent form from nursing home resident-subject is also required.

Name Modified Date

View: 3.01 - 3.04(a)

## **Section 3 - Human Subjects**

- 3.1 **What is the age range of the subject population?**

18 and older

**3.2 What is their gender?**

- \* Both males and females

Provide a justification if single gender selected:

**3.3 Will any racial or ethnic subgroups be explicitly excluded from participation?**

- \* No

If **Yes**, identify subgroups and provide a justification:

**3.4 For studies conducted in the U.S., do you expect that all subjects will be able to comprehend English?**

- \* Yes

If **No**, identify what languages will be understood by subjects and describe your plan to manage communication with non-English speaking subjects during all phases of the study:

**3.4.1 If translated documents are used, upload a signed translator certification form and back translations (if applicable):**

Name    Modified Date

There are no items to display

View: 3.05 - 3.05(a)

**Section 3 - Human Subjects****3.5 Participation of Children: Will children less than 18 years of age be studied?**

- \* No

If **No**, provide a justification for excluding children:

The number of "children" under the age of 18 with the qualifying diagnosis is minimal. The amount of information to be obtained from this small population is minimal.

**3.5.1 Specify the age range of the children to be studied.  
(Check all that apply below:)**

\*

Choices

There are no items to display

- 3.5.2 **Provide a rationale for the specific age ranges of the children to be studied:**
- 3.5.3 **Describe the expertise of the study team for conducting research with children within this age range:**
- 3.5.3.1 **Have you obtained the following clearances from all research staff who may have direct contact with children under the age of 18? Direct contact under the law includes face-to-face, and telephonic or electronic, contact with minors. Please see the [Child Clearances](#) guidance document for further explanation?**

**Pennsylvania Department of Public Welfare Child Abuse History Clearance;  
Pennsylvania State Police Criminal Record Check; and  
FBI Criminal Background Check**

**Note:** If No, once all clearances are obtained, a modification must be submitted.

**If you selected N/A, please explain:**

It is important to note that “direct contact” refers not only to face-to-face meetings but also extends to communication via phone (including text messaging), social media or internet. Direct contact also includes the care, guidance, supervision or control, or routine interaction with, minors. Conversely, a participating investigator or support staff member who does not have direct contact, either electronically or in person, with children does not need to obtain clearances (e.g., statistician, non-clinical laboratory personnel, etc.). If your research study provides babysitting services, the babysitters must have the required child clearances.

\* **Note:** It is the responsibility of the principal investigator to ensure that all research staff have these clearances prior to any interaction with children. Contact Human Resources at 412-624-8150 for assistance with this process.

3.5.4 **Describe the adequacy of the research facilities to accommodate children within this age range:\***

3.5.5 **Permitted Categories of Research: The Federal Policy and FDA regulations governing human subject protections specify that research involving children must fall into one of the following permitted categories.**

\*

#### **45 CFR 46.406**

- The risk represents only a minor increase over minimal risk.
- The research procedures present experiences to the subjects that are reasonably commensurate with those inherent in their actual or expected medical, dental, psychological, social, or educational situations.
- The research procedures are likely to yield generalizable knowledge about the subjects' disorder or condition which is of vital importance for understanding or amelioration of the subjects' disorder or condition.

#### **45 CFR 46.407**

- The risk is justified by the anticipated benefit to the subjects; and the relation of the anticipated benefit to the risk is at least as favorable to the subjects as that presented by available alternative approaches.

Provide a justification which **must address all considerations** related to the designated category of research:

View: 3.06

### **Section 3.0 - Human Subjects**

3.6 **Does this research study involve prisoners, or is it anticipated that the research study may involve prisoners?**

\* No

3.6.1 **The Federal Policy and FDA regulations specify that research involving prisoners must fall into one of the following permitted categories.**

\*

\*Provide a justification for your designation:

**General Requirements:** The Federal Policy and FDA regulations specify that research involving prisoners must also conform to each of the following general requirements. Describe how your study **meets each of the following regulations.**

3.6.2 **Any possible advantages accruing to the prisoner through his or her participation in the research, when compared to the general living conditions, medical care, quality of food, amenities, and opportunity for earnings in the prison are not of such a magnitude that the prisoner's ability to weigh the risks of the research against the value of such advantages in the limited choice environment of the prison is impaired. [45 CFR 46.305 (a)(2)]**

\*

3.6.3 **The risks involved in the research are commensurate with risks that would be accepted by nonprisoner volunteers. [45 CFR 46.305 (a)(3)]**

\*

3.6.4 **The procedures for the selection of subjects within the prison are fair to all prisoners and immune from arbitrary intervention by prison authorities or prisoners. [45 CFR 46.305 (a)(4)]**

\*

3.6.5 **Information regarding the research is presented to the potential prisoners-subjects in a language which is understandable to them.[45 CFR 46.305 (a)(5)]**

\*

3.6.6 **Adequate assurance exists that the parole boards will not take into account a prisoner's participation in the research in making decisions regarding parole, and each prisoner is clearly informed in advance that participation in the research will have no effect on his or her parole. [45 CFR 46.305 (a)(6)]**

\*

3.6.7 **Where there may be a need for follow-up examination or care of the prisoners-subjects after the end of their participation in the research, adequate provision has been made for such examination or care; taking into account the varying lengths of individual prisoners' sentences, and the prisoners have been informed of this fact. [45 CFR 46.305 (a)(7)].**



\*

View: 3.07

**Section 3 - Human Subjects****3.7 Will pregnant women be knowingly and purposely included in this research study?**

\* No

**General Requirements:** The Federal Policy [45 CFR 46, Subpart B] specify that research involving pregnant women and/or fetuses must also confirm to each of the following criteria. Describe how your study meets each of the requirements.

**3.7.1 Where scientifically appropriate, preclinical studies, including studies on pregnant animals, and clinical studies, including studies on non-pregnant women, have been conducted and provide data for assessing potential risks to pregnant women and fetuses. [45 CFR 46.204 (a)] [Include references]**

\*

**3.7.2 The risk to the fetus is caused solely by interventions or procedures that hold out the prospect of direct benefit for the women or the fetus; or, if there is no such prospect of direct benefit, the risk to the fetus is not greater than minimal and the purpose of the research is the development of important biomedical knowledge which cannot be obtained by any other means. [45 CFR 46.204 (b)]**

\*

**3.7.3 Any risk is the least possible for achieving the objectives of the research. [45 CFR 46.204 (c)]**

\*

**3.7.4 No inducements, monetary or otherwise, will be offered to terminate the pregnancy. [45 CFR 46.204 (h)]**

\*

**3.7.5 Individuals engaged in the research will have no part in any decisions as to the timing, method, or procedures used to terminate a pregnancy. [45 CFR 46.204 (i)]**



\*

**3.7.6 Individuals engaged in the research will have no part in determining the viability of a neonate. [45 CFR 46.204 (j)]**

\*

View: 3.08

**Section 3 - Human Subjects**

**3.8 Does this research study involve neonates of uncertain viability or nonviable neonates?**

\* No

General Requirements: The Federal regulations [45 CFR 46.205] specify that research involving neonates of uncertain viability and nonviable neonates must conform to each of the general requirements. Describe how each of the following requirements will be met.

**3.8.1 Where scientifically appropriate, preclinical and clinical studies have been conducted and provide data for assessing potential risks to neonates (include references). [45 CFR 46.205 (a)(1)]**

\*

**3.8.2 Individuals engaged in the research will have no part in determining the viability of the neonate. [45 CFR 46.205 (a)(3)]**

\*

**3.8.3 Does this research study involve neonates of uncertain viability? [45 CFR 46.205(b)]**

\*

**3.8.3.1 The Federal regulations specify that, until it is ascertained whether or not a neonate is viable, a neonate may not be involved in research unless one of the following conditions is met.**

\*

\*Provide a justification for your selection:

**3.8.4 Does this research study involve nonviable neonates? [45 CFR 46.205(c)]**

\*

General Requirements: The Federal regulations specify that, after delivery, a nonviable neonate may not be involved in research unless each of the following additional conditions are met [45 CFR 46.205(c)].

3.8.4.1 **Vital functions of the neonate will not be artificially maintained.** [45 CFR 46.205 (c)(1)]

\*

3.8.4.2 **The research will not terminate the heartbeat or respiration of the neonate.** [45 CFR 46.205 (c)(2)]

\*

3.8.4.3 **There will be no added risks to the neonate resulting from the research.** [45 CFR 46.205 (c)(3)]

\*

3.8.4.4 **The purpose of the research is the development of important biomedical knowledge that cannot be obtained by other means.** [45 CFR 46.205 (c)(4)]

\*

View: 3.09

### Section 3 - Human Subjects

3.9 **Fetal Tissues: Does this research involve the use of fetal tissues or organs?**

\* No

General Requirements: In accordance with the Pennsylvania Abortion Control Act, fetal tissues or organs may only be obtained for use in research subsequent to obtaining the written informed consent of the mother. The Pennsylvania Abortion Control Act specifies that research involving the use of fetal tissue or organs must also conform to **each** of the following requirements. [Indicate how you will conform to each requirement]

- 3.9.1 **Informed consent for the research use of fetal tissue derived from an abortion will be obtained separate from, and after, the decision and consent to abort has been made.**
- \*
- 3.9.2 **No consideration of any kind (i.e., monetary or otherwise) will be offered to the mother in obtaining her consent for the research use of the fetal tissue or organs.**
- \*
- 3.9.3 **The mother will not be permitted to designate a recipient of the fetal tissue or organs for use in research.**
- \*
- 3.9.4 **All persons who participate in the procurement or use of the fetal tissue or organs will be informed as to the source of the tissue (e.g., abortion, miscarriage, stillbirth, ectopic pregnancy).**
- \*

View: 3.10 - 3.12(a)

--->

### **Section 3.0 - Human Subjects**

- 3.10 **What is the total number of subjects to be studied at this site, including subjects to be screened for eligibility?**

Note: The number below is calculated by summing the data entered in question 3.11. Any additions or changes to the values entered in 3.11 will be reflected in 3.10.

\* 100

- 3.11 **Identify each of the disease or condition specific subgroups (include healthy volunteers, if applicable) that will be studied.**

**Click on the "Add" button and specify for each subgroup:**

- 1) how many subjects will undergo research related procedures at this site; and**
- 2) if applicable, how many subjects will be required to undergo screening procedures (e.g., blood work, EKG, x-rays, etc.) to establish eligibility. Do Not include subjects who**

**will undergo preliminary telephone screening.**

\*

	Subgroup	Number to undergo research procedures	Number to undergo screening procedures
<a href="#">View</a>	Standard Therapy plus IOPI	50	0
<a href="#">View</a>	Standard Therapy	50	0

**3.12 Provide a statistical justification for the total number of subjects to be enrolled into this research study at the multicenter sites or this site.**

\* Described below:

This is a pilot study. Enrollment numbers were determined through a review of the referral base and realistic expectations for recruitment.

View: 3.13 - 3.15(a)

**Section 3.0 - Human Subjects**

**3.13 Inclusion Criteria: List the specific criteria for inclusion of potential subjects.**

Age 18 and older.

Diagnosed with oral, oropharyngeal, hypopharyngeal or laryngeal cancer having non-surgical treatment with chemoradiation, or radiation therapy alone, resulting in treatment associated dysphagia.

**3.14 Exclusion Criteria: List the specific criteria for exclusion of potential subjects from participation.**

1. Unable to adhere to assigned therapy program due to cognitive deficits.
2. Surgical treatment for head and neck cancer.
3. unable to give informed consent
4. Past or current history of temporomandibular joint dysfunction
5. Past or current history of myofacial pain disorders

**3.15 Will HIV serostatus be evaluated specifically for the purpose of participation in this research study?**

\* No

If **Yes**, provide a justification:

View: 4.01 - Version 2

**Section 4 - Subject Recruitment and Informed Consent Procedures**

**4.1 Select all recruitment methods to be used to identify potential subjects:**

Other Strategies: Described below

**Advertisements**

Upload the advertisements for review:

Name Modified Date

**Honest Broker**

Identify the name of the honest broker system and name of the specific individuals who will provide those services:

Specify the IRB-assigned honest broker system number (e.g., HB123456):

Upload the signed honest broker assurance agreement:

Name Modified Date

There are no items to display

**Recruitment Letters and Scripts**

Upload recruitment letters/scripts/text:

Name Modified Date



**Research Registry**

List the IRB approval number and title for each registry source:

**4.2 Provide a detailed description of your recruitment methods, including identifying and initiating contact with participants:**

Potential research subjects will be initially contacted at the University of Pittsburgh Medical Center Department of Otolaryngology outpatient clinic while there for routine clinical evaluation. They will be approached by their clinician who may also be an investigator of this research project. The investigator or clinician, who will be trained in all research procedures, will present information about this research study. If the potential research subject is interested, the informed consent process will be initiated.

Note: Questions jump from 4.2 to 4.6 as questions 4.3-4.5 have been removed and the information is now captured in 4.1

View: 4.06

**Section 4 - Subject Recruitment and Informed Consent Procedures**

- 4.6 Are you requesting a waiver to document informed consent for any or all participants, for any or all procedures? (e.g., a verbal or computerized consent script will be used, but the subjects will not be required to sign a written informed consent document.**

*This is not a waiver to obtain consent.*

\* No

- 4.6.1 Identify the specific research procedures and/or the specific subject populations for which you are requesting a waiver of the requirement to obtain a signed consent form.**

**If not all**, identify the specific procedures and/or subject populations for which you are requesting a waiver:

- 4.6.2 Indicate which of the following regulatory criteria is applicable to your request for a waiver of the requirement to obtain a signed consent form.**

**45 CFR 46.117(c)(1)** That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern; or

**45 CFR 46.117(c)(2)** That the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

- 4.6.2.1 **Address why the specific research procedures for which you are requesting a waiver of the requirement to obtain a signed consent form present no more than minimal risk of harm to the research subjects:**
- 4.6.2.2 **Justify why the research listed in 4.6.1 involves no procedures for which written informed consent is normally required outside of the research context:**
- 4.6.3 **Address the procedures that will be used and the information that will be provided (i.e., script) in obtaining and documenting the subjects' verbal informed consent for study participation:**

Upload Scripts:

Name Modified Date

View: 4.07 - Version 2.0

#### **Section 4 - Subject Recruitment and Informed Consent Procedures**

- 4.7 **Are you requesting a waiver to obtain informed consent or an alteration of the informed consent process for any of the following?**

\* No

- 4.7.1 **If Yes, select the reason(s) for your request:**

There are no items to display

General Requirements: The Federal Policy [45 CFR 46.116 (d)] specifies in order for a waiver of consent to be approved, the request must meet four criteria. For each request, you will be asked to provide a justification addressing how each of these criterion is met.

**Medical record review for the identification of potential subjects:**

The research involves no more than minimal risk to the subjects;

**[45 CFR 46.116 (d)(1)]**

The waiver or alteration will not adversely affect the rights and welfare of the subjects;

**[45 CFR 46.116 (d)(2)]**

The research could not practicably be carried out without the waiver or alteration;

**[45 CFR 46.116 (d)(3)]**

Whenever appropriate, the subjects will be provided with additional pertinent information after participation;

**[45 CFR 46.116 (d)(4)]**

**Review of identifiable medical records:** [Note: A waiver of HIPAA Authorization must be requested (2.14.2)] **Include the approximate number of medical records and/or specimens that will be accessed and enter -1 in question 3.11 for the number of subjects to be enrolled.**

The research involves no more than minimal risk to the subjects;

**[45 CFR 46.116 (d)(1)]**

The waiver or alteration will not adversely affect the rights and welfare of the subjects;

**[45 CFR 46.116 (d)(2)]**

The research could not practicably be carried out without the waiver or alteration;

**[45 CFR 46.116 (d)(3)]**

Whenever appropriate, the subjects will be provided with additional pertinent information after participation.

**[45 CFR 46.116 (d)(4)]**

**Parental Permission and/or Child Assent**

The research involves no more than minimal risk to the subjects;

**[45 CFR 46.116 (d)(1)]**

The waiver or alteration will not adversely affect the rights and welfare of the subjects;

**[45 CFR 46.116 (d)(2)]**

The research could not practicably be carried out without the waiver or alteration;

**[45 CFR 46.116 (d)(3)]**

Whenever appropriate, the subjects will be provided with additional pertinent information

after participation.  
[45 CFR 46.116 (d)(4)]

### **Alteration of informed consent process**

The research involves no more than minimal risk to the subjects;  
[45 CFR 46.116 (d)(1)]

The waiver or alteration will not adversely affect the rights and welfare of the subjects;  
[45 CFR 46.116 (d)(2)]

The research could not practicably be carried out without the waiver or alteration;  
[45 CFR 46.116 (d)(3)]

aWhenever appropriate, the subjects will be provided with additional pertinent information after participation.  
[45 CFR 46.116 (d)(4)].

### **Other Minimal Risk activity**

The research involves no more than minimal risk to the subjects;  
[45 CFR 46.116 (d)(1)]

The waiver or alteration will not adversely affect the rights and welfare of the subjects;  
[45 CFR 46.116 (d)(2)]

The research could not practicably be carried out without the waiver or alteration;  
[45 CFR 46.116 (d)(3)]

Whenever appropriate, the subjects will be provided with additional pertinent information after participation.  
[45 CFR 46.116 (d)(4)].

#### **4.7.2 Under what circumstances (if any) will you obtain consent from some of these subjects?**

## Section 4 - Subject Recruitment and Informed Consent Procedures

### 4.8 Are you requesting an exception to the requirement to obtain informed consent for research involving the evaluation of an 'emergency' procedure?

**Note:** This exception allows research on life-threatening conditions for which available treatments are unproven or unsatisfactory and where it is not possible to obtain informed consent.

\* No

View: 4.09 Informed Consent

## Section 4 - Subject Recruitment and Informed Consent Procedures

### 4.9 Upload all consent documents for watermarking:

Draft Consent Forms for editing:

Name	Modified Date
<a href="#">UPMC ICF - IOPI RTC2.doc</a>	10/21/2015 4:16 PM

Approved Consent Form(s):

Name	Modified Date
<a href="#">UPMC ICF - IOPI RTC2.doc</a>	7/25/2017 10:32 AM

View: 4.10

## Section 4 - Subject Recruitment and Informed Consent Procedures

### 4.10 Will all potential adult subjects be capable of providing direct consent for study participation?

\*

Yes

**Indicate why direct consent is not possible:**

#### 4.10.1 Provide a justification for the inclusion of adult subjects who are unable to provide direct consent for study participation.



4.10.2 **Specify the criteria used to determine that a potential adult subject is not able to provide direct consent for participation and identify who will be responsible for that determination.**

4.10.3 **Will you obtain the potential adult subject's assent for study participation?**

\*

If **No**, provide a justification for not obtaining assent:

4.10.4 **Identify who will provide proxy consent for the participation of the decisionally impaired adult:**

View: 4.11 - 4.11(b)

#### **Section 4 - Subject Recruitment and Informed Consent Procedures**

4.11 **At what point will you obtain the informed consent of potential research subjects or their authorized representative?**

Prior to performing any of the research interventions/interactions

If **Other**, address below:

4.11.1 **Address why you feel that it is acceptable to defer obtaining written informed consent until after the screening procedures have been performed.**

4.11.2 **Taking into account the nature of the study and subject population, indicate how the research team will ensure that subjects have sufficient time to decide whether to participate in this study. In addition, describe the steps that will be taken to minimize the possibility of coercion or undue influence.**

Patients will be provided with the information about the study. They will be told it is their choice if they wish to participate, and that it will not affect the care they receive. Clinical care will continue as directed regardless of participation in this research.

View: 4.12 - 4.14(a)

#### **Section 4 - Subject Recruitment and Informed Consent Procedures**

**4.12 Describe the process that you will employ to ensure the subjects are fully informed about this research study.**

\* Addressed below:

**This description must include the following elements:**

- who from the research team will be involved in the consent process (both the discussion and documentation);
- person who will provide consent or permission;
- information communicated; and
- any waiting period between informing the prospective participant about the study and obtaining consent

In addition, address the following if applicable based on your subject population:

- process for child assent and parental permission
  - continued participation if a child subject turns 18 during participation
- process for obtaining proxy consent and assent for decisionally impaired subjects
  - continued participation if subject regains capacity to consent

The potential research subject will be approached by their clinician who may also be an investigator on this research study. The clinician or investigator will provide information about participation, including the purpose of the study, the potential risks and benefits of study participation, and their rights as a research subject. The clinician or the investigator will go through the informed consent document with the potential research subject prior to enrollment. The investigator and/or clinician will answer any questions that the potential research subject may have about this research study. Consent will ultimately be obtained by the clinician or one of the investigators on this project as approved by the IRB.

**4.13 Are you requesting an exception to either IRB policy related to the informed consent process?**

- For studies involving a drug, device or surgical procedures, a listed physician investigator is required to obtain the written informed consent unless an exception to this policy has been approved by the IRB
- For all other studies, a listed investigator is required to obtain consent (Note: In order to request an exception to this policy, the study must be minimal risk)

\* Yes

If **Yes**, provide a justification and describe the qualifications of the individual who will obtain consent:

We are requesting an exception to the IRB policy requiring a "listed physician investigator" to obtain written informed consent from participants.

The reason for this request is that additional clinicians in the Department of Otolaryngology will have the required knowledge to complete the informed consent process. Currently, there are 5 Speech Language Pathologists (currently not listed as co-investigators) that will be directly involved in the care of the participants. These individuals will be assisting with the swallowing testing as well as instructing the subjects in the proper therapy techniques and proper use of the IOPI device. With proper instruction on the details of the protocol, these additional 5 SLPs who are assisting directly with the care of these individuals will be adequately qualified to answer questions related to this research.

#### 4.14 Will you inform research subjects about the outcome of this research study following its completion?

\* No

If **Yes**, describe the process to inform subjects of the results:

View: 5.01.1 - 5.01.2 Version 2

### Section 5 - Potential Risks and Benefits of Study Participation

#### 5.1 Describe potential risks (physical, psychological, social, legal, economic or other) associated with screening procedures, research interventions/interactions, and follow-up/monitoring procedures performed specifically for this study:

\*

[View](#)

<b>Research Activity:</b>	medical record review/data collection
<b>Common Risks:</b>	No Value Entered
<b>Infrequent Risks:</b>	Rare risk of confidentiality breach.
<b>Other Risks:</b>	No Value Entered

[View](#)

<b>Research Activity:</b>	Questionnaires
<b>Common Risks:</b>	<i>No Value Entered</i>
<b>Infrequent Risks:</b>	possible emotional distress
<b>Other Risks:</b>	<i>No Value Entered</i>

[View](#)

<b>Research Activity:</b>	tongue exercises
<b>Common Risks:</b>	soreness of tongue or jaw muscles
<b>Infrequent Risks:</b>	<i>No Value Entered</i>
<b>Other Risks:</b>	<i>No Value Entered</i>

### 5.1.1 Describe the steps that will be taken to prevent or to minimize the severity of the potential risks:

Experienced personnel and staff will be conducting all procedures.

Research data being collected for this study may be in either electronic or paper form. All electronic data will be stored on restricted access, password protected servers. Any paper data will be stored in locked cabinets within the offices of the Department of Otolaryngology. Individuals reviewing this data will have completed the appropriate training regarding confidentiality. Only individuals directly involved with the conduct of this research will be permitted access to the data.

It will be necessary to collect personal identifiable information as subjects will be followed over a several month time period depending on their clinical treatment. Medical record information will be accessed during participation so personal identifiable information will need to be captured.

Muscle soreness will managed by decreasing the target pressure of the IOPI device for the subject. This device must be kept out of the reach of children. While the instructions of the device state that a "medical professional should hold onto tube...", all subjects will be instructed on the safe/appropriate method of using the device. This may include a family member assisting in the use of the device or the subject holding on to the tube on their own. This process will be discussed in depth during the instruction period prior to the start of IOPI therapy. Any participant with poor comprehension of these instructions (in the opinion of a research team member) may be removed from the study for safety reasons.

Subjects will be instructed to skip any questions that they are not comfortable answering.

**5.2 What steps will be taken in the event that a clinically significant, unexpected disease or condition is identified during the conduct of the study?**

**\* Addressed below:**

Participants will be under the clinical care of a member of the Department of Otolaryngology. Any disease or condition identified during the course of this research will be addressed following standard clinical procedure.

**5.3 All the risk questions (screening, intervention/interaction, follow-up) have been merged into one question (5.1).**

View: 5.04

**Section 5 - Potential Risks and Benefits of Study Participation**

**5.4 Do any of the research procedures pose a physical or clinically significant psychological risk to women who are or may be pregnant or to a fetus?**

**\* No**

**5.4.1 List the research procedures that pose a risk to pregnant women or fetuses:**

**5.4.2 Describe the steps that will be taken to rule out pregnancy prior to exposing women of child-bearing potential to the research procedures that pose a risk to pregnant women or fetuses:**

**5.4.3 Describe the measures to prevent pregnancy, and their required duration of use, that will be discussed with women of child-bearing potential during and following exposure to research procedures:**

View: 5.05

**Section 5 - Potential Risks and Benefits of Study Participation**

**5.5 Do any of the research procedures pose a potential risk of causing genetic mutations that could lead to birth defects?**

**\* No**

**5.5.1 List the research procedures that pose a potential risk of genetic mutations/birth**



**defects:**

- 5.5.2 Describe the measures to prevent pregnancy, and their required duration of use, in female subjects and female partners of male subjects during and following exposure to research procedures:**

View: 5.06 - 5.06(a)

**Section 5 - Potential Risks and Benefits of Study Participation**

- 5.6 Are there any alternative procedures or courses of treatment which may be of benefit to the subject if they choose not to participate in this study?**

\* Yes - Describe below:

If **Yes**, describe in detail:

Yes. Standard swallowing therapy for individuals with treatment associated dysphagia.

View: 5.07 - 5.07(a)

**Section 5 - Potential Risks and Benefits of Study Participation**

- 5.7 Describe the specific endpoints (e.g., adverse reactions/events, failure to demonstrate effectiveness, disease progression) or other circumstances (e.g., subject's failure to follow study procedures) that will result in discontinuing a subject's participation?**

\* Describe below:

It may be possible that subjects may be removed for the following reason:

If subject is unable to cognitively understand the exercises.

Information related to "non-compliance" is important to be noted. Subjects who are non-compliant will not be removed.

View: 5.08 -5.08(a)

**Section 5 - Potential Risks and Benefits of Study Participation**

- 5.8 Will any individuals other than the investigators/research staff involved in the conduct of this research study and authorized representatives of the University Research**

**Conduct and Compliance Office (RCCO) be permitted access to research data/documents (including medical record information) associated with the conduct of this research study?**

\* Yes

**5.8.1 Identify the 'external' persons or entity who may have access to research data/documents and the purpose of this access:**

Although we do not currently plan on sharing data, should we decide to share data in the future, we will contact the Office of Research to determine whether an agreement needs to be executed.

**5.8.2 Will these 'external' persons or entity have access to identifiable research data/documents?**

\*

No; the research data/documents will be coded and subject identifiers removed prior to access by the external persons

If **Yes**, describe how they will protect the confidentiality of the research data:

**5.9 Has or will a Federal Certificate of Confidentiality be obtained for this research study?**

\* No

**5.10 Question has been moved to 5.17**

**5.11 Question has been moved to 5.16**

View: 5.12 - 5.13

**Section 5 - Potential Risks and Benefits of Study Participation**

**5.12 Does participation in this research study offer the potential for direct benefit to the research subjects?**

Yes - Describe the direct benefit that subjects may receive as a result of study participation. Indicate if all, or only certain, of the subjects may derive this potential benefit.

Describe the benefit:

It is possible that individuals assigned to the group using IOPI may experience an accelerated

rate of recovery related to their dysphagia. They may also experience an enhanced recovery.

**5.13 Describe the data and safety monitoring plan associated with this study. If the research study involves multiple sites, the plan must address both a local and central review process.**

The investigators and research staff will meet at least monthly to discuss the progress of the research study and to review all information related to this research study including recruitment, confidentiality, adverse events and patient safety. The Principal Investigator, Dr. Johnson, will oversee these meetings. A summary report will be provided to the IRB as part of the renewal process.

View: 5.14 - 5.17

**Section 5 - Potential Risks and Benefits of Study Participation**

**5.14 What precautions will be used to ensure subject privacy is respected?** (e.g. the research intervention will be conducted in a private room; the collection of sensitive information about subjects is limited to the amount necessary to achieve the aims of the research, so that no unneeded sensitive information is being collected, drapes or other barriers will be used for subjects who are required to disrobe)

All conversations with the patients will be conducted in closed door rooms as part of their regular clinical appointment. Information collected will be the minimum necessary to contribute to the specific aims of this project.

**5.15 What precautions will be used to maintain the confidentiality of identifiable information?** (e.g., paper-based records will be kept in a secure location and only be accessible to personnel involved in the study, computer-based files will only be made available to personnel involved in the study through the use of access privileges and passwords, prior to access to any study-related information, personnel will be required to sign statements agreeing to protect the security and confidentiality of identifiable information, whenever feasible, identifiers will be removed from study-related information, precautions are in place to ensure the data is secure by using passwords and encryption, because the research involves web-based surveys, audio and/or video recordings of subjects will be transcribed and then destroyed to eliminate audible identification of subjects)

Paper based records will be kept in a secure location and only accessible to individuals directly involved in the study. Electronic information will be stored on restricted access, password protected servers. Subjects are assigned codes once enrolled, but personal

identifiable information will be maintained to be able to access medical records as needed as it pertains to this research. Documentation will contain identifiable information. All electronic information will be maintained behind the UPMC firewall.