

VAMHCS HUMAN RESEARCH PROTECTION  
STANDARD OPERATING PROCEDURE

SOP# HRP 06.01

Initial Approval Date: 2/14/08

CONTROL AND USE OF DEVICES, EQUIPMENT AND PROCEDURES IN THE  
CONDUCT OF A RESEARCH STUDY

This SOP, originally approved on 2/14/08, was revised on 4/16/08 and has now undergone changes as summarized below:

Version	2.2	Origin	Version 2.1
Author	Jessica Mendoza		
Reviewed/ Revised by	Jessica Mendoza	Dates Reviewed / Revised	10/14/08
Changes	Added that PIs must notify Chief, Pharm Services of study closure through the IDP	New Version #	2.2
Approved	Leslie Katzel, R&D Chair 10/23/08	Approved R&D / Dennis Smith	<b>10/23/08</b>
File Name	\\Use of Investigational Devices (HRP 06.01) 2008.2.2		

This amended version (2.2) will be submitted to the HRPOC Subcommittee and the R&D Committee at their next scheduled meetings.

\_\_\_\_\_  
Leslie Katzel, MD, PhD  
Chair, R&D Committee

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Date

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CONTROL AND USE OF DEVICES, EQUIPMENT AND PROCEDURES IN THE  
CONDUCT OF A RESEARCH STUDY

## OBJECTIVES:

- To ensure that devices and equipment (whether investigational or not) are stored securely, dispensed properly and used safely within the VAMHCS.
- to ensure that procedures performed during the course of VAMHCS research studies are done by qualified, trained staff who are acting within their scope of practice
- To assist the VAMHCS Research Service in its mission to protect participants in VA approved protocols.
- To conform to University of Maryland Institutional Review Board policies and procedures.
- To conform to VA policies and procedures.
- To conform with 21 CFR 812 (Investigational Device Exemption) and other federal regulations.

## SCOPE:

This applies to all investigators, physicians, pharmacists, nurses and technicians participating in human studies involving patients or control subjects at the VAMHCS.

This applies to all research studies, whether or not conducted under an Investigational Device Exemption (IDE).

Because this SOP aims to ensure the safety and welfare of research participants, it also applies to ALL research studies that utilize devices, equipment or procedures, whether or not the device or equipment used or procedure performed is investigational, i.e. *even if the device, equipment or procedure are standard of care*. For routine or standard devices, equipment or procedures, this SOP merely asks investigators to consider whether staff are properly trained in the use of the device, equipment or procedure and whether devices are stored and maintained correctly.

## SEE ALSO:

IRB P&amp;P I.5.A

[Research Using Investigational or Unlicensed  
Test Articles](#)

IRB P&amp;P I.5.B

[Control of Investigational Test Articles](#)

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<p>IRB P&amp;P I.5.C</p> <p>IRB P&amp;P I.5.D</p> <p>VAMHCS SOP 119-010</p> <p>VAMHCS Pharmacy SOP</p> <p>VAMHCS Pharmacy Policy</p> <p>IDS internal procedure</p>	<p>Emergency Use of Investigational or Unlicensed Test Articles</p> <p><a href="#">Humanitarian Use Devices (HUD)</a></p> <p>Investigational Drug Section (IDS)</p> <p>Controlled Substance Policy 119-018</p> <p>Controlled Substance Handling 119-15</p> <p>“Informed Consent Verification Procedure”</p>
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**RESPONSIBILITIES:**

The Principal Investigator (PI) is responsible for:

- obtaining approval for investigational device/equipment protocols from the UMB IRB and the VA R&D Committee;
- obtaining an “Investigational Device Exemption (IDE)”, if necessary;
- thoughtfully completing the Research Service “Attestation for the Use of Devices, Equipment & Procedures in the Conduct of a Research Study” as part of the R&D submission;
- storing and maintaining the device(s)/equipment under proper conditions;
- inventory and accountability of all investigational devices/equipment;
- ensuring that staff are qualified to dispense/use/teach about the use of the device(s)/equipment;
- ensuring that any study-related procedures (whether or not the procedure involves the use of investigational device(s)/equipment) are performed by qualified, trained staff who are acting within their scope of practice;
- informing the Research Compliance Officer (RCO) of any changes in the Attestation;
- obtaining informed consent from prospective subjects before performing any study-related activity;
- conducting the protocol according to the signed agreement, the investigational plan and applicable FDA regulations, for protecting the rights, safety and welfare of subjects under the investigator’s care, and for the control of devices under investigation [812.100].
- returning or disposing of unused devices according to protocol;
- informing the Chief, Pharmacy Services (through the Investigational Drug Pharmacist) when a study involving devices dispensed through the Investigational Drug Service is closed.

The Research Service Office of Research Compliance (ORC) is responsible for:

- assisting investigators in preparing IRB and R&D Committee submissions;
- assisting investigators in preparing their policies regarding use of investigational devices;
- ensuring that “Attestation for the Use of Devices, Equipment & Procedures in the Conduct of a Research Study” has been completed before R&D Committee approval;

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- acting as a resource for investigators and staff.

*IF* the Investigational Pharmacy has been designated as the dispensary of the device, it is responsible for:

- storing and maintaining the device(s)/equipment under proper conditions;
- inventory and accountability of all investigational devices/equipment;
- return or disposal of unused test article according to protocol.

#### BACKGROUND:

Standard (non-investigational) devices, equipment and procedures Even standard devices, equipment and procedures can cause injury or harm if they are used improperly or by unqualified staff. The comfort and safety of the participant must take paramount importance.

The Research Service seeks to minimize such risk of injury and harm by emphasizing to the investigator his/her responsibility to ensure that staff is qualified to perform procedures and use devices and equipment correctly. The investigator's "Attestation for the Use of Devices, Equipment & Procedures in the Conduct of a Research Study" and the scope of practice granted by the investigator to staff are the mechanisms by which the Research Service can be aware of the staff qualifications necessary to conduct a study and by which the investigator takes responsibility for the expertise of his/her research staff.

Investigational device/equipment The process of study and approval of an investigational device is essentially the same as that in effect for pharmaceuticals. Some terminology and details are different (for example, "Investigational Device Exemption" [IDE] as opposed to "Investigational New Drug" [IND]). It is highly advised that investigators and staff study 21CFR812 ("Investigational Device Exemptions") and related FDA resources (see Section 9, "References") for specific guidance.

Although the FDA only requires an IDE for unapproved significant risk (SR) devices, it does require IRB review of non-significant risk device studies, approved devices being studied for off-label uses, and studies involving devices awaiting a 501(k) determination.

The VAMHCS Research Service requires that all protocols involving investigational devices/equipment of any sort go through IRB and R&D Committee review. On the UMB/VAMHCS campus, this process is generally the same as that for pharmaceutical clinical studies. This includes IRB submission (applicable sections of BRAAN), R&D submission (including the "Attestation for the Use of Devices, Equipment & Procedures in the Conduct of a Research Study"), IRB and R&D reporting (unanticipated events, protocol deviations, and

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continuing reviews), and conduct of the study (informed consent, Research Subject Clinical Warnings, source documentation, following the protocol, etc.).

Unlike with study drugs, the VAMHCS does not require that devices be shipped to, stored in and dispensed from the Investigational Drug Service (IDS). The investigator is therefore frequently the individual responsible for inventory and accountability of investigational devices. *However, it is possible for arrangements to be made with the IDS by which the pharmacy will store, dispense and control the inventory of the investigational device.*

Procedures This SOP also applies to any procedure performed as part of the study protocol. This includes routine or standard of care procedures, investigational procedures, procedures required to implant or otherwise effect/activate the device, etc.

Investigational procedures, “off-label” application of accepted procedures, or studies comparing the safety or effectiveness of accepted procedures require the submission of a study protocol to the IRB and R&D committee.

The main concern for procedures that are not in and of themselves the study entity (for example, a procedure used to implant the investigational device), is that they are done safely by qualified staff within the staff’s licensure or scope of practice. The “Attestation for the Use of Devices, Equipment & Procedures in the Conduct of a Research Study” has been instituted as an effort to have investigators pay special consideration to the qualifications of staff that are to perform study-related procedures.

### PROCEDURE:

1. For investigational devices, the investigator obtains the necessary IDE information from the Sponsor when submitting the protocol to the IRB and R&D Committee. If necessary (for example, an investigator-initiated SR device study), the investigator applies to the FDA for an IDE him/herself.
2. For all protocols, the investigator submits the protocol and related materials to the IRB for review. As part of the BRAAN/CICERO application for an investigational device, the investigator must provide an IDE#, if applicable, and justify the risk level of the device (Significant Risk [SR] or Nonsignificant Risk [NSR]). The IRB processes the protocol submissions according to its policies and procedures.
3. For all protocols, once IRB approval has been obtained, the investigator applies for review of the protocol by the VAMHCS R&D Committee:

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- 3.1. The investigator completes and signs the “Attestation for the Use of Devices, Equipment & Procedures in the Conduct of a Research Study” (available from the Research Service website<sup>1</sup>) and submits it with his/her R&D Committee application. This attestation applies for any and all procedures, devices and equipment used for research purposes in the course of the study, whether the procedures, devices or equipment are investigational or not.
  - 3.2. The PI informs the RCO **in writing** of any changes in an approved Attestation. Changes may occur due to modifications in the research protocol that affect the competency of study staff to operate new devices, equipment or procedures. Additional staff training may need to be done and/or new scopes of practice may need to be assigned.
  - 3.3. If the IDS will be used to dispense the device, the investigator must provide the IDP with a copy of the signed 10-1223, R&D Committee approval letter, and IRB approval letter. The IDP maintains a regulatory file according to applicable sections of VAMHCS SOP 119-010.
  - 3.4. If applicable, the PI must notify the Research Service and the Chief, Pharmacy Services (through the Investigational Drug Pharmacist) when the study is closed.
4. The investigator determines whether any special training is needed for use of a device/equipment or performance of a procedure and ensures that necessary staff receives training as necessary. The investigator ensures that all staff using any device/equipment or performing any procedure for the research study is properly certified and acting within his/her scope of practice. This includes common procedures such as phlebotomy and equipment such as iv pumps. Training logs, credentialing logs, certifications, etc. **MUST** be on record. Credentialing records should contain:
- Names and degrees of individuals,
  - Licensure of individuals (if applicable),
  - Type(s) / topic(s) of training (*there MUST be training on all investigational devices and all procedures to be performed by staff; staff who have shown competency in routine procedures within their scope of practice do not need additional training; only staff who are to use a device or perform a procedure need to be trained.*),
  - Copies of training records from investigator meetings,
  - Date(s) of training sessions,
  - Sign-in sheets, certificates of attendance, etc.,
  - Documentation of competencies (post-tests, demonstrations, hours of mentorship, etc.)

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<sup>1</sup> [www.maryland.research.va.gov](http://www.maryland.research.va.gov)

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5. The principal investigator may not order, receive, store, or dispense investigational devices until written approval of the R&D Committee has been obtained. (For “Emergency Use”, see Procedure 15.)
  - 5.1. Upon receipt of devices, equipment, or supplies, the principal investigator or designee:
    - 5.1.1. Checks the condition of materials,
    - 5.1.2. Confirms all items on packing slip have been received by dating and the signing packing slip,
    - 5.1.3. Notes any discrepancies and calls the sponsor immediately,
    - 5.1.4. Saves all shipment paperwork,
    - 5.1.5. Reviews the storage instructions for special storage requirements,
    - 5.1.6. Initiates inventory control procedures
    - 5.1.7. , Stores supplies in the manner prescribed by the sponsor/manufacture (refrigerator/freezer logs, etc. should be current and available at all times),
    - 5.1.8. Stores investigational devices/equipment in a locked, secure area.
6. If a device or equipment is electrical, it must have a VAMHCS Bioengineering Safety Check.
7. .Before using, dispensing or performing any device, equipment or procedure specified in an approved protocol, the investigator obtains informed consent from potential subjects by discussing the study with the individual and obtaining the subject’s signature on an approved informed consent form.
  - 7.1. For VAMHCS research, an approved 10-1086 informed consent form must be used and properly signed and dated.
  - 7.2. If the IDS is used to dispense the device, the investigator must provide the IDP with a copy of the signed 10-1086. The IDP verifies and documents according to the IDS procedure on informed consent verification.
8. Once informed consent is obtained, the investigator/staff uses, dispenses and/or performs the device(s), equipment or procedure(s) as described in the approved protocol.
9. At the end of the study, the investigator must return or dispose of the device according to the protocol.
10. The investigator keeps detailed records on the use or dispensing of investigational devices. Accountability logs should contain the following:
  - 10.1. Name, lot #, expiration date, date of receipt, etc (any or others that apply)
  - 10.2. Name of study subject receiving the device/treatment
  - 10.3. Date of dispensing/treatment
  - 10.4. Starting and ending balances of devices

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- 10.5. Co-signing of staff (if applicable)
  - 10.6. Exposure times to device (if applicable)
  - 10.7. Date of return/destruction/disposition/repair of device/equipment.
11. Source documentation and maintenance of documents occurs as in standard practice for pharmaceutical studies:
- 11.1. a Regulatory Binder containing signed protocol, original Informed Consent Form(s), IRB submission, approvals and amendments, and reports, R&D Committee submission, approvals (including the 10-1223) and amendments, and reports, Sponsor correspondence, etc;
  - 11.2. regulatory documents such as a copy of the signed 10-1223, R&D Committee approval letter, IRB approval letter, IRB correspondence., and Sponsor correspondence,
  - 11.3. the IDE determination,
  - 11.4. education and training records and certifications of research staff,
  - 11.5. shipping and dispensing documents for devices or equipment, including accountability records
  - 11.6. enrollment notes, Research Subject Clinical Warning, and scanned informed consent form in CPRS;
  - 11.7. study charts containing source documents, notes, logs, diaries, etc.
12. Unanticipated events involving risks to participants or others and other reportable events must be reported to the IRB and Research Service according to standard procedures.
13. It is strongly recommended that investigators have written internal policies that apply to all of the above (See Research Service SOP 07.06G, "Study-Specific SOPs (SSSOPs)").
14. If the Investigational Pharmacy is responsible for storing and dispensing the device, it must:
- 14.1. receive a copy of the signed Informed Consent Form from the investigator/staff before the device may be dispensed;
  - 14.2. follow items 5.1 and 7-10 above.
15. Emergency Use Procedures:
- 15.1. Emergency use means "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 CFR 56.102(d)]. **VAMHCS investigators must follow the IRB's policies and procedures on "Emergency Use of a Test Article".** A

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summary of the IRB's procedures is as follows. Refer to the actual Policy for details<sup>2</sup>.

- 15.2. Prior to the emergency use:
- 15.2.1. The Investigator must first contact the manufacturer of the device to determine if it can be made available for the emergency use under the manufacturer's IND or IDE; or whether the FDA will authorize shipment of the test article in advance of the IND or IDE submission.
- 15.2.2. If the IDS is to be used for storage and dispensing of the device, the Investigator must also contact the VAMHCS Investigational Drug Service Pharmacist (IDP) as soon as possible in order to arrange delivery or transfer.
- 15.3 The Investigator must notify the IRB of the intent to use an investigational drug or biologic in an emergency situation ("Emergency Use Request") via BRAAN/CICERO\*.
- 15.3.1 If it is outside of regular business hours, the Investigator must contact the HRPO by telephone of the intent to use an investigational drug or biologic in an emergency situation (410-706-5037). The HRPO phone message provides a number to page the IRB Chair or Executive Committee Member after hours.
- 15.3.2 If possible, this notification should occur PRIOR to use of the test article. However, if, in extremely rare circumstances, it is not possible to communicate with the IRB before treating the patient, the welfare of the patient is the overriding priority and treatment may be administered without prior IRB notification. The practitioner must submit a written report to the IRB as soon as possible but within 5 working days. The investigator will be expected to justify to the IRB why communication prior to the use was not possible.
- 15.4 All efforts must be taken to obtain informed consent from the patient or the legally authorized representative (LAR) prior to the emergency use\*.
- 15.4.1 If prior consent from the patient or LAR is not possible, refer to the IRB policy for details on alternative procedures.
- 15.4.2 Since the emergency use is prior to IRB approval, no IRB-approved consent form will exist. Use a hospital clinical consent form or other suitable form instead.
- 15.4.3. The consent form MUST clearly state that the device is investigational or is being used in an investigational situation.
- 15.5. The Investigator must document the following:
- 15.5.1. Enter an enrollment note in CPRS stating the circumstances of the emergency use and the consent process\*.

<sup>2</sup> The current policy is UMB HRPP Policy and Procedure 11E: Procedure for the Emergency Use of FDA Regulated Products. However, as of 1/31/08, the UMB policies are in revision.

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- 15.5.2. Enter a “Research Subject Clinical Warning” (RSCW) into CPRS (even though the emergency use cannot be used for research data; see 12.5 below).
- 15.5.3. Immediately send a copy of the signed consent form to be scanned into CPRS.
- 15.6. After the emergency use:
- 15.6.1. The Investigator must notify the IRB, the VAMHCS Research Compliance Officer (RCO) and the Chair, R&D Committee as soon as possible but within five working days of the emergency use.
- 15.6.2. The Investigator must submit an Amendment in BRAAN/CICERO\* providing a follow-up report to the IRB within five days of the emergency use of an investigational device.
- 15.7. The investigator should evaluate the likelihood of a similar need for the drug, agent, or biologic and if future use is likely, immediately initiate efforts to obtain IRB approval and an FDA approved IND for the drug, agent, or biologic’s subsequent use.
- 15.8. **This use of the investigational article may not be used to collect data for research purposes.**
- 15.9. **The Investigator may not use the investigational article on future patients unless there is an approved protocol.** A future use of the test article requires IRB approval.

STANDARDS:

- No device is received until the PI has received approval from the IRB **and** the R&D Committee.
- All investigational devices/equipment are stored in a locked, secured fashion.
- Access is limited to the principal investigator or staff.
- Other conditions (temperature, calibrations, etc.) conform to sponsor’s/manufacturer’s specifications.
- No personnel dispenses/uses/educates about the device unless s/he is properly trained/certified.
- All procedures, whether investigational or not, are performed by qualified, trained staff who are acting within their scope of practice.
- No investigational device/equipment is dispensed/used or investigational procedure performed until the subject has taken part in the informed consent process and signed the Informed Consent Form.
- The PI/staff keeps accurate records for inventory control, data collection and reporting.
- The PI/staff keeps accurate, current records of training and credentialing of study staff.

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- The PI reports to the IRB and the Research Service according to standard procedures.
- The PI informs the RCO **in writing** of any changes in the approved Attestation.

#### COMPLIANCE:

During compliance audits performed by the Research Compliance Office, investigators' records will be examined concerning all of the above. Reports of "unanticipated problems involving risks to participants or others" involving an investigational device, equipment or any research-related procedure will be investigated immediately.

Any non-compliance with storage, dispensing, or usage of a device by the PI or staff, OR any evidence that a device/equipment is being used by unqualified staff, OR any evidence that a procedure is being performed by unqualified staff will result in halting of the study (within considerations for subject safety) until the problem has been resolved.

Non-compliance will be investigated and reported to the IRB and VAMHCS officials according to Research Service SOP 01.08 "Addressing and Responding to Allegations of Noncompliance with Institutional Policies Related to the Human Research Protection Program". ORO or ORD will be notified as applicable (based on SOP 01.08).

#### APPENDIX A      Definitions

#### RESOURCES AVAILABLE ON THE RESEARCH SERVICE WEBSITE:

[www.maryland.research.va.gov](http://www.maryland.research.va.gov)

"Attestation for the Use of Devices, Equipment & Procedures in the Conduct of a Research Study"

Sample credentialing/training log

Sample Accountability log

Research Service SOPs ["Research Personnel Education and Training" (Scope of Practice)] HRP 04.02

"Study-Specific SOPs (SSSOPs)" HRP 07.06G

#### REFERENCES:

21 CFR 812                      "Investigational Device Exemptions"

FDA Information Sheets: "Medical Devices"

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FDA FAQ Sheet:	“Significant Risk and Nonsignificant Risk Medical Device Studies”
VHA Handbook, 1200.5	“Emergency Use of Unapproved Medical Devices”
VAMHCS SOP 119-010	“IRB Review of Medical Devices”
IDS internal procedure	“Requirements for the Protection of Human Subjects Research”
	Investigational Drug Section (IDS)
	“Informed Consent Verification Procedure”

## APPROVAL

This SOP entitled “Control and Use of Devices, Equipment and Procedures in the Conduct of a Research Study” has been approved by the Medical Center Director, effective 2/14/08.

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(excerpted from FDA Information Sheets and FAQ Sheet)

**Medical Device:** A medical device is defined, in part, as any health care product that does not achieve its primary intended purpose by chemical action or by being metabolized. Medical devices include, among other things, surgical lasers, wheelchairs, sutures, pacemakers, vascular grafts, intraocular lenses, and orthopedic pins. Medical devices also include diagnostic aids such as reagents and test kits for *in vitro* diagnosis of disease and other medical conditions such as pregnancy.

Medical devices unlike drugs are classified into one of three classes and are regulated in proportion to their class:

Class I: General controls are sufficient to maintain safety and efficacy. Devices for which necessary controls (general or special) are undetermined but are: (1) not life-supporting or life-sustaining; or (2) important for preventing impairment to human health and do not pose significant risk of illness or injury also belong to this category.

Class II: Special controls are required to assure safety and efficacy. Special controls could include promulgation of performance standards, post-market surveillance, patient registries, development of guidelines, recommendations, or other actions.

Class III: These are novel devices or devices about which there is insufficient information to classify them into Class I or II.

**Investigational Device:** A medical device that is the subject of a clinical study designed to evaluate the effectiveness and/or safety of the device (21 CFR 812.3(g)). Investigational devices include transitional devices (21 CFR 812.3( r)) that are objects of investigations. For the purpose of the SOP, an investigational device may be an approved device that is being studied for an unapproved use or efficacy (VHA Handbook).

**Unapproved Medical Device:** A device that is used for a purpose or condition for which the device requires, but does not have, an approved application for premarket approval under section 515 of the Federal Food, Drug & Cosmetic (FD&C) Act. An unapproved device may be used in human subjects only if approved for clinical testing under an approved application for an Investigational Device Exemption (IDE). Medical Devices that have not received marketing clearance under section 510(k) of the FD&C Act are also considered unapproved devices.

**Investigational Device Exemption (IDE):** is comparable to an “IND” in the pharmaceutical side of research applications to the FDA. An

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investigator/sponsor needs an IDE if the device/equipment is unapproved and is considered to be of “significant risk”.

Federal law prohibits the distribution of new drugs, biologics, and medical devices until the FDA has reviewed clinical data and determined that a particular product is safe and effective for a specific use in human patients. In order to test a new drug, biologic, or device in clinical trials, it is necessary to obtain an exemption from the law. In the case of a device, the sponsor is required to apply for an IDE before tests with human subjects may begin. It is also possible to obtain a “Treatment IDE” in much the same way that Treatment INDs are obtained for pharmaceuticals meeting certain criteria.

Clinical investigations undertaken to develop safety and effectiveness data for medical devices must be conducted according to the requirements of the Investigational Device Exemptions (IDE) regulations 21CFR812. Certain clinical investigations of devices may be exempt from the IDE regulations (21CFR812.2c). Unless exempt from the IDE regulations, an investigational device must be categorized as either “significant risk” (SR) or “non-significant risk” (NSR). The determination that a device presents a NSR or SR is initially made by the sponsor. The proposed study is then submitted either to the FDA (for SR studies) or to the IRB (for NSR studies).

The IRB’s SR/NSR determination has significant consequences for the study sponsor, FDA, and prospective research subjects. SR devices must be conducted in accordance with the full IDE requirements (21CFR812), and may not commence until 30 days following the sponsor’s submission of an IDE application to the FDA. The study may not commence until FDA has approved the IDE application and the IRB has approved the study.

In contrast, NSR device studies do not require submission of an IDE application to FDA. Instead, the sponsor is required to conduct the study in accordance with the “abbreviated requirements” of the IDE regulations (21CFR812.2b). Unless otherwise notified by FDA, an NSR study is considered to have an approved IDE if the sponsor fulfills the abbreviated requirements. These requirements address, among other things, the requirements for IRB approval and informed consent, record keeping, labeling, promotion, and study monitoring.

**510(k):** The premarket notification requirement for new devices and devices that are significant modifications of already marketed devices is set forth in section 510(k) of the Federal Food, Drug, and Cosmetic Act. Devices determined by the FDA to be “substantially significant” are often referred to as “510(k) devices”. If the new device is deemed not to be substantially equivalent to a pre-amendments device, it must undergo clinical testing and premarket approval before it can be marketed unless it is reclassified into a lower regulatory class.

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**Significant Risk (SR) Device:** means an investigational device that:

- a. Is intended as an implant and presents a potential for serious risk to the health, safety, or welfare of a subject;
- b. Is purported or represented to be useful in supporting or sustaining human life and presents a potential for serious risk to the health, safety, or welfare of a subject;
- c. Is for a use of substantial importance in diagnosing, curing, mitigating or treating disease, or otherwise preventing impairment of human health and presents a potential for serious risk to the health, safety, or welfare of a subject; or
- d. Otherwise presents a potential or serious risk to the health, safety, or welfare of a subject.

The risk determination is initially made by the Sponsor but must be approved by the IRB (and the FDA, if significant risk).

The risk determination should be based on the proposed use of a device in an investigation, and not on the device alone. In deciding if a study poses a significant risk, an IRB must consider the nature of the harm that may result from the use of the device. Studies where the potential harm to subjects could be life-threatening, could result in permanent impairment of a body function or permanent damage to body structure, or could necessitate medical or surgical intervention to preclude permanent impairment of a body function or permanent damage to body structure should be considered SR. Also, if a subject must undergo a procedure as part of the investigational study, e.g., a surgical procedure, the IRB must consider the potential harm that could be caused by the procedure in addition to the potential harm caused by the device.

**Nonsignificant Risk (NSR) Device Study** is one that does not meet the definition for a significant risk study. NSR should not be confused with the concept of “minimal risk”, a term used in IRB regulations to identify certain studies qualified for “expedited review”.

**Procedure:** a method of doing something, with all the steps involved. For the purpose of this SOP, procedure means anything done to a study participant because of his/her involvement in the study. These procedures may be standard or investigational; major or no risk of injury. This SOP seeks to ensure that staff performing procedures are qualified and trained, even in minor procedures.

**Equipment:** For the purposes of this SOP, “equipment” is used interchangeably with “device”.