**INVESTIGATIONAL DEVICE EXEMPTION APPLICATION**

***IDE Title***

*Name of Sponsor Investigator*, MD

*Title, Department*

University of Arizona

Date of Submission

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**Name and the address of the sponsor**

**Report of Prior Investigations**

*In this section, sponsor should provide a complete report of prior investigations of the device.*

***General***

*The report of prior investigations shall include reports of all prior clinical, animal, and laboratory testing of the device and shall be comprehensive and adequate to justify the proposed investigation.*

***Specific Content***

*a) A bibliography of all publications, whether adverse of supportive, that are relevant to an evaluation of the safety or effectiveness of the device, copies of all published and unpublished adverse information, and, if requested by an IRB or FDA,* ***copies of other significant publications.***

*b) A summary of all other unpublished information (whether adverse or supportive) in the possession of, or reasonably obtainable by, the sponsor that is relevant to an evaluation of safety or effectiveness of the device*.

*c) If information on nonclinical laboratory studies is provided a statement that all such studies have been conducted in compliance with applicable requirements in the good laboratory practice (GLP) regulation in 21 CRF part 58. If the study was not conducted in compliance with such regulations, a brief statement of the reason for the noncompliance.*

**Investigational Plan**

*At the beginning of this section, sponsor can give a brief overview of the investigation plan, logic and need for this trial, is it a single-site study, what are the end points, etc.*

***Purpose***

*The name and intended use of the device and the objectives and duration of the investigations.*

***Protocol***

*A written protocol should describe the methodology to be used and an analysis of the protocol demonstrating that the investigation is scientifically sound. Protocol should include objectives and the hypothesis of the trial. Also describe the type of trial (i.e., controlled/open, double-blind/single/blind, etc. Describe in detail how the trial will be conducted and analytical methods that will be used to evaluate the study. If case report forms (CFR) will be used, please attach it to the protocol.*

***Risk Analysis***

*A description and analysis of all increased risks to which subject will be exposed by the investigation; the manner in which these risk will be minimized; a justification for the investigation; and a description of the patient population including the number, age, sex, and condition.*

*This section is often underdeveloped by sponsor-investigators. Below is a partial example of the risk section for an implantable device. This section may take many pages.*

| No. | Deficiency Addressed | Potential Hazard | Resultant Harm | Risk Evaluation Discussion | Mitigation Strategy |
| --- | --- | --- | --- | --- | --- |
|  | 5.a. | Surgical Procedure | Pain | The device is placed through a small, minimally invasive skin incision under topical anesthesia. The patient will be brought into the minor procedure room and placed supine. The neck will be prepped and draped in the usual sterile fashion.The implant is secured to the anterior rim of the cricoid cartilage five 2-0 nylon sutures.  | Pre-operative clearance from the anesthesia service; routine surgical sedation; notch will be infiltrated with 1% lidocaine.  |
|  | 5.a. | Surgical Procedure | Bleeding | Minimally invasive 2 cm skin incision. |
|  | 5.a. | Surgical Procedure | Infection | Pre-operative prophylactic antibiotics with 1G Cefazolin.Prophylactic antibiotics administered per patients existing PEG tube for 10 days. |
|  | 5.a.21.a.21.b. | Device dropped or deemed unsterile in some manner | Delay or abort procedure | There is increased risk with this surgical procedure as with any other surgical procedure. | (Flash sterilization will not be allowed)Additional sterile devices will be available to prevent procedure termination with minimal delay. |
|  | 5.a. | Implanted device | Device rejection | As with any implant, there is a risk of implant infection and rejection. Titanium is highly biocompatible and magnetic resonance imaging (MRI) compatible. Titanium implants have precedent in head and neck surgery and are commonly used in traumatic and oncologic reconstruction. | This risk has been included on the patient consent form.Device constructed from ASTM F67-00, grade 2 - unalloyed titanium for surgical implant application.To minimize patient harm associated with rejection, patients will be closely monitored every two weeks for the first two months after implantation. They will then be monitored monthly until two years after device implantation. The implant will be removed if there is any sign of infection that does not resolve with antibiotics or any sign of abscess formation, tissue or cartilage damage, or implant rejection.  |
|  | 5.b.iii | Implanted device | Seroma | Titanium is highly biocompatible and magnetic resonance imaging (MRI) compatible. Titanium implants have precedent in head and neck surgery and are commonly used in traumatic and oncologic reconstruction. | This risk has been included on the patient consent forms. |
|  | 5.b.iv | Implanted device | Erosion | This risk has been included on the patient consent forms. |
|  | 5.b.v | Implanted device | Allergic response | This risk has been included on the patient consent forms.Device constructed from ASTM F67-00, grade 2 - unalloyed titanium for surgical implant application. |
|  | 17. | Endotoxins | Adverse reaction | Titanium is highly biocompatible and magnetic resonance imaging (MRI) compatible. Titanium implants have precedent in head and neck surgery and are commonly used in traumatic and oncologic reconstruction. | Labelled non-pyrogenicEndotoxin testing less than 0.03EU per *QCTL 2300.00 Endotoxin Testing* |

***Description of Device***

*A description of each important component, ingredient, property and principle of operation of the device and of each anticipated change in the device during the course of investigation*

***Monitoring Plan***

*The sponsor’s written procedures for monitoring the investigation and the name and address of any monitor.*

*The ICH Good Clinical Practices Guidelines describe how to monitor the study. Although it applies to drug studies, it also makes sense for device studies (*[*http://ichgcp.net/518-monitoring*](http://ichgcp.net/518-monitoring)*). The Investigator must develop a monitoring plan, the written procedure for monitoring the study. This section should also include the name, address and qualifications of the monitor.*

**Manufacturing Information**

*A description of the methods, facilities, and controls used for the manufacture, processing, storage, and, where appropriate, installation of the device, in sufficient details so that a person generally familiar with good manufacturing practice can make a knowledgeable judgment about the quality control used in the manufacture of the device.*

*This section often presents the most difficulties for Sponsor-Investigators*

***Common deficiencies with design and manufacture Section***

* *Design: Inadequate characterization or description of the device and its operation due to inadequate or omitted:*
	+ *Design/engineering drawing of device*
	+ *Rationale for device design*
	+ *Device and performance specifications*
	+ *Description of materials (including biocompatibility information)*
	+ *Description of function - how does device and/or components/subsystems work together to achieve desired function*
	+ *Validation testing for subsystems and main system*
* *Manufacture: Inadequate or missing description of the controls used to ensure that the devices are produced consistently and as designed.*

***What are Standards and Controls?***

*Many domestic and international consensus standards address aspects of safety and/or effectiveness relevant to medical devices. CDRH believes that conformance with recognized consensus standards can support a reasonable assurance of safety and/or effectiveness for many applicable aspects of medical devices. Therefore, information submitted on conformance with such standards should have a direct bearing on safety and effectiveness determinations made during the review of IDEs. When an FDA-recognized consensus standard exists it serves as a complete performance standard for a specific medical device. In these cases, the standard may include specific acceptance criteria that describe the relevant performance characteristics of that specific medical device. Conformance and declarations of conformance to any recognized consensus standard that clearly spells out acceptance criteria is a very effective use of standards in the premarket process.*

*Some examples of standards for medical devices*

* *ISO 14937* ***Sterilization of health care products - General requirements for characterization of a sterilizing agent and the development, validation and routine control of a sterilization process for medical devices***
* *DIN-EN-ISO-10993-15* ***Biological evaluation of medical devices. Identification and quantification of degradation products from metals and alloys***

*It is difficult for an academic sponsor-investigator to know and understand all standards used in development of medical devices. The following table summarizes the most common standards that may need to be considered:*

| Standard Number | **Standard Name** |
| --- | --- |
| IEC 60601-1:1995 | Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance |
| IEC 60601-1:2007  | Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance |
| IEC 60601-1-2:2007 | General Requirements for Safety Collateral Standard: Electromagnetic Compatibility |
| IEC 60601-2-34:2000 | Medical electrical equipment - Part 2-34: Particular Requirements for the Safety, Including Essential Performance, of Invasive Blood Pressure Monitoring Equipment |
| IEC 60601-2-37:2007 | Particular Requirements for the Safety of Ultrasonic Medical Diagnostic and Monitoring Equipment |
| IEC 60601-1-4:2000 | Medical electrical equipment – Part 1-4: General requirements for safety – Collateral Safety - Programmable electrical medical systems |
| IEC 61000-3-2:2008 | Electromagnetic Compatibility (EMC) - Part 3-2: Limits - Limits for Harmonic Current Emissions (equipment input current <= 16 A per phase) |
| IEC 61000-3-3:2008 | Electromagnetic Compatibility (EMC) - Part 3-3: Limits – Limitation of Voltage Changes, Voltage Fluctuations and Flicker in Public Low-voltage Supply Systems, for Equipment with Rated Current = 16 A Per Phase and not Subject to Conditional Connection |
| IEC 61000-4-2:2008 | Electromagnetic Compatibility (EMC) - Part 4-2: Testing and Measurement Techniques - Electrostatic Discharge Immunity /test |
| IEC 61000-4-3:2008 | Electromagnetic Compatibility (EMC) - Part 4-3: Testing and Measurement Techniques - Radiated, Radio-frequency, Electromagnetic Field Immunity Test |
| IEC 61000-4-4:2007 | Electromagnetic Compatibility (EMC) - Part 4-4: Testing and Measurement Techniques - Electrical Fast Transient/burst Immunity Test |
| IEC 61000-4-5:2005 | Electromagnetic Compatibility (EMC) - Part 4-5: Testing and Measurement Techniques - Surge Immunity Test |
| IEC 61000-4-6:2008 | Electromagnetic Compatibility (EMC) - Part 4-6: Testing and Measurement Techniques - Immunity to Conducted Disturbances, Induced by Radio-frequency Fields |
| IEC 61000-4-8:2001 | Electromagnetic Compatibility (EMC) - Part 4-8: Testing and Measurement Techniques - Power Frequency Magnetic Field Immunity Test |
| IEC 61000-4-11:2004 | Electromagnetic Compatibility (EMC) - Part 4-11: Testing and Measurement Techniques - Voltage Dips, Short Interruptions and Voltage Variations Immunity Tests |
| IEC 60825-1:2007 | Safety of Laser Products - Part 1: Equipment Classification and Requirements |
| ISO 10993-1:2003 | **Biological Evaluation of Medical Devices - Part 1: Evaluation and Testing** |
| ISO-10993-4:2002 | **Biological Evaluation of Medical Devices - Part 4: Selection of Tests for Interactions with Blood** |
| ISO-10993-5:1999 | **Biological Evaluation of Medical Devices - Part 5: Tests for In Vitro Cytotoxicity** |
| ISO-10993-7:2008 | **Biological Evaluation of Medical Devices - Part 7: Ethylene Oxide Sterilization Residuals** |
| ISO 10993-10:2006 | **Biological Evaluation of Medical Devices - Part 10: Tests for Irritation and Delayed-type Hypersensitivity** |
| ISO 11135:2008 | **Medical Devices - Validation and Routine Control of Ethylene Oxide Sterilization** |
| ISO 11607-1:2006 | **Packaging of Terminally Sterilized Medical Devices - Part 1: Requirements for Materials, Sterile Barrier Systems and Packaging Systems** |
| ISO 11607-2:2006 | **Packaging for Terminally Sterilized Medical Devices - Part 2: Validation Requirements for Forming, Sealing and Assembly Processes** |
| ISO 13485:2003 | **Quality Management System - Medical Device - System Requirements for Regulatory Purposes** |
| ISO 14971:2003 | Medical devices – Application of Risk Management to Medical Devices (***Note:*** *All new devices shall use the 2007 version of this standard below*) |
| ISO 14971:2007 | **Medical devices – Application of Risk Management to Medical Devices** |
| ISO 15223-1:2007 +A1:2008 | Medical devices — Symbols to be used with medical device labels, labeling, and information to be supplied |
| CSA C22.2 60601-1:2008 | Part 1: General Requirements for Basic Safety & Essential Performance, Medical Electrical |
| BS EN 1041:2008 | **Information Supplied by the Manufacturer with Medical Devices** |
| BS EN 550:2007 | **Sterilization of Medical Devices. Validation and Routine Control of Ethylene Oxide Sterilization** |
| BS EN 556-1:2001 | **Sterilization of Medical Devices - Requirements for Devices to be Designed “STERILE” - Part 1: Requirements for Terminally Sterilized Medical Devices** |
| BS EN 980:2008 | **Symbols for Use in the Labeling of Medical Devices** |
| BS EN 60601-1-2:2007 | Medical Electrical Equipment, General Requirements for Basic Safety & Essential Performance |
| BS EN 60601-1:2006 | Medical Electrical Equipment - Part 1: General Requirements for Basic Safety & Essential Performance, Medical Electrical |
| BS EN 55011:2007 | Limits and Methods of Measurement of Radio Disturbance Characteristics of Industrial, Scientific and Medical (ISM) Radio-frequency Equipment |
| BS EN 61000-3-2:2000 | Electromagnetic Compatibility (EMC), Part 3: Limits, Section 2: Limits for Harmonic Current Emissions (equipment input current ≤16 A per phase) |
| BS EN 61000-3-3:2001 | Electromagnetic compatibility (EMC), Part 3: Limits, Section 2: Limitation of Voltage Fluctuations and Flicker in Low-voltage Supply Systems for Equipment with Rated Current ≤16 A |
| BS EN 61000-4-2:2001 | Testing and Measurement Techniques – Electrostatic Discharge Immunity Test |
| BS EN 61000-4-3:2006 | Testing and Measurement Techniques – Radiated, Radio-frequency, Electromagnetic Field Immunity |
| BS EN 61000-4-4:2004 | Testing and Measurement Techniques – Electrical Fast Transient/Burst Immunity Test |
| BS EN 61000-4-5:2006 | Testing and Measurement Techniques – Electromagnetic Compatibility |
| BS EN 61000-4-6:2007 | Test and Measurement Techniques – Immunity to Conducted Disturbances, Induced by Radio Frequency Immunity |
| BS EN 61000-4-8:2001 | Test and Measurement Techniques - Power Frequency Magnetic Field Immunity Test |
| BS EN 61000-4-11:2004 | Test and Measurement Techniques - Voltage Dips, Short Interruptions and Voltage |
| UL 60601-1:2006 | Medical Electrical Equipment - Part 1: General Requirements for Safety |
| NEMA UD2-2004 | Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment |
| NEMA UD3-2004 | Standard for Real-time Display of Thermal & Mechanical Indices on Diagnostic Ultrasound Equipment |
| IEC 60601-1-6:2006 | **Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability** |
| IEC 62366:2007 | **Medical devices - Application of usability engineering to medical devices** |

*If a recognized standard describes a test method but does not specify a performance limit or pass/fail criteria, the manufacturer should submit the test results.*

*Submissions should include clear documentation of the extent of conformance. FDA recommends that submissions include a matrix that identifies all sections of the consensus standard with an indication of “yes,” “no,” or “not applicable” to indicate conformance. A submission should further specify acceptance criteria that are relevant to the specific medical device and should identify any deviations to the consensus standard. With adequate justification for the acceptance criteria and for any deviations from the standard, FDA can usually accept a declaration of conformance without the need to review test protocols and analyze the raw data.*

*A declaration of conformity to a recognized consensus standard should do the following:*

* *identify the applicable recognized consensus standards that were met*
* *specify, for each consensus standard, that all requirements were met, except for inapplicable requirements or deviations as described below*
* *identify, for each consensus standard, any way(s) in which the standard may have been adapted for application to the device under review, e.g., identify which of an alternative series of tests were performed*
* *identify, for each consensus standard, any requirements that were not applicable to the device*
* *specify any deviations from each applicable standard that was applied (e.g., deviations from international standards that are necessary to meet U.S. infrastructure conventions such as the National Electrical Code (ANSI/NFPA 70)*
* *specify what differences exist, if any, between the tested device and the device to be marketed and justify the use of test results in these areas of difference*
* *provide the name and address of each laboratory or certification body that was involved in determining the conformance of the device with the applicable consensus standards and a reference to any accreditations of those organizations, if a test laboratory or certification body was employed*

*Consensus Standards database is maintained by CDRH staff:* [*http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandards/search.cfm*](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandards/search.cfm)

*The actual standards can be purchased from:* [*http://www.document-center.com/home.cfm*](http://www.document-center.com/home.cfm)

*Sometimes the relevant standards can be identified using* [*Product Classification Database*](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPCD/PCDSimpleSearch.cfm)*:*



**Quality Systems**

[*FDA 21 CFR Part 820*](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?CFRPart=820&showFR=1)*, also known as the Quality System Regulation (*[*QSR*](http://www.mastercontrol.com/medical_device/qsr_quality_software_system.html)*) outlines Current Good Manufacturing Practice cGMP regulations that govern the methods used in, and the facilities and controls used for, the design, manufacture, packaging, labeling, storage, installation, and servicing of all finished devices intended for human use. These requirements are meant to ensure that medical devices are safe and effective. Medical device manufacturers undergo* [*FDA inspections*](http://www.mastercontrol.com/FDA/fda_inspections.html) *to ensure* [*FDA 21 CFR Part 820 compliance*](http://www.mastercontrol.com/21_cfr_regulations/21_cfr_part_820/compliance.html)*.*

*CDRH maintains an extensive* [*Medical Device Quality Systems Manual*](http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/PostmarketRequirements/QualitySystemsRegulations/MedicalDeviceQualitySystemsManual/default.htm)*, which covers the Quality System regulation and the basic Good Manufacturing Practices (GMP) requirements that all manufacturers and distributors must consider when they plan to manufacture medical devices, including medical device kits, trays or packs, for distribution in the United States. Model procedures and sample forms are also included in the manual to assist manufacturers.*

*When choosing a manufacturer for the investigational device, sponsor-investigator needs to ensure that the manufacturer meets the ends points outlined in the Manual.*

*Sponsor –investigator typically closely participates in the* [*Design Controls*](http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/PostmarketRequirements/QualitySystemsRegulations/MedicalDeviceQualitySystemsManual/ucm122416.htm)*:*

***Design input*** *means the physical and performance requirements of a device that are used as a basis for device design [21 CFR 820.3(f)]. Design input also includes requirements for labeling, packaging, manufacturing, installation, maintenance and servicing. The final device specifications should cover ALL of the device characteristics. At the end, the design input requirements need to be documented, reviewed and approved by a designated individual(s), typically the inventor (PI).*

***Design review*** *means a documented, comprehensive, systematic examination of a design to evaluate the adequacy of the design requirements, to evaluate the capability of the design to meet these requirements, and to identify problems. Typically, design review requires pilot production and validation of initial production units or lots. Subsequent activities are usually design changes. As the development program progresses, the reviews should cover production documentation such as assembly drawings, manufacturing instructions, test specifications, test procedures, etc. Design review is often done by committees in formal meetings. The end**of the total design effort has not been reached until it is known that the initial production devices, when transferred to production and produced per the device master record, meet all of the current design specifications*

***Design output*** *(21 CFR 820.3(g) means the results of a design effort at each design phase and at the end of the total design effort. The finished design output is the basis for the device master record. The total finished design output consists of the device, its packaging and labeling, and the device master record. Device master record (DMR) is a compilation of records containing the procedures and specifications for a finished device. This stage includes purchasing of components (with documentation of purchase and validation of the components). Acceptance criteria should be established for each component. Design output is documented, reviewed, and approved before release by a committee*

***Design verification******and validation*** *[21 CFR 820.30(f)] confirms that the design output meets the design input requirements. The results of the design verification, including identification of the design, method(s), the date, and the individual(s) performing the verification, are documented in the DHF. Design validation means establishing by objective evidence that device specifications conform with user needs and intended use(s). Verification means confirmation by examination and provision of objective evidence that specified requirements have been fulfilled. Verification and validation are done according to a written protocol(s). The protocol(s) should include defined conditions for the testing. The protocol(s) should be approved before being used. Test protocol(s) may not be perfect for a new design. Therefore, the designers and other verification personnel carefully annotate any ongoing changes to a protocol. The original design of devices and any subsequent changes should be verified by appropriate and formal laboratory, animal, and in vitro testing. Risk analysis should be conducted to identify possible hazards associated with the design.*

***Design transfer*** *should assure that the section of the design being transferred:*

* *meets input requirements;*
* *contains acceptance criteria, where needed;*
* *contains design parameters which have been appropriately verified;*
* *is complete and approved for use;*
* *is fully documented in the DMR or contains sufficient design output information to support the generation of remaining DMR documents; and*
* *is placed under change control if not already done.*

***Design changes*** *to a device element are controlled per 820.30(i) Design Changes, which states that: each manufacturer shall establish and maintain procedures for the identification, documentation, validation or where appropriate verification, review, and approval of design changes before their implementation.*

***Design history file*** *(DHF) means a compilation of records, which describes the design history of a finished device [820.3(e)]. The design controls in 820.30(j) require that each manufacturer shall establish and maintain a DHF for each type of device. Typical documents that may be in, or referenced in, a DHF are listed below:*

* *design plans;*
* *design review meeting information;*
* *sketches, drawing;*
* *procedures;*
* *photos;*
* *engineering notebooks;*
* *component qualification information;*
* *biocompatibility (verification) protocols and data;*
* *design review notes;*
* *verification protocols and data for evaluating prototypes;*
* *validation protocols and data for initial finished devices;*
* *contractor / consultants information;*
* *parts of design output/DMR documents that show plans were followed; and*
* *parts of design output/DMR documents that show specifications were met.*

|  |
| --- |
| **ITEMS THAT MAY APPEAR IN A DEVICE SPECIFICATION** |
| **Name of product*** Trade name
* Trademark
* Generic name
* Chemical name
* Official name
* Common name
 | **Performance Characteristics*** Description/Intended use
* Accessories
* Functional parameters
* Limitations
* Contraindications
* Input / Output requirements
* Human Interface
 |
| **Classification*** Regulatory
* Commercial
* Functional
* Other
 | **Physical Characteristics** |
| * Weight
* Consistency
* Size
* Packaging
 | * Color
* Power Requirements
* Form/Shape
* Other
 |
| **Environmental Limitations**  |
| * Operating temperature range
* Storage temperature range
* Vibration and shock range
* Voltage range
* Humidity range
 | * Moisture protection
* Pressure, altitude limits
* Electromagnetic interference
* Electrical transients
* Shelf life / Other
 |
| **Important Components** |
| * Active ingredients
* Major subsystems
* Diagnostic kit materials
* Accessories
* Labeling
 | * Service labeling
* Components/items supplied by user
* Software
* Periodic Warranty / Other
 |
| **User Safety and Performance Considerations**  |
| * Chemical
* Electrical
* Thermal
* Mechanical sharp, moving parts
 | * Personnel training
* Periodic testing
* Maintenance
* Other
 |

**DOCUMENTS THAT MAY APPEAR IN A DEVICE MASTER RECORD**

*1.0 Device Master Record Index (Table of contents)*

*2.0 Device Specifications*

*(Device specifications are described in the chapter text.)*

*3.0 Manufacturing Information*

*3.1 Index*

*(Optional. See 1.0 above for total table of contents.)*

*3.2 Formulation or top assembly drawing*

*3.3 List of components*

*1. List of ingredients (including grade or type)*

*2. Bill of materials (i.e., component list usually arranged by subassembly or other sub­product level or by process steps)*

*3. Formula*

*3.4 Procurement documentation*

*1. Specifications*

*2. Drawings*

*3. Certificate of compliance requirements*

*4. Supplier Assessment procedures
3.5 Device documentation*

*1. Fabrication drawings*

*2. Surface finish procedures*

*3. Subassembly drawings*

*4. Wiring and piping diagrams*

*5. Assembly procedures*

*6. Assembly drawings*

*7. Reference documentation*

*a. Wiring and piping schematics*

*b. Test specifications*

*8. Sub­batch procedures*

*9. Blending or mixing procedures*

*10. Solution procedures*

*11. Final formulation procedures*

*12. Software packages*

*3.6 Precautions and special notations*

*1. Apparel*

*2. Cleaning*

*3. Storage conditions*

*4. Filling, mixing conditions*

*5. Hazards and safety precautions*

*3.7 Equipment, lines, and procedures*

*1. Process lines*

*2. Assembly lines*

*3. Vessels*

*4. Mixers, tools*

*5. Molds*

*6. Machine maintenance procedures*

*7. Calibration procedures*

*8. Setup procedures*

*9. Operating procedures*

*10. Process flow charts*

*3.8 Sterilization procedures*

*1. Procedures for ethylene oxide, radiation, filtration, steam, etc.*

*2. Handling and flow procedures*

*3. Cycle parameter specifications*

*4. Diagrams for loading products in the chamber*

*3.9 Production control documentation*

*1. Inspection procedures*

*2. Test procedures*

*3. Blank job travelers*

*4. Blank inspection/test forms*

*5. Instrument charts*

*6. Reporting forms*

*7. Approved deviations*

*4.0 Labeling and Packaging*

*4.1 Index (Optional. see 1.0 above.)*

*4.2 Labeling*

*1. Label drawings*

*2. Labeling drawings*

*3. Label/labeling review procedures and forms*

*4. Production control procedures and history record forms*

*5. Instruction manuals*

*6. Service manuals*

*7. Customer software*

*8. Customer feedback forms*

*4.3 Packaging*

*1. Package drawings (usually includes labeling information)*

*2. Closure drawings*

*3. Filling and/or packaging procedures*

*4. Packing procedures*

*5. Special shipment procedures*

*4.4 Storage requirements*

*1. Temperature*

*2. Humidity*

*3. Shelf­life*

*5.0 Control Procedures and Activities*

*5.1 Index (optional. see 1.0 above.)*

*5.2 Inspection procedures*

*1. Incoming*

*2. In­process*

*3. Finished devices*

*4. Process control charts*

*5. Blank data reporting forms*

*5.3 Test procedures*

*1. Incoming*

*2. In­process*

*3. Pretest conditioning*

*4. Finished device*

*5. Process control charts*

*6. Blank device history record forms*

*7. Automated test programs and/or software*

*6.0 Final Release*

*6.1 Release document review list*

*6.2 Distribution procedures*

*6.3 Blank device history record forms*

**Example of the Investigators Agreement**

*An example of the agreement to be entered into by all investigators to comply with investigator obligations stated under part 812, and a list of the names and addresses of all investigators who have signed the agreement.*

*Investigators CV should be attached as a part of this section. When applicable a statement of the investigator's relevant experience (including the dates, location, extent and type of experience*); *If the investigator was involved in an investigation or other research that was terminated, an explanation of the circumstances that led to termination; and a statement of the investigator's commitment to:*

1. *conduct the investigation in accordance with the agreement, the investigational plan, Part 812 and other applicable FDA regulations, and conditions of approval imposed by the reviewing IRB and FDA;*
2. *supervise all testing of the device involving human subjects;*
3. *ensure that the requirements for obtaining informed consent are met; and*
4. *Investigator’s commitment to provide sufficient and accurate financial disclosure information and update information if any relevant changes occur during the investigation and for one year following the completion of the study.*

**Investigator certification**

*A certification that all investigators who will participate in the investigation have signed the agreement, that the list of investigators includes all the investigators participating in the investigation, and that no investigator will be added to the investigation until they have signed the agreement.*

**IRB’s Information**

*A list of the name, address, and chairperson of each IRB that has been or will be asked to review the investigation and a certification of the action concerning the investigation taken by such IRB.*

**Name and Address of the Investigational Institutions**

*The name and address of any institution at which a part of the investigation may be conducted.*

**Financial claims**

*State if device will be sold. If yes, please state the amount to be charged and an explanation of why sale does not constitute commercialization of the device.*

**Environmental assessment**

*Per Device Advice on the CDRH Web site,* [*http://www.fda.gov/cdrh/devadvice/ide/application.shtml*](http://www.fda.gov/cdrh/devadvice/ide/application.shtml)*, an environmental assessment as required under 21 CFR 25.40 or a claim for categorical exclusion under 21 CFR 25.30 or 25.34 is no longer required.*

**Labeling**

*Copies of all labeling for the device.*

*Under § 812.5 an investigational device or its immediate package must bear a label with the following information:*

* *the name and place of business of the manufacturer, packer, or distributor;*
* *the quantity of contents, if appropriate; and*
* *the statement, "CAUTION ­­ Investigational device. Limited by Federal (or United States) law to investigational use."*

*The label must also describe all relevant contraindications, hazards, adverse effects, interfering substances or devices, warnings, and precautions.*

*The labeling of an investigational device must not contain any false or misleading statements nor imply that the device is safe or effective for the purposes being investigated.*

*If the investigational device is used solely for research on laboratory animals, the label must contain the following statement: "CAUTION ­­ Device for investigational use in laboratory animals or other tests that do not involve human subjects."*

*The sponsor should provide detailed information on device labeling in the investigational plan. This information may vary depending on the device and the nature of the study. Product labeling should be sufficient to ensure stability of the test article for the duration of the study (storage requirements, calibration procedures), bear sufficient directions for proper administration, and detail procedures to follow in the event of patient injury.*

**Informed Consent**

*Copies of all forms and informational materials to be provided to subjects to obtain informed consent.*

**Additional Information**

*Any other relevant information FDA requests for review of the application.*

*This is a good place to include the list any references you are attaching to the application.*