MEDICAL DEVICES: Applicable FDA^a Investigational Device Exemption (IDE) Regulations

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^a FDA=U.S. Food and Drug Administration

^b Medical device: defined by law as an "instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including any component, part, or accessory, which is . . . intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals, or . . . intended to affect the structure or any function of the body of man or other animals . . ." (21 USC §321(h)). Devices may range from simple tongue depressors and bedpans to complex programmable pacemakers, and closed loop artificial pancreas systems. Also included are in vitro diagnostic (IVD) products, such as reagents, test kits, and blood glucose meters, as well as diagnostic ultrasound products, x-ray machines and medical lasers. Note that software intended to be used for one or more medical purposes that perform these purposes without being part of a hardware medical device may also be considered a medical device.⁹

^c A diagnostic device is a device used to identify, interpret, measure, monitor, observe and/or characterize the nature, cause, aspect or feature of phenomenon that may be related to a health status condition.

Generally, before a medical device may be legally marketed in the U.S., federal laws require submission to the FDA for review to determine whether the device is safe and effective (21 U.S. Code of Federal Regulations, Section 814 et seq. (21 CFR 814)); these laws impose a wide range of requirements that span the spectrum from device development to manufacturing, distribution, quality control, marketing and post-marketing activities. Exceptions to some of these requirements may be made for medical devices that will be used and investigated in certain studies; these may be referred to as investigational device exemptions or IDEs.

Use this algorithm to see if the use or investigation of a medical device is subject to U.S. Food and Drug Administration (FDA) regulations that require submission of an application to the FDA for approval before such use or investigation involving the medical device is permitted. Whether or not such device-related application may be required, a study may still be subject to many other FDA regulations (e.g., Institutional Review Board (IRB) review; Investigational Drug Application; Good Clinical Practice training; serious adverse event reporting; data and safety monitoring; ClinicalTrials.gov registration; etc.).

¹ A study will involve determining the <u>safety</u> of a medical device if a study activity includes evaluating device benefits compared to risks, including the presence or absence of risks when the device is used for its intended purpose and conditions of use (, Part 860 (21 CFR 860), section 860.7(d)(1)).

A study will involve determining the <u>effectiveness</u> of a medical device if a study activity includes evaluating whether use of the device will provide clinically significant results (21 CFR 860, section 860.7(e)(1)). To locate any citation included in these Notes, see <u>https://www.ecfr.gov/</u> and search for the referenced Title and sections. While the eCFR is not an official edition of the U.S. Code of Federal Regulations, the eCFR is a U.S. government online resource that provides more timely versions and ease of use.

² Cleared or approved medical devices are those devices for which there is unequivocal documentation (i.e., FDA approval letter for premarket approval application (PMA); FDA 510(k) Premarket Notification Number or FDA 510(k) clearance letter) that the specific device that is planned for use or investigation in a study may in accordance with FDA regulations, clearance or approval be legally marketed in the U.S. and used or investigated consistent with the devices' intended use (i.e., general purpose of the device; how the device is designed to be used) or indications for use (i.e., for what purpose the device is expected to be used; the disease or condition that the device will diagnose, treat, prevent, cure or mitigate). Authoritative information about FDA device approvals and clearances may be found at https://www.fda.gov/medical-devices/products-and-medical-procedures/device-approvals-denials-and-clearances. Device sponsors/manufacturers/distributers should provide study teams with documentation for a FDA cleared or approved device that will be used in a study, and study teams should maintain this documentation; the documentation may be required by the FSU IRB. The FDA database of

cleared and approved medical devices is found at <u>https://www.accessdata.fda.gov/scripts/cdrh/devicesatfda/index.cfm</u>. Medical devices for which the use or investigation in a study does not strictly conform to the devices' FDA clearance or approval for the device's intended or indications for use are NOT considered "cleared" or "approved" for purposes of this algorithm.

Note that many medical devices that are classified as Class I and some Class II devices may be exempted by the FDA from requiring clearance or approval, and therefore will not have a FDA approval letter of 501(k) Premarket Notification Number. To check if a medical device falls within an exemption, visit this FDA device classification page (provides access to the classification database for search purposes): https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpcd/classification.cfm. IF the device does not require FDA clearance or approval AND the device will in accordance with its classification conform to any applicable limitations on the use of the device, then you may answer Yes to this question; however, be prepared to provide the IRB with the product code or regulation number if the study will involve use of a medical device that may be exempt from FDA clearance or approval.

³ A *label* is defined as a display of written, printed, or graphic matter upon the immediate container of any article. *Labeling* is defined as all labels and other written, printed, or graphic matters (1) upon any article or any of its containers or wrappers, or (2) accompanying such an article (Title 21 of the United States Code, section 321(k), (m)). Depending on the circumstances, labeling may include packaging, product inserts, Web sites, and other promotional materials. The term accompanying is interpreted liberally to mean more than physical association with the product. It extends to posters, tags, pamphlets, circulars, booklets, brochures, instruction books, direction sheets, fillers, etc. 'Accompanying' also includes labeling that is brought together with the device after shipment or delivery for shipment in interstate commerce (see FDA's Device Labeling page at: <u>https://www.fda.gov/medical-devices/overview-device-regulation/device-labeling</u>). When a medical device that is planned for use in a study will include a use that does not strictly conform to the device's label or labeling, then for purposes of this algorithm the use of the device is NOT considered a use in accordance with the device label.

For any medical device for which determining its safety or effectiveness is the object of the study, a legible copy of the device label must be included in the IRB submission, and a clear statement in the protocol that the device will 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 (21 CFR section 812.5).

⁴ *FDA regulated* means that study is subject to one or more FDA regulations or covered by FDA-related guidance, whether or not the study involves use of a medical device. For example, a study that does not involve a medical device, a study that involves a medical device for which the device's safety or effectiveness is not be evaluated, or a study that involves a medical device for which the device's safety or effectiveness is not be evaluated, or a study that involves a medical device for which TDA IDE clearance or approval is not required or has been granted, may still be subject to other FDA regulations if the study involves use or investigation of a drug or a dietary supplement, if a serious adverse event occurs during the study that requires reporting to the FDA, labeling requirements for any medical device, and post-marketing surveillance. Many other requirements may apply. Visit this FDA web page for additional information about FDA regulations: https://www.fda.gov/regulatory-information/fda-rules-and-regulations. Regardless of IDE regulatory outcome, Institutional Review Board (IRB) review is always required IAW applicable federal laws and FSU policies.

⁵ A significant risk (SR) device means a device that: (1) is intended as an implant and presents a potential for serious risk to the health, safety, or welfare of a subject; (2) is purported or represented to be for a use in supporting or sustaining human life and presents a potential for serious risk to the health, safety, or welfare of a subject; (3) 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 (4) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject; (2) is to the health, safety, or welfare of a subject; or (4) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject; or (4) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject; (2) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject; (2) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject; (2) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject; (2) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject; (2) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject; (2) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject (21 CFR 812.3(m)). The IRB, FDA or device sponsor may deem a medical device to be a significant risk device, but an FDA determination is controlling. Regardless of IDE regulatory outcome, Institutional Review Board (IRB) review is always required IAW applicable federal laws and FSU policies.

^{5a}A device that does NOT meet any of the SR criteria (1)-(4) above may be considered a non-significant risk (NSR) device (i.e., the device does not pose a significant risk to human subjects). The IRB, FDA or device sponsor may deem a medical device to be a significant risk device, but an FDA determination is controlling. Regardless of IDE regulatory outcome, Institutional Review Board (IRB) review is always required IAW applicable federal laws and FSU policies.

⁶ A medical device that is a SR device requires the submission of a full IDE application to the FDA for review. A medical device that is subject to a full IDE application may only be used or investigated in a study 30 days after the FDA notifies the study sponsor of receipt of the IDE application, unless the FDA otherwise notifies the sponsor within the 30 days that the IDE is approved, approved with conditions or disapproved. In either case, IRB approval is still required before the study may be initiated. For FDA requirements pertaining to a full IDE application, see 21 CFR 812.20; see this FDA link about the IDE Approval Process and the FDA requirements for conducting the study in accordance with the FDA's IDE regulations: https://www.fda.gov/medical-devices/investigational-device-exemption-ide/ide-approval-process.

⁷ A medical device that not a significant risk or SF device is deemed to be a NSR device (i.e., the requires a formal determination by the IRB (in addition to the usual requirement for IRB review) that the device is deemed a NSR device; if the IRB concurs with the sponsor, then a full IDE application need not be submitted to the FDA for review. FDA deems the IRB's concurrence that a device is a NSR device as an approved IDE (referred to as an abbreviated IDE) for the device. However, if the IRB finds that a device is a SR device, the sponsor is required to submit a IDE application to the FDA, and the FDA's determination will be controlling. See this FDA link about the IDE Approval Process and the FDA requirements for conducting the study in accordance with the FDA's IDE regulations: <u>https://www.fda.gov/medical-devices/investigational-device-exemption-ide/ide-approval-process</u>.

⁸ A medical device that is cleared or approved by the FDA and used in accordance with its label and labeling, or a qualified diagnostic medical device, is exempt from the requirement for a full or abbreviated IDE application. Additionally, certain other devices may also be deemed exempt from the requirement for an IDE application; these include the following:

- Devices undergoing consumer preference testing, testing of a device modification, or testing of a combination of two or more devices already in commercial distribution, but only if the testing is not for the purpose of determining device safety or effectiveness and use or investigation of the device does not put subjects at risk;
- Devices intended solely for veterinary use (the practice or science and art of preventing, curing, or alleviating disease and injury in animals, including domestic animals);
- Devices shipped solely for research on or with laboratory animals and labeled in accordance with 21 CFR 812.5(c); and,
- Custom devices, as defined in 21 CFR 812.3(b), unless the device is being used to determine safety or effectiveness for commercial distribution. Custom devices are "limited to no more than 5 units per year of a particular device type" and require annual reporting to the FDA (21 CFR 812.2(c)(3)-(7)).

Note that even if a device is exempt from the requirement for an IDE application, other FDA regulations may still apply, including regulations pertaining to clinical investigations, IRB and other device-related requirements (e.g. device registration and listing; post-marketing surveillance; adverse event reporting; quality systems; Good Manufacturing Practice. See also https://www.fda.gov/medical-devices). Regardless of IDE regulatory outcome, Institutional Review Board (IRB) review is always required IAW applicable federal laws and FSU policies.

⁹ The use or investigation of software (a mobile application or mobile app that is executed on a mobile platform with or without wireless connectivity or a web-based software application tailored to a mobile platform but executed on a server) in a study may subject the software to FDA medical device regulations if the software is used for a medical purpose; the software is then considered a mobile medical application. In such a case, the decisions and IDE outcomes illustrated and described in this algorithm may apply.

Generally, if the intended use of software in a study is for the diagnosis of disease or other conditions, or the cure, mitigation, treatment, or prevention of disease, or is intended to affect the structure or any function of the human body, then the software is considered an FDA-regulated device.

Some mobile medical applications are excluded from being considered regulated medical devices. These include devices whose functions are limited to: (1) administrative support of a healthcare facility; (2) maintaining or encouraging a healthy lifestyle and unrelated to the diagnosis, cure, mitigation, prevention, or treatment of a disease or condition; (3) serving as electronic patient records, including patient-provided information, to the extent that such records are intended to transfer, store, convert formats, or display the equivalent of a paper medical chart, so long as such records were created, stored, transferred, or reviewed by healthcare professionals or by individuals working under supervision of such professionals, and such function is not intended to interpret or analyze patient records, including medical image data, for the purpose of diagnosis, cure, mitigation, prevention, or treatment of a disease or condition; (4) transferring, storing, converting formats, or displaying clinical laboratory test or other device data and results, findings by a healthcare professional with respect to such data and results, unless such function is intended to interpret or analyze a medical image or a signal from an in vitro diagnostic device or a pattern or signal from a signal acquisition system. For more specific FDA guidance, visit this FDA page and search for device software or mobile medical applications: https://www.fda.gov/regulatory-information/search-fda-guidance-documents.

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