SIGNIFICANT RISK OR NON-SIGNIFICANT RISK DEVICE DETERMINATIONS

The Investigational Device Exemption (IDE) regulation (21 CFR 812) describes three types of device studies, for which the first two are subject to IDE regulation: significant risk (SR), non-significant risk (NSR), and exempt.

Significant Risk Device

A significant risk device presents a potential for serious risk to the health, safety, or welfare of a subject. Examples include sutures, cardiac pacemakers, hydrocephalus shunts, and orthopedic implants.

A SR device means an investigational device that:

- Is intended as an implant and presents a potential for serious risk to the health, safety, or welfare of a subject;
- 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;
- 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
- Otherwise presents a potential for serious risk to the health, safety, or welfare of a subject. (21 CFR 812.3(m))

Non-Significant Risk Devices

Non-significant risk devices are devices that do not pose a significant risk to the human subjects. Examples include most daily-wear contact lenses and lens solutions, dental tools, and catheters. The following criteria should be considered in determining whether a device study poses a SR or NSR:

- The sponsor’s description of why the study is not SR
- Whether the proposed NSR research study meets the definition of “significant risk” (see above)
- The proposed use of the device as well as any protocol related procedures and tests, not just the device alone.
- Additional information from the sponsor, if needed.

Exempt Studies

Most Class I and some Class II devices are “exempt” from premarket review, unless a manufacturer wants to market the device for a new use or introduces a new technology. A manufacturer does not need to make a premarket submission to the FDA for an exempt-type device. However, the device must be manufactured under a quality assurance
program, be suitable for the intended use, be adequately packaged and properly labeled, and have establishment registration and device listing forms on file with the FDA.

Sponsors and investigators of certain studies are exempt from the requirements of 21 CFR Part 812. Examples of exempt studies are consumer preference testing, testing of a device modification, or testing of two or more devices in commercial distribution if the testing does not collect safety or effectiveness data, or put subjects at risk. Studies of an already cleared medical device in which the device is used or investigated in accordance with the indications in the cleared labeling are exempt.

In addition, diagnostic device studies (e.g., in vitro diagnostic studies) are exempt from the requirements of 21 CFR Part 812 under certain circumstances. The study is exempt as long as the sponsor complies with the requirements at 21 CFR 809.10(c) for labeling, and if the testing: (1) is noninvasive; (2) does not require an invasive sampling procedure that presents significant risk; (3) does not by design introduce energy into a subject; and (4) is not used as a diagnostic procedure without confirmation of the diagnosis by another, medically established diagnostic product or procedure.

Who is responsible to determine whether a device is SR or NSR?

Sponsors are responsible for making the initial risk determination and Investigators will present it to the IRB as part of their IRB submission. With your submission you should provide a description/specifications of the device, why the device qualifies as a NSR device, and if available any previous reports of prior investigations. If FDA has previously determined that the device is NSR documentation should be provided. For Significant Risk device studies, the sponsor must submit an IDE application to FDA and receive approval, and the device’s IDE number should be documented in your IRB application.

Unless FDA has already made a risk determination for the device study, the IRB is required to review the sponsor’s risk determination. FDA’s decision is final. If the IRB does not agree with the sponsor’s assessment it will request that the determination be modified. The IRB will consider the following in determining whether a device study is SR or NSR: (1) the sponsors justification why; (2) whether the device meets the definition of SR; (3) the proposed use of the device and any related protocol related procedures; (4) the nature of the harm that could potentially result from use of the device in the intended population; and (5) any additional requested information from the sponsor and/or investigator, if requested.

Distinguishing Between SR and NSR Device Studies

The effect of the SR/NSR decision is very important to research sponsors and investigators. NSR device studies have fewer regulatory controls than SR. The major differences are in the approval process and in the record keeping and reporting
requirements. The SR/NSR decision is also important to FDA because the IRB serves, in a sense, as the Agency's surrogate with respect to review and approval of NSR studies. FDA is usually not apprised of the existence of approved NSR studies because sponsors and IRBs are not required to report NSR device study approvals to FDA. If an investigator or a sponsor proposes the initiation of a claimed NSR investigation to an IRB, and if the IRB agrees that the device study is NSR and approves the study, the investigation may begin at that institution immediately, without submission of an IDE application to FDA.

If an IRB believes that a device study is SR, the investigation may not begin until both the IRB and FDA approve the investigation. To help in the determination of the risk status of the device, IRBs will review information such as reports of prior investigations conducted with the device, the proposed investigational plan, a description of subject selection criteria, and monitoring procedures. The sponsor should provide the IRB with a risk assessment and the rationale used in making its risk determination.

**IRB and Sponsor Responsibilities Following SR/NSR Determination**

If the IRB decides the study is Significant Risk:

**IRB Responsibilities:**

- Notify sponsor and investigator of SR decision
- After IDE obtained by sponsor, proceed to review study as normal

**Sponsor Responsibilities:**

- Submit IDE to FDA or, if electing not to proceed with study, notify FDA of the SR determination;
- Study may not begin until FDA approves IDE and IRB approves the study.
- Sponsor and investigator(s) must comply with IDE regulations, as well as informed consent and IRB regulations.

If the IRB decides the study is Non-significant Risk:

- IRB proceeds to review study as normal
- If the study is approved by the IRB, the sponsor and investigator must comply with "abbreviated IDE requirements", and informed consent and IRB regulations.

For additional information please review the FDA guidance *Significant Risk and Nonsignificant Risk Medical Device Studies*: [http://www.fda.gov/cdrh/d861.html](http://www.fda.gov/cdrh/d861.html)