# Guidance for In-Vitro Diagnostic Device Studies using Leftover Specimens

**About IVDs**

In-vitro diagnostics (IVD) are tests that can detect diseases, conditions, or infections. Some tests are used in laboratory or other health professional settings and other tests are for consumers to use at home. IVD devices include products used to collect specimens or to prepare or examine specimens (e.g., blood, serum, urine, spinal fluid, tissue samples) after they are removed from the human body. This would include a genetic testing device intended for use in the diagnosis of diseases or other conditions.

**Purpose of this Guidance**

The purpose of this guidance is to explain the regulatory requirements of in-vitro diagnostic (IVD) device studies - including IRB review and consent requirements for IVD diagnostic device studies **using leftover specimens**. This information comes from FDA guidance issued on June 25, 2010, referenced in the footnote of this document, along with FDA guidance issued April 25, 2006. We will heavily rely on the FDA guidance's language in this document.

## Regulatory Requirements for IVD device studies[i]

**Is an Investigational Device Exemption (IDE) required for IVD device studies?**

Some IVD device studies are exempt from IDE regulations. To be IDE exempt, an IVD study must fit in one of these three categories:

1. The IVD is a pre-amendments device (i.e., a device that was in commercial distribution before the enactment of the 1976 Medical Device Amendments to the Act), other than a transitional device, and is used or investigated according to the indications in the labeling at that time.

2. The IVD is a device, other than a transitional device, that is substantially equivalent to a pre-amendments device and is used or investigated according to the indications in the labeling reviewed by FDA in determining substantial equivalence.

3. The IVD:
    a) Is properly labeled per 21 CFR 809.10(c)
    b) Is noninvasive
    c) Does not require an invasive sampling procedure that presents a significant risk
    d) Does not by design or intention introduce energy into a subject
    e) Is not used as a diagnostic procedure without confirmation of the diagnosis by another, medically established diagnostic product or procedure

On this last criteria, if an investigational test uses a new technology or represents a significant technological advance, established diagnostic products or procedures may not be adequate to confirm the diagnosis provided by the investigational IVD. This means that if there are no current reliable tests to diagnose a disease that is being studied with the IVD research study,

the study should be reviewed under an IDE or an abbreviated IDE (according to the device risk level).

## Is an IVD study considered human subjects research?

A "subject," as defined by FDA regulation, includes individuals whose specimens are tested with an IVD [21 CFR 812.3(p)]. Even if there are ***no*** identifiers on the specimens, the research would involve "human subjects" per the FDA's definition.

## Can investigational IVD studies receive expedited IRB review?

Yes, as long as they are minimal risk (as determined by the IRB) and the device is considered to be IDE exempt. **Note**: A study may not be expedited if identification of the subjects and/or their information would reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, insurability, reputation, or be stigmatizing. This can be mitigated with reasonable and appropriate protections so that risks related to invasion of privacy and breach of confidentiality are no greater than minimal. Also, IVDs that require a device risk determination (not IDE exempt) need to be reviewed at Full Board.

## What if my study uses only completely de-identified leftover specimens? [ii]

The study will still fall under the FDA device and human subjects' research regulations and must be reviewed by an IRB. The FDA's definition of a human subject includes individuals on whose specimens an investigational device is used. [i] Note that the requirement for informed consent, therefore, applies to the study; however, FDA has agreed to exercise "enforcement discretion" in these cases, as described in the next section.

## When would informed consent from subjects be required, if using leftover specimens?

An IVD study using leftover specimens **may not** need to obtain informed consent from subjects in certain circumstances. Consent may be required if any of the following applies:

1. The study requires an IDE.
2. The specimens were collected specifically for the proposed investigation.
3. The test results will be reported to the subject's health care provider or placed in the medical record.

## What would constitute a de-identified leftover specimen?

A de-identified leftover specimen does not have an identifier (name, medical record number, date, code, etc.) that the researcher(s) could use to link the sample with the patient. If the sample is de-identified with a code, make sure that neither you nor any other investigators on the study have or had access to a key that could link any code to an individual.

For the purposes of this document, coded means that: 1) a number, letter, symbol, or combination thereof (i.e., the code) has replaced identifying information (such as name or social security number) that would enable the investigator or any other individuals associated with the investigation, including the sponsor to readily ascertain the identity of the individual to whom the specimen pertains; and 2) a key to decipher the code exists, enabling linkage of

the identifying information to the specimen. [(i)]

## Who should I contact if I have additional questions?

You may contact the **IRB Education and QA team** at (404) 712-0720, or the Office of Research Compliance at **orc@emory.edu** or at (404) 727-2398**.**

[i] FDA Guidance: In Vitro Diagnostic (IVD) Device Studies -Frequently Asked Questions

[ii] FDA Guidance on Informed Consent for In Vitro Diagnostic Device Studies Using Leftover Human Specimens that are Not Individually Identifiable