From: OC GCP Questions
To: [redacted]
Subject: Question Related to Clinical Trial
Date: Tuesday, November 17, 2015 1:39:33 PM

Good afternoon –

FDA regulations describe three phrases of clinical investigation of a drug. These definitions can be found in Title 21 of the U.S. Code of Federal Regulations, Part 312.21 and can be accessed from our GCP website (www.fda.gov/oc/gcp through the link to "Good Clinical Practice/Clinical Trial Regulations", then to "Investigational New Drug Application (21 CFR 312)", and hence to Part 312.21. This section reads as follows:

Sec. 312.21 Phases of an investigation.

An IND may be submitted for one or more phases of an investigation. The clinical investigation of a previously untested drug is generally divided into three phases. Although in general the phases are conducted sequentially, they may overlap. These three phases of an investigation are as follows:

(a) Phase 1. (1) Phase 1 includes the initial introduction of an investigational new drug into humans. Phase 1 studies are typically closely monitored and may be conducted in patients or normal volunteer subjects. These studies are designed to determine the metabolism and

pharmacologic actions of the drug in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness. During Phase 1, sufficient

information about the drug`s pharmacokinetics and pharmacological effects should be obtained to permit the design of well-controlled, scientifically valid, Phase 2 studies. The total number of subjects and patients included in Phase 1 studies varies with the drug, but is generally in the range of 20 to 80.

(2) Phase 1 studies also include studies of drug metabolism, structure-activity relationships, and mechanism of action in humans, as well as studies in which investigational drugs are used as research tools to explore biological phenomena or disease processes.

(b) Phase 2. Phase 2 includes the controlled clinical studies conducted to evaluate the effectiveness of the drug for a particular indication or indications in patients with the disease or condition under study and to determine the common short-term side effects and risks associated with the drug. Phase 2 studies are typically well controlled, closely monitored, and conducted in a relatively small number of patients, usually involving no more than several hundred subjects.

(c) Phase 3. Phase 3 studies are expanded controlled and uncontrolled trials. They are performed after preliminary evidence suggesting effectiveness of the drug has been obtained, and are intended to gather the additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship of the drug and to provide an adequate basis for physician labeling. Phase 3 studies usually include from several hundred to several thousand subjects.

You might also be interested in reading the information about phases of clinical trials in the publication, "From Test Tube to Patient, Protecting America's Health Through Human Drugs;" here's the link: (www.fda.gov/Drugs/ResourcesForYou/Consumers/ucm143455.htm to the complete document; see also the following link to the specific section (www.fda.gov/Drugs/ResourcesForYou/Consumers/ucm143531.htm).

FDA encourages sponsors who have questions about a study and its design, to contact the agency for assistance. If you need information as to whether an IND is needed for your study, please go to the following link for contact information:
www.fda.gov/ScienceResearch/SpecialTopics/RunningClinicalTrials/ucm134493.htm

Industry and academia have, in some cases, further divided the three phases into subphases (for example: Phase 1A or Phase 1B). FDA regulations do not define such subphases; therefore, I cannot provide you with a specific answer to your question.

It might be best to send your question to the Center for Drugs (CDER) at druginfo@fda.hhs.gov.

Kind regards,

Doreen M. Kezer, MSN
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Office of Good Clinical Practice
Office of the Commissioner, FDA

From: [redacted]
Sent: Monday, November 16, 2015 3:47 PM
To: OC GCP Questions
Cc: [redacted]
Subject: Question Related to Clinical Trial

Hi, I had a question that I was hoping you could answer for me, which is whether or not a phase 1 trial is required by the FDA in order to proceed to a Phase 2a clinical trial?

Thank you very much for your assistance.

[redacted]