

# Design and Analysis of Clinical Trials Concept and Methodology

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**Abstract:** *Clinical research is an alternative terminology used to describe medical research. Clinical research involves people, and it is generally carried out to evaluate the efficacy of a therapeutic drug, a medical/surgical procedure, or a device as a part of treatment and patient management. However, clinical trials are those studies that assess the potential of a therapeutic drug/device in the management, control, and prevention of disease. The recent focus of federal funding on comparative effectiveness research underscores the importance of clinical trials in the practice of evidence-based medicine and health care reform. The impact of clinical trials not only extends to the individual patient by establishing a broader selection of effective therapies, but also to society as a whole by enhancing the value of health care. According to WHO, the clinical trial is any research study that prospectively assigns human to one or more health-related interventions to evaluate the efr. H. American Recovery and Reinvestment Act of 2009. 1st Ed 2009.ects on health outcomes. The clinical trials can be divided in various phase which five phases 0,I,I,III and IV trials.*

**Keywords:** Clinical trials, phase I trial, phase II trial, phase III trial, phase IV trial., clinical research.

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