History and Principles of Good Clinical Practice

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A Brief History of GCP

• Early 1960s: Widespread concern about the safety and control of investigational drugs and the clinical research process developed among member of the medical profession, the scientific community, regulatory authorities, and general public.

A Brief History of GCP

- 1968: WHO convened a Scientific Group on Principles for Clinical Evaluation of Drugs
 The Scientific Group was charged with reviewing and formulating principles for clinical evaluation of drug products.
- 1975: Another WHO Scientific Group was convened to specifically consider all aspects of the evaluation and testing of drugs and to formulate proposals and guidelines for research in the field of drug development.

A Brief History of GCP

- WHO's "Guidelines for Good Clinical Practice (GCP) for trials on pharmaceutical products" 1995.
- The GCP guideline is Topic E6 ICH, 1997
- International Standard Organization (ISO), "Clinical investigation of medical devices for human subjects, Part I (General requirements) and Part 2 (Clinical investigation plans) (2001)
- Pan American Health Organization (PAHO). Pan American Network on Drug Regulatory Harmonization (PANDRH). "GCP: Document of the Americas" (2005)

Background

- Need for safe and efficient products for various health problems
- Drug development is expensive and time consuming
- Need for efficient quality systems
- Global drug market
- Existence of national laws and regulations for drug development

Purpose

• To harmonize the regulations and guidelines for drug development

Participants

- Regulatory agency/industry representatives from Europe, Japan and US
 - + WHO, Canada, Nordic group, Australia

Goal

- To provide a unified standard to facilitate the mutual acceptance of clinical data by the regulatory authorities
- Remove redundancy /duplication in development and review process

Process

- Developed guidelines applicable for
 - Drugs
 - Biologics
 - Medical devices
- Approved by ICH members
- Adopted by National Regulatory Authorities

Good Clinical Practice (GCP)

An international ethical and scientific quality standard for designing, conducting, recording, and reporting trials that involve the participation of human subjects

Public assurance that the rights, safety, and well-being of trial subjects are protected

- Consistent with the Declaration of Helsinki
- Results in credible data

Good Clinical Practice



The end product of clinical research

Protocol Data Collection Management Analysis Study Report

Positive (or negative) data can lead to a recommendation to use (or not to use) a treatment.

Who are responsible for GCP

The responsibility for GCP is shared by all of the parties involved, including:

- sponsors
- investigators and site staff
- contract research organizations (CROs)
- ethics committees
- regulatory authorities
- research subjects.

Principle 1: Ethical Conduct

Research involving humans should be scientifically sound and conducted in accordance with basic ethical principles, which have their origin in the Declaration of Helsinki. Three basic ethical principles of equal importance, namely respect for persons, beneficence, and justice, permeate all other GCP principles.

Principle 2 Research Described in a Protocol

Research involving humans should be scientifically justified and described in a clear, detailed protocol.

Principle 3: Risk Identification:

Before research involving humans is initiated, foreseeable risks and discomforts and any anticipated benefit (s) for the individual research subject and society should be identified. Research of investigational products or procedures should be supported by adequate non-clinical and, when applicable, clinical information.

Principle 4: Benefit-Risk Assessment

Research involving humans should be initiated only if the anticipated benefit(s) for the individual research subject and society clearly outweigh the risks. Although the benefit of the results of the trial to science and society should be taken into account, the most important considerations are those related to the rights, safety, and well-being of the research subjects.

Principle 5: Review by IEC/IRB

Research involving humans should receive independent ethics committee/institutional review board (IEC/IRB) approval/favourable opinion prior to initiation

Principle 6: Protocol Compliance

Research involving humans should be conducted in compliance with the approved protocol.

Principle 7: Informed Consent

Freely given informed consent should be obtained from every subject prior to research participation in accordance with national culture (s) and requirements. When a subject is not capable of giving informed consent, the permission of a legally authorized representative should be obtained in accordance with applicable law.

Principle 8: Continuing Review/Ongoing Benefit-Risk Assessment

Research involving humans should be continued only if the benefit-risk profile remains favorable.

Principle 9: Investigator Qualifications

Qualified and duly licensed medical personnel (i.e. physician or, when appropriate, dentist) should be responsible for the medical care of research subjects, and for any medical decision (s) made on their behalf.

Principle 10: Staff Qualifications

Each individual involved in conducting a trial should be qualified by education, training, and experience to perform his or her respective task (s) and currently licensed to do so, where required.

Principle 11: Records

All clinical trial information should be recorded, handled, and stored in a way that allows its accurate reporting, interpretation, and verification.

Principle 12: Confidentiality/Privacy

The confidentiality of records that could identify subjects should be protected, respecting the privacy and confidentiality rules in accordance with the applicable regulatory requirement (s)

Principle 13: Good Manufacturing Practice

Investigational products should be manufactured, handled, and stored in accordance with applicable Good Manufacturing Practice (GMP) and should be used in accordance with the approved protocol.

Principle 14: Quality Systems

Systems with procedures that assure the quality of every aspect of the trial should be implemented.

GCP Design Standards

- Written protocol
- Investigator brochure
- Scientific soundness
- Feasibility
- Adequate resources
- Randomization / blinding

GCP Conduct Standards

- IRB & Regulatory approval
- Compliance with protocol
- Informed consent
- Confidentiality of data
- Medical management of adverse events
- Product accountability
- Qualification & training

GCP Recording Standards

- CRF completion
- Data handling
- Security maintenance
- Audit requirements
- Product accountability
- Management of study files/essential documents

GCP Reporting Standards

To

- Sponsors
- IRB/IEC
- Regulatory authorities
- Other investigators
- Adverse events
- Interim reviews
- Progress reports
- Final reports
- Monitoring / audit reports

Conclusion

