Per Hartvig
Hospital pharmacy, University
hospital, Uppsala

- History
- Citrus fruit study (skjörbjugg)
- Vaccination
- GMP 1960-ties
- GLP 1980-ties
- + GLTP
 - Thalidomid Neurosedyn
 - 1977 Proposal from FDA
 - 1989 Nordic guidelines

- GCTP is an international ethics and scientific standard for
 - Planning
 - Conducting
 - Documenting and
 - Reportingclinical studies in man

- First Nordic Guidelines in 1989
 - Medical Products Agency LVFS 2003:6

Objectives

- *To protect the interest of the patient
- To assure quality inb research

Purpose:

- Approval for registration and marketing
- Prove scientific hypothesis
- Utility of the drug when used in the general population
- Marketing multicentre seeding trials

ICH-GCP

International Conference of Harmonization

 Cooperation between USA, Japan and Europe of pharmaceutical industry, regulatory agencies and academic institutions

First meeting held 1989

ICH-GCTP

- Objectives:
 - Avoid unnecessary studies
 - -Studies should be carried out anywhere
 - Minimize studies in animals
 - Faster drug development
 - In the future: Drugs are approved for a region
 - www.ich.org

ICH-GCTP- Main components

- Informed consent
- Ethic committee approval
- Sponsor must provide SOP for planning, conduct, closure and report
- Responsibilities of sponsor and investigator
- Monitoring procedure
- Auditing procedures
- Documentation
- Archiving of documents

A clinical drug trial- A chain of thoughts and decisions

- Study objective
- Main question
- Hypothesis
- Study design
- Inclusion criteria
- Exclusion criteria
- Efficacy end point
- Safety (AE and ADR)
- Statistics
- Monitoring
- Data management
- Analysis and reporting
- Conclusions

CLINICAL DRUG TRIAL

STUDY PHASES

Phase 0

Phase 1

Phase 2

Phase 3

Phase 4

Chemistry

Animal studies

Healthy volunteers (30-100)

Pharmacokinetics

Open study in patient(<1000)

Pharmacokinetics in pt~ 5000

Large patient studies (>10000)

Post marketing studies

*EXPLANATORY STUDIES *CONFORMATION STUDIES

GCTP: Study protocol

- Introduction and rationale
- Study objectives
- Study design
- Time schedule
- Patent numbers
- Patient selection
- Inclusion criteria
- Exclusion criteria
- Withdrawal criteria
- Blinding of the study
- Breaking randomisation code
- Investigated products
- Packaging and labelling
- Storage

- Administration route
- Compliance checks
- Drug accountability
- Study procedures
- Adverse events
- **↑** Case report form
- Efficacy and safety
- Statistical analysis
- Ethic responsibilities
- Insurance and liability
- Study monitors
- Audit and inspection
- Financial agreement
- Publication
- Completion of study

STANDARD OPERATING PROCEDURES FOR GCTP

- *Consider:
- GCTP regulations
- + FDA
- + ICH
- Company demands
- Legal demands
- * Insurance demands

CASE RECORD FORM, CRF

- Master information
- Not possible to change printed text
- ◆ No empty spaces -Lacking data = NA
- Written text can be changed
 - what is wrong and add the right text
 - Signum with date (monitor's mantra)

Clinical Trial Actors (GCTP)

- Auditör
 ↓ ↓ ↓
 INVESTIGATOR ←/→ SPONSOR
 - Monitor (CRO/Hospitalpharmacy)

Monitoring

- *Assure the security and wellbeing of patients and volunteers
- * CRF is correct, complete and traceable to Master documents
- *The studie is performed according to GCTP and study protocols with amendments
- Audit of the study site

- 4
- GCTP guarantees that
- "Studies are scientifically and
- ethically:
 - Designed (study protocol)
 - performed
 - recorded (CRF)
 - finished
 - reported and documented

* Jag har utstått många prövningar

🛨 varav en klinisk......

GOOD LABORATORY PRACTISE

- * Animals
 - -Housing
 - -Heritage
 - -Feeding
 - *Timing
 - Type of food
 - -Light-dark circle
 - -Aggression