QUALITY SYSTEM FOR CLINICAL TRIAL SAMPLES
(OR GOOD CLINICAL LABORATORY PRACTICE)

Background

Analysis of samples from clinical trials must comply with the relevant Good Clinical Practice regulations and guidelines. However, these contain no specific guidance regarding the procedures and standards required for valid analytical results.

The Research Quality Association and Medicines and Healthcare products Regulatory Agency(MHRA) issued advice for clinical laboratories which were superseded by the European Medicine Agency (EMA) reflection paper for laboratories that perform the analysis or evaluation of clinical trial samples (EMA/INS/GCP/532137/2010).

In the guidance published by regulatory bodies the term GCLP is absent, with good reason both GLP and GCP are statutory requirements, in contrast GCLP is a term which is used by industry for various guidance documents. Adherence to these guidelines is not a statutory requirement in Europe and will not be assessed during regulatory GCP laboratory inspections.

"Laboratories must be aware of the regulatory requirements that apply to the work that they are performing to ensure compliance whether it be GCP or GLP".

Regulations

The regulation which applies in the UK is The Medicines for Human Use (Clinical Trials) Regulations 2004 No. 1031 (as amended) and further guidance is contained in the International Committee on Harmonisation (ICH) Guideline for Good Clinical Practice (GCP) E6(R2) effective 14 June 2017

Quality Management System

A quality management system to support the analysis of samples from a clinical study must meet the requirements of the GCP regulations.

The regulations make no reference to analysis of samples whereas, there are clear and specific requirements for the Ethics Committee, the Sponsor and Investigator.

One reference is made to a quality system in the regulation *"systems with procedures that assure that quality of every aspect of the trial shall be implemented"* (UK SI 2004 No 1031, Schedule 1, Part 2. 13).

The ICH guidelines, section 8 Essential Documents parts 8.2.12 and 8.3.7, requires documented competence of a facility to perform the required test(s) and support the reliability of results. What constitutes competence is for the sponsor to determine.

Medical Laboratories will have accreditation to ISO 15189 (or the predecessor CPA which will be withdrawn in 2018), some laboratories will be members of the UK GLP Monitoring Program or have other accreditations which would require a quality management system. Although these accreditations would provide some assurances, these alone are not sufficient to be compliant with the requirements of GCP.

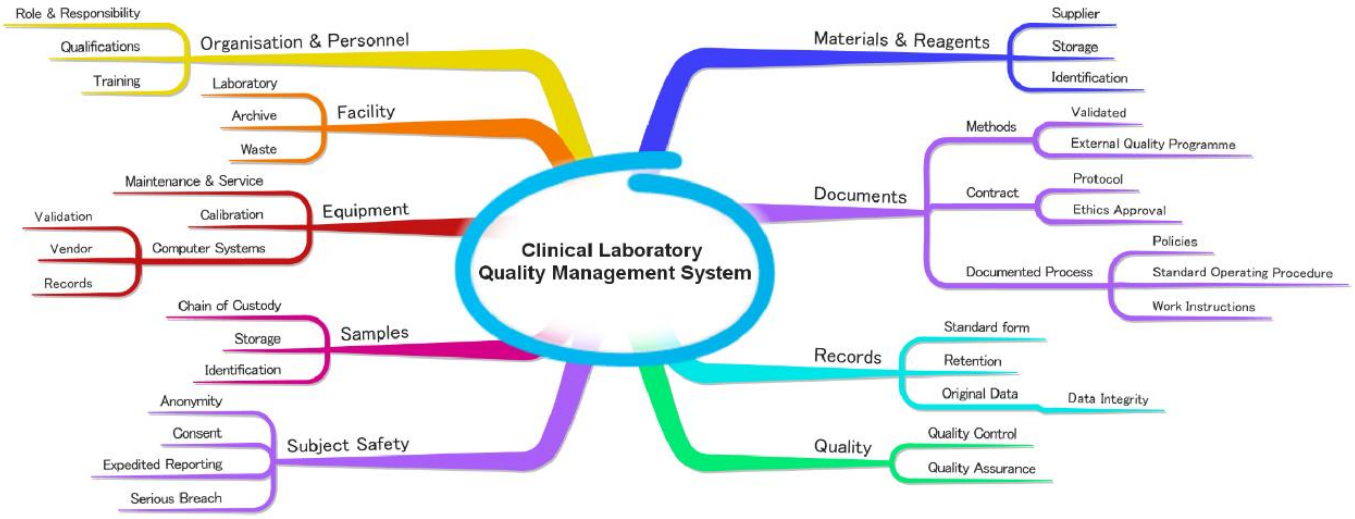

Figure Map of a clinical laboratory QMS – an amalgamation of a generic laboratory QMS and GCP regulatory requirements

Many aspects of the QMS outlined above should be familiar to those operating in an analytical laboratory especially those who already have an accreditation. Those specific to analysing samples from clinical trials include subject safety, consent and anonymity and study protocol compliance. Thus, the following should be considered:

Subject Safety

Are the results to be used to assess subject wellbeing? – such as haematology data
Is there a mechanism to expedite reporting of results to a clinician if appropriate?

Subject Consent

Is there a mechanism to provide assurance that consent has been given for the analysis of the samples?
Is there a mechanism for the withdrawal of subject consent for the analysis of their samples during the study?

Subject Confidentiality

Is it possible to identify the individual from the information provided to those analysing the samples?

Study Protocol Compliance

Is there a policy and mechanism for reporting a serious breach to the GCP regulations?
Is there a mechanism to document and report deviations from the protocol?
Are the samples from a single or double-blind study?
Is it necessary to break the blind code to perform the analysis?
Will results from the analysis un-blind the study to the study team?

TMQA & GCLP

We hope that you have found this article useful. The team at TMQA have extensive experience in clinical trials and laboratory QMS. We can provide a wide range of services which are tailored to meet your specific needs. Contact us at info@tmqa.co.uk if you are interested in what TMQA can provide for your organisation.

Health Check	Gap Analysis	QMS Build
Training	Mock GCP Inspection	Vendor Audit