



Clinical Trials Jargon Buster

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Introduction

Clinical trials and the processes involved in developing new treatments are full of jargon.

We've collected some of the common acronyms and phrases used, some internationally, and some in the Australian context, so clinical trials are more accessible to the community.

We want this to be a useful document so please contact us at www.Research4.Me if you have suggestions for acronyms or terms we should include, or if the descriptions we've provided are not clear or understandable.

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Common Acronyms

Acronym		Explanation
ARTG	Australian Register of Therapeutic Goods	<p>The ARTG contains therapeutic goods that can be lawfully supplied in Australia. More information on the ARTG here: https://www.tga.gov.au/australian-register-therapeutic-goods</p> <p>Search the ARTG here: https://tga-search.clients.funnelback.com/s/search.html?query=&collection=tga-artg</p>
ANZCTR	Australian New Zealand Clinical Trials Registry	<p>A publicly accessible online listing (register) of clinical trials being undertaken in Australia and New Zealand. Available at: http://www.anzctr.org.au/about.aspx ²</p>
EMA	European Medicines Agency	<p>European agency responsible for regulation of medicines and medical devices for human and veterinary use</p> <p>http://www.ema.europa.eu/ema/index.jsp?curl=pages/home/Home_Page.jsp&mid=</p>
EU	European Union	
FDA	Food and Drug Administration	<p>US agency responsible for regulation of food and therapeutic agents (eg drugs, devices, biologicals)</p> <p>https://www.fda.gov/</p>
GCP (or ICH- GCP)	Good Clinical Practice	<p>An international standard for the design, conduct, performance, monitoring, auditing, recording, analyses, and reporting of clinical trials that provides assurance that the data and reported results are credible and accurate, and that the rights, integrity, and confidentiality of the trial participants are protected. It was developed by EMA, FDA and PMDA to harmonise the expectations for how clinical trials for medicines to be approved should be conducted internationally. Depending on country, may be applicable to a broader range of clinical trials than just those for new medicine trials.</p> <p>http://www.ich.org/products/guidelines/efficacy/efficacy-single/article/good-clinical-practice.html</p> <p>In Australia, this guidance has been annotated by the TGA:</p> <p>https://www.tga.gov.au/sites/default/files/ich13595an.pdf</p>
HREC	Human Research Ethics Committee	<p>Human Research Ethics Committees (HREC's) are responsible for providing Ethics approval for a clinical trial to be conducted with patients. ² More information about HRECs is available from Australia's NMHRC, who is responsible for their oversight:</p> <p>https://www.nhmrc.gov.au/health-ethics/human-research-ethics-committees-hrecs</p>

Acronym		Explanation
ICH	International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use	The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use brings together regulatory authorities and the pharmaceutical industry to discuss scientific and technical aspects of drug registration. ICH's mission is to achieve greater harmonisation worldwide to ensure that safe, effective, and high quality medicines are developed and registered in the most resource-efficient manner. More information is available here: http://www.ich.org/home.html
IRB	Institutional Review Board.	This is a term used predominantly in the US ⁵ . Under FDA regulations, an IRB is an appropriately constituted group that has been formally designated to review and monitor biomedical research involving human subjects. More information about IRB's from the FDA can be found here: https://www.fda.gov/RegulatoryInformation/Guidances/ucm126420.htm
MRFF	Medical Research Future Fund	The MRFF) was established on 26 August 2015 by the Medical Research Future Fund Act 2015. The Fund is a financial asset fund and represents an endowment that will support medical research and innovation into the future. http://health.gov.au/internet/main/publishing.nsf/Content/mrff
NIH	US National Institutes of Health	The NIH is the primary agency of the United States government responsible for biomedical and public health research. More information about the NIH is available here: https://www.nih.gov/
NHMRC	National Health and Medical Research Council	The National Health and Medical Research Council (NHMRC) is Australia's leading expert body promoting the development and maintenance of public and individual health standards. NHMRC brings together within a single national organisation the functions of research funding and development of advice. www.nhmrc.gov.au
PMDA	Pharmaceuticals and Medical Devices Agency (Japan)	Government Agency overseeing regulation of medicines and medical devices in Japan. http://www.pmda.go.jp/english/
TGA	Therapeutic Goods Administration	Government Agency in Australia responsible for regulating the supply, import, export, manufacturing and advertising of therapeutic goods including medicines, medical devices, blood and blood products. www.tga.gov.au
WHO	World Health Organisation	The World Health Organization is a specialised agency of the United Nations that is concerned with international public health. More information is available here: http://www.who.int/en/

Common Terms in clinical trials

Term/Phrase	Definition
Adverse Drug Reaction (ADR)	In the pre-approval clinical experience with a new medicinal product or its new usages, particularly as the therapeutic dose(s) may not be established: all noxious and unintended responses to a medicinal product related to any dose should be considered adverse drug reactions. The phrase responses to a medicinal product means that a causal relationship between a medicinal product and an adverse event is at least a reasonable possibility, i.e., the relationship cannot be ruled out. Regarding marketed medicinal products: a response to a drug which is noxious and unintended and which occurs at doses normally used in man for prophylaxis, diagnosis, or therapy of diseases or for modification of physiological function (see the ICH Guideline for Clinical Safety Data Management: Definitions and Standards for Expedited Reporting). ¹
Adverse Event (AE)	Any untoward medical occurrence in a patient or clinical investigation subject administered a pharmaceutical product and which does not necessarily have a causal relationship with this treatment. An adverse event (AE) can therefore be any unfavourable and unintended sign (including an abnormal laboratory finding), symptom, or disease temporally associated with the use of a medicinal (investigational) product, whether or not related to the medicinal (investigational) product (see the ICH Guideline for Clinical Safety Data Management: Definitions and Standards for Expedited Reporting). ¹
Arm	Any of the treatment groups in a randomised trial. Most randomised trials have two or more 'arms'. ²
Audit	A systematic and independent examination of trial related activities and documents to determine whether the evaluated trial related activities were conducted, and the data were recorded, analyzed and accurately reported according to the protocol, sponsor's standard operating procedures (SOPs), Good Clinical Practice (GCP), and the applicable regulatory requirement(s). ¹
Audit Trail	Documentation that allows reconstruction of the course of events. ¹
Baseline measures	These are the 'baselines', 'starting points' or 'benchmarks' which are objective measures upon which outcomes can be judged against. ³
Blinding/Masking Blind	A procedure in which one or more parties to the trial are kept unaware of the treatment assignment(s). In a single blind trial, the trial participant is not told which arm of the trial he/she is on and is therefore unaware of whether he/she is in the experimental or control arm of the trial; also called masked. In a double blind trial, the trial participant, investigator(s), monitor, and, in some cases, data analyst(s) are unaware of the treatment arm the participant has been assigned to. ^{1,3} 'Blinding' is not always possible (e.g. research into the benefits of massage). Whenever blinding is used, there will always be a method in which the participants treatment can be unblinded in the event that information is required for safety. ³
Case Report Form (CRF)	A printed, optical, or electronic document designed to record all of the protocol required information to be reported to the sponsor on each trial subject. ¹

Term/Phrase	Definition
Clinicaltrials.gov	A database of privately and publicly funded clinical studies conducted around the world, provided by the US National Library of Medicine. It does not hold every clinical trial running globally, and inclusion on the database does not mean it has been evaluated by the US government.
Clinical Trial/ Study Report	A written description of a trial/study of any therapeutic, prophylactic, or diagnostic agent conducted in human subjects, in which the clinical and statistical description, presentations, and analyses are fully integrated into a single report (see the ICH Guideline for Structure and Content of Clinical Study Reports). ¹
Comparator (Product)	An investigational or marketed product (i.e., active control), or placebo, used as a reference in a clinical trial ¹
Completed	A trial is considered completed when trial participants are no longer being examined or treated (i.e. no longer in follow-up); the database has been 'locked' and records have been archived. ²
Confounding factors	A confounding factor is anything which might have influenced the trial that was unplanned. For example, 'everyone on the trial caught the flu during the trial' or 'there was a transport strike and people couldn't get in for bloodtests'. A confounding factor would not be something caused by the trial intervention. ³
Contract	A written, dated, and signed agreement between two or more involved parties that sets out any arrangements on delegation and distribution of tasks and obligations and, if appropriate, on financial matters. The protocol may serve as the basis of a contract. ¹
Control group	The group that does not receive the new treatment being studied but receives the current standard treatment. ⁴
Coordinating Committee	A committee that a sponsor may organize to coordinate the conduct of a multicentre trial. ¹
Coordinating Investigator	An investigator assigned the responsibility for the coordination of investigators at different centres participating in a multicentre trial. ¹
(CRO) Contract Research Organization	A person or an organization (commercial, academic, or other) contracted by the sponsor to perform one or more of a sponsor's trial-related duties and functions. ¹
Direct Access	Permission to examine, analyze, verify, and reproduce any records and reports that are important to evaluation of a clinical trial. Any party (e.g., domestic and foreign regulatory authorities, sponsor's monitors and auditors) with direct access should take all reasonable precautions within the constraints of the applicable regulatory requirement(s) to maintain the confidentiality of subjects' identities and sponsor's proprietary information ¹
Documentation	All records, in any form (including, but not limited to, written, electronic, magnetic, and optical records, and scans, x-rays, and electrocardiograms) that describe or record the methods, conduct, and/or results of a trial, the factors affecting a trial, and the actions taken. ¹
Double-blind study	Neither the patients nor the research team know which treatments they are receiving - either the new treatment or the current standard treatment. When safety concerns arise, treatment can be 'un-blinded'. ⁴
Efficacy	(Of a drug or treatment). The maximum ability of a drug or treatment to produce a result regardless of dosage. A drug passes efficacy trials if it is effective at the dose tested and against the illness for which it is prescribed. ²

Term/Phrase	Definition
Eligibility Criteria/ Inclusion and Exclusion Criteria	<p>Any medical or social criteria that would include or exclude someone from research (e.g. gender, age, medications, disease type and status, previous treatment history other conditions). They ensure patients enrolling in a clinical trial share similar characteristics so that researchers have greater confidence that the results of the study are due to the treatment(s) studied rather than other factors. ^{2,3,4}</p> <p>It is important to note that inclusion and exclusion criteria are not used to reject people personally, but rather to identify appropriate trial participants and keep them safe. ²</p>
Eligible Patient	A patient selected in accordance with, and who meets, the eligibility criteria specified for the trial. ²
Essential Documents	Documents which individually and collectively permit evaluation of the conduct of a study and the quality of the data produced
Ethics approval	Approval given by a Human Research Ethics Committee (HREC) for a clinical trial to be conducted with patients. ²
Follow-up	A process of periodic contact with participants enrolled in a trial for the purpose of monitoring health status, administering trial treatments, modifying the course trial treatment, observing the effects of the trial treatment, or for data collection. ²
24 Good Clinical Practice (GCP)	A standard for the design, conduct, performance, monitoring, auditing, recording, analyses, and reporting of clinical trials that provides assurance that the data and reported results are credible and accurate, and that the rights, integrity, and confidentiality of trial subjects are protected. ¹
Independent Data-Monitoring Committee (IDMC) (or DSMB)	An independent data-monitoring committee that may be established by the sponsor to assess at intervals the progress of a clinical trial, the safety data, and the critical efficacy endpoints, and to recommend to the sponsor whether to continue, modify, or stop a trial. (also called Data and Safety Monitoring Board (DSMB), Monitoring Committee, Data Monitoring Committee (DMC)) ¹
Impartial Witness	A person, who is independent of the trial, who cannot be unfairly influenced by people involved with the trial, who attends the informed consent process if the subject or the subject's legally acceptable representative cannot read, and who reads the informed consent form and any other written information supplied to the subject. ¹
Independent Ethics Committee (IEC) Known in Australia as HREC – Human Research Ethics Committee	An independent body (a review board or a committee, institutional, regional, national, or supranational), constituted of medical professionals and non-medical members, whose responsibility it is to ensure the protection of the rights, safety and well-being of human subjects involved in a trial and to provide public assurance of that protection, by, among other things, reviewing and approving/providing favourable opinion on, the trial protocol, the suitability of the investigator(s), facilities, and the methods and material to be used in obtaining and documenting informed consent of the trial subjects. The legal status, composition, function, operations and regulatory requirements pertaining to Independent Ethics Committees may differ among countries – see <i>National Statement</i> in Australia for requirements. ¹
Informed Consent	A process by which a patient voluntarily confirms his or her willingness to participate in a particular trial, after having been informed of all aspects of the trial that are relevant to the patient's decision to participate - including benefits, risks and side effects, and alternative options. Informed consent is documented by means of a written informed consent form (which has the name of the trial clearly displayed). It must be signed and dated by the trial participant (or the trial participant's legally acceptable representative) and the Investigator, in the presence of each other. ^{1,2,4}

Term/Phrase	Definition
Inspection	The act by a regulatory authority(ies) of conducting an official review of documents, facilities, records, and any other resources that are deemed by the authority(ies) to be related to the clinical trial and that may be located at the site of the trial, at the sponsor's and/or contract research organization's (CRO's) facilities, or at other establishments deemed appropriate by the regulatory authority(ies). ¹
Institution (medical)	Any public or private entity or agency or medical or dental facility where clinical trials are conducted ¹
Interim Clinical Trial/ Study Report	A report of intermediate results and their evaluation based on analyses performed during the course of a trial ¹
Intervention	This word is often used to describe what the research is testing or trying out. It could be a drug, a new kind of treatment pathway or something as simple as a massage. ³
Investigator	A person responsible for the conduct of the clinical trial at a trial site. If a trial is conducted by a team of individuals at a trial site, the investigator is the responsible leader of the team and may be called the principal investigator. See also Subinvestigator. ¹
Investigator's Brochure	A compilation of the clinical and nonclinical data on the investigational product(s) which is relevant to the study of the investigational product(s) in human subjects ¹
Legally Acceptable Representative	An individual or juridical or other body authorized under applicable law to consent, on behalf of a prospective subject, to the subject's participation in the clinical trial. ¹
Lost to Follow-up	Where there are no results from certain participants on a trial (e.g. People who leave a trial) ¹
Monitoring	The act of overseeing the progress of a clinical trial, and of ensuring that it is conducted, recorded, and reported in accordance with the protocol, Standard Operating Procedures (SOPs), Good Clinical Practice (GCP), and the applicable regulatory requirement(s). ¹
Monitoring Plan	A document that describes the strategy, methods, responsibilities, and requirements for monitoring the trial. ¹
Multicentre Trial	A clinical trial conducted according to a single protocol but at more than one site, and therefore, carried out by more than one investigator. ¹
Outcome Measures	These are the outcomes that are measured at the end of the research, they must be the same as the baseline measures. ³
Phase I, II, III and IV	<p>Trials involving the development of new medicines are conducted in sequential phases to reduce risk of safety issues. Phase I and II trials involve small numbers of patients, including those for whom current treatments are no longer viable. Phase III trials are large-scale trials involving thousands of patients where new treatment options are compared with current treatments. New treatments become part of standard care when their value is proven in Phase III trials. Phase IV trials continue to collect information about treatments that have become part of standard care after they have passed through Phase III. ^{4,5}</p> <p>New clinical trial models are blurring the lines between the phases, in order to increase speed of testing. In some cases, if the evidence is overwhelming regarding efficacy and safety or unmet need, new medicines can be approved prior to phase 3 trials, though additional post-approval trials will continue to collect more evidence.</p>

Term/Phrase	Definition
Placebo / sham device	<p>A placebo is an inactive or ‘dummy’ treatment. In the case of medical device trials, it may be called a Sham Device. These tools are used to make it easier to evaluate the effect of the treatment being tested versus “no treatment” (current standard care).⁵</p> <p>It should be noted that if used, a placebo is usually used in addition to the current standard care. If there is no agreed standard care that is effective, then the placebo arm may receive no treatment. It is widely accepted as unethical to use a placebo if there is a known effective treatment, and an ethics committee will carefully consider this during their review of the risks and benefits of the trial for participants when deciding whether to approve a clinical trial.⁵</p>
Protocol	A document that describes the objective(s), design, methodology, statistical considerations, and organization of a trial. The protocol usually also gives the background and rationale for the trial, but these could be provided in other protocol referenced documents. A protocol details the number of patients, the duration, the trial, the treatments, tests and how the results will be interpreted for each trial. Protocols are reviewed and approved by human research ethics committees before a trial is initiated. ^{1,3}
Protocol Amendment	A written description of a change(s) to or formal clarification of a protocol ¹
Quality Assurance (QA)	All those planned and systematic actions that are established to ensure that the trial is performed and the data are generated, documented (recorded), and reported in compliance with Good Clinical Practice (GCP) and the applicable regulatory requirement(s). ¹
Quality Control (QC)	The operational techniques and activities undertaken within the quality assurance system to verify that the requirements for quality of the trial-related activities have been fulfilled.
Randomised controlled trials (RCT)	Treatments are assigned randomly to patients in a trial. Patients do not choose which treatments they receive. Randomisation helps reduce the risk of bias being introduced when comparing treatments. ^{4,5}
Randomization	The process of assigning trial subjects to treatment or control groups using an element of chance to determine the assignments in order to reduce bias ¹
Regulatory Authorities	Bodies having the power to regulate. In the ICH GCP Guideline the expression Regulatory Authorities includes the authorities that review submitted clinical data and those that conduct inspections. These bodies are sometimes referred to as competent authorities ¹
Sample Size*	How many people were involved in the trial. The sample size required is usually calculated by a statistician based on the hypothesis for the trial and expected treatment effect necessary to establish a difference between the treatment arms. ¹
Serious Adverse Event (SAE) or Serious Adverse Drug Reaction (Serious ADR)	Any untoward medical occurrence that at any dose: - results in death, - is life-threatening, - requires inpatient hospitalization or prolongation of existing hospitalization, - results in persistent or significant disability/incapacity, or - is a congenital anomaly/birth defect (see the ICH Guideline for Clinical Safety Data Management: Definitions and Standards for Expedited Reporting). ¹
Single-Blind/ Single-blind study	This is where the participant is not informed which arm of a trial on the participant has been assigned to, but the research team know whether patients are receiving the standard treatment or the new treatment under trial. ^{3,4}
Source Documents	Documents Original documents, data, and records (e.g., hospital records, clinical and office charts, laboratory notes, memoranda, subjects' diaries or evaluation checklists, pharmacy dispensing records, recorded data from automated instruments, copies or transcriptions certified after verification as being accurate copies, microfiches, photographic negatives, microfilm or magnetic media, x-rays, subject files, and records kept at the pharmacy, at the laboratories and at medico-technical departments involved in the clinical trial). ¹

Term/Phrase	Definition
Sponsor	An individual, company, institution, or organization which takes responsibility for the initiation, management, and/or financing of a clinical trial. ¹
Sponsor-Investigator	An individual who both initiates and conducts, alone or with others, a clinical trial, and under whose immediate direction the investigational product is administered to, dispensed to, or used by a subject. The term does not include any person other than an individual (e.g., it does not include a corporation or an agency). The obligations of a sponsor-investigator include both those of a sponsor and those of an investigator. ¹
Standard Operating Procedures (SOPs)	Detailed, written instructions to achieve uniformity of the performance of a specific function. ¹
Subinvestigator	Any individual member of the clinical trial team designated and supervised by the investigator at a trial site to perform critical trial-related procedures and/or to make important trial-related decisions (e.g., associates, residents, research fellows). ¹
Subject/Trial Subject/Participant	An individual who participates in a clinical trial, either as a recipient of the investigational product(s) or as a control. ¹
Subject Identification Code	A unique identifier assigned by the investigator to each trial subject to protect the subject's identity and used in lieu of the subject's name when the investigator reports adverse events and/or other trial related data. ¹
Trial Site	The location(s) where trial-related activities are actually conducted. ¹
Trial arm*	Trials might have multiple 'arms' which are groups that are being tested simultaneously. One arm may be the 'control' group that receives the best available standard of care. In some cases that may be a placebo (dummy treatment), if there is no medical community agreement that there is any effective treatment for a condition. A dummy treatment may also be used to facilitate blinding of treatment arms, if two treatments look different (eg one is a pill and one is an injection). Different arms might start interventions at different times. Sometimes, protocols require a crossover, where participants change to the alternative treatment They may or may not know when this happens. ¹
Unexpected Adverse Drug Reaction	An adverse reaction, the nature or severity of which is not consistent with the applicable product information (e.g., Investigator's Brochure for an unapproved investigational product or package insert/summary of product characteristics for an approved product) (see the ICH Guideline for Clinical Safety Data Management: Definitions and Standards for Expedited Reporting). ¹
Validation of Computerized Systems	A process of establishing and documenting that the specified requirements of a computerized system can be consistently fulfilled from design until decommissioning of the system or transition to a new system. The approach to validation should be based on a risk assessment that takes into consideration the intended use of the system and the potential of the system to affect human subject protection and reliability of trial results ¹
Vulnerable Subjects	Individuals whose willingness to volunteer in a clinical trial may be unduly influenced by the expectation, whether justified or not, of benefits associated with participation, or of a retaliatory response from senior members of a hierarchy in case of refusal to participate. Examples are members of a group with a hierarchical structure, such as medical, pharmacy, dental, and nursing students, subordinate hospital and laboratory personnel, employees of the pharmaceutical industry, members of the armed forces, and persons kept in detention. Other vulnerable subjects include patients with incurable diseases, persons in nursing homes, unemployed or impoverished persons, patients in emergency situations, ethnic minority groups, homeless persons, nomads, refugees, minors, and those incapable of giving consent ¹

Term/Phrase	Definition
Well-being (of the trial subjects)	The physical and mental integrity of the subjects participating in a clinical trial. ¹

Acknowledgements/Sources:

This glossary was produced with input from Jack Nunn, Janelle Morrissey, and the sources below:

1. <http://www.ich.org/products/guidelines/efficacy/efficacy-single/article/good-clinical-practice.html>
2. <https://www.trog.com.au/Glossary>
3. McMillian Cancer UK Original resources
4. <https://www.moga.org.au/patients-carers/clinical-trials>
5. Janelle Bowden, Research4Me

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