21 CFR 50 Protection of Human Subjects: Food and Drug Administration (FDA) Regulations concerning all clinical investigations regulated by the FDA.

21 CFR 56 Institutional Review Boards: Food and Drug Administration (FDA) Regulations concerning the composition, operation and responsibility of an Institutional Review Board (IRB) that reviews clinical investigations regulated by the FDA.

45 CFR 46 Protection of Human Subjects: Department of Health and Human Services (DHHS) regulations for the protection of human participants of research supported or otherwise subject to regulation by any Federal Department or Agency which takes appropriate administrative action to make the policy applicable for such research.

A:

AAHRPP: Association for the Accreditation of Human Research Protection Programs, Inc.

ADVERSE EVENT: An undesirable and unintended, although not necessarily unexpected, result of therapy or other intervention (e.g., headache following spinal tap or intestinal bleeding associated with aspirin therapy)

Category A Event: Event or problem occurring to a subject enrolled at a UTCOM/EMC site or a site in which a UTCOM/EMC investigator is involved in the conduct of the research or is responsible for the reporting of adverse events and/or unanticipated problems involving risks to subjects to a regulatory agency

Category B Event: Event occurring to a subject no enrolled at a UTCOM/EMC site or a site in which a UTCOM/EMC investigator is not involved in the conduct of the research and the investigator is not responsible for the reporting of unanticipated problems or serious adverse events to a regulatory agency

AMENDMENT: Any change to a study protocol other than typographical errors. Amendments must be reviewed by an Institutional Review Board (IRB) before the modification is implemented.
ANONYMOUS: Lacking identification; identifiers or other information that could identify the individual are removed.

ASSENT: Agreement by an individual not competent to give legally valid informed consent (e.g., a child or cognitively impaired person) to participate in research. An assent is typically paired with a permission from a parent or guardian, and together they comprise the informed consent to participate.

ASSURANCE OF COMPLIANCE: A formal written, binding commitment submitted to a federal agency where an institution promises to comply with applicable regulations governing research with human subjects and stipulates the procedures to be used to achieve compliance.

AUTHORIZED INSTITUTIONAL OFFICIAL: An officer of an institution with the authority to speak for and legally commit the institution to adherence to the requirements of the federal regulations regarding the involvement of human subjects in biomedical and behavioral research. At the University of Tennessee Health Sciences Center (including the University of Tennessee College of Medicine at Chattanooga), the Authorized Institutional Official is the Vice-Chancellor for Research.

AWARDEE: The recipient of Federal funding (also called “grantee”).

B:

BELMONT REPORT: 1979 document that sets forth the tenants of the ethical treatment of research participants: autonomy (respect for persons), beneficence, and justice.

BENEFICENCE: An ethical principle discussed in the Belmont Report that entails an obligation to protect persons from harm. The principle of beneficence can be expressed in two general rules (1) do no harm; and (2) protect from harm by maximizing possible benefits and minimizing possible risks of harm.

BENEFIT: A valued or desired outcome; an advantage. The UT COM IRB application requests information about the benefits to the research participants.

BREACH OF PROTOCOL: A form of adverse event includes, but is not limited to, breakdowns in approved procedures of the study, such as the consent process, violations of data confidentiality, or complaints by participants.

C:

CERTIFICATES OF CONFIDENTIALITY: Certificates of Confidentiality are issued by the National Institutes of Health (NIH) to protect identifiable research information from forced disclosure. They allow the investigator and others who have access to research records to refuse to disclose identifying information on research participants in any civil, criminal, administrative, legislative, or other proceeding, whether at the federal, state, or local level. Information regarding certificates is available at http://grants1.nih.gov/grants/policy/coc/.
CHILD: A person who has not attained the legal age for consent to treatment of procedures involved in research, as determined under the applicable law of the jurisdiction in which the research will be conducted [45 CFR 46.401(a)]. In Tennessee, individuals younger than 18 years of age are considered children for most health care situations, and informed consent for research then consists of the child’s assent and the parent’s permission).

CODE OF FEDERAL REGULATIONS (45 CFR 46): Department of Health and Human Services (DHHS) regulations for the protection of all human participants of research supported or otherwise subject to regulation by any Federal Department or Agency which takes appropriate administrative action to make the policy applicable for such research.

COGNITIVELY IMPAIRED: Having either a psychiatric disorder (e.g., psychosis, neurosis, personality or behavior disorders, or dementia) or a developmental disorder (e.g., mental retardation) that affects cognitive or emotional functions to the extent that capacity for judgment and reasoning is significantly diminished. Others, including persons under the influence of or dependent upon drugs or alcohol, those suffering from degenerative diseases affecting the brain, terminally ill patients, and persons with severe disabling physical handicaps, may also be compromised in their ability to make decisions in their best interests.

COLLABORATOR: Investigators participating on a research protocol.

COMMON RULE: Subpart A of the Federal Regulations for protecting human research participants (45 CFR 46), to which 17 U.S. Departments/Agencies subscribe. The Department/Agencies are:

- Dept. of Agriculture
- Dept. of Energy
- National Aeronautics and Space Administration
- Dept. of Commerce
- Consumer Product Safety Commission
- Agency for International Development
- Dept. of Housing and Urban Development
- Dept. of Justice
- Dept. of Defense
- Dept. of Veterans Affairs
- Environmental Protection Agency
- National Science Foundation
- Dept. of Transportation
- Central Intelligence Agency (by executive order)
- Dept. of Health and Human Services
- Social Security Administration (by statute)

COMPETENCE: Technically, a legal term, used to denote capacity to act on one’s own behalf; the ability to understand information presented, to appreciate the consequences of acting (or not acting) on that information, and to make a choice).

CONFIDENTIALITY: Pertains to the treatment of information that an individual has disclosed in a relationship of trust with the expectation that it will not be divulged to
others without permission in ways that are inconsistent with the understanding of original disclosure.

**CONFLICT OF INTEREST:** A situation that may occur when an investigator’s personal goal or role obligation conflicts with an obligation to uphold another party’s interest, thereby compromising objectivity and impartiality.

**CONTRACT:** One of several mechanisms whereby the University of Tennessee funds research; used when work is performed for the Government or private sponsor.

**CONTROL (SUBJECTS) or CONTROLS:** Subject(s) used for comparison who are not given a treatment under study or who do not have a given condition, background, or risk factor that is the object of study. Control conditions may be concurrent (occurring more or less simultaneously with the condition under study) or historical (preceding the condition under study). When the present condition of subjects is compared with their own condition on a prior regiment or treatment, the study is considered historically controlled.

**COOPERATIVE AGREEMENT:** One of several mechanisms whereby collaborative research is funded. In this type of agreement, the investigators negotiate project tasks and timelines.

**COOPERATIVE RESEARCH:** Those projects that involve more than one institution.

**D:**

**DATA AND SAFETY MONITORING BOARD (DSMB):** A committee of scientists, physicians, statisticians, and others that collects and analyzes data during the course of a clinical trial to monitor for adverse effects and other trends (such as an indication that one treatment is significantly better than another, particularly when one arm of the trial involves a placebo control) that would warrant modification or termination of the trial, or notification of the subjects about new information that might affect their willingness to continue in the trial.

**DECLARATION OF HELSINKI:** A code of ethics for clinical research approved by the World Medical Association in 1964 and widely adopted by medical associations in various countries. It was revised in 1975 and 1989.

**DEPARTMENT OF HEALTH AND HUMAN SERVICES (DHHS, HHS):** The United States government's principal agency for protecting the health of all Americans and providing essential human services. DHHS is the largest grant-making agency in the federal government. DHHS agencies include:

- National Institutes of Health (NIH)
- Food and Drug Administration (FDA)
- Centers for Disease Control and Prevention (CDC)
- Indian Health Service
- Health Resources and Services Administration
- Substance Abuse and Mental Health Services Administration
- Agency for Healthcare Research and Quality
- Centers for Medicare and Medicaid Services
EMANCIPATED MINOR: A legal status conferred upon persons who have not yet attained the age of legal competency as defined by state law (for such purposes as consenting to medical care), but who are entitled to treatment as if they had by virtue of assuming adult responsibilities such as being self-supporting and not living at home, marriage, or procreation.

ENGAGED IN RESEARCH: An institution becomes engaged in human subjects research when its employees or agents (1) intervene or interact with living individuals for research purposes; or (2) obtain individually identifiable private information for research purposes. An institution is automatically considered to be engaged in human subjects research whenever it receives a direct DHHS award to support such research. In such cases, the awardee institution bears ultimate responsibility for protecting human subjects under the award.

EQUITABLE: Fair or just, used in the context of selection of subjects to indicate that the benefits and burdens of research are fairly distributed.

EXPEDITED REVIEW: Review of proposed research by the IRB chair or a designated voting member or group of voting members rather than by the entire IRB. Federal rules permit expedited review for certain kinds of research involving no more than minimal risk and for minor changes in approved research.

EXEMPTION/EXEMPT RESEARCH: Term used in the Federal Regulations to describe six categories of research which do not require full Institutional Review Board (IRB) review. Only the IRB may determine which activities qualify for an exempt review. Investigators do not have the authority to make an independent determination that research involving human subjects is exempt.

FEDERALWIDE ASSURANCE (FWA): The Federal Policy (Common Rule) for the protection of human subjects at Section 103(a) requires that each institution "engaged" in Federally-supported human subject research file an "Assurance" of protection for human subjects. In December 2000, the Office of Human Research Protections (OHRP) developed an Institutional Review Board (IRB) Registration and a new Federalwide Assurance (FWA) intended to: 1) create a new registry of IRBs, and 2) streamline the assurance process to significantly reduce the administrative burden on individual institutions, other federal departments and agencies, and OHRP. The University of Tennessee College of Medicine at Chattanooga and Erlanger IRB has a Federalwide Assurance with OHRP.

FOOD AND DRUG ADMINISTRATION (FDA): Agency of the Department of Health and Human Services. The FDA has its own set of Federal Regulations for protecting human research participants.
**FULL BOARD REVIEW:** Review of proposed research at a convened meeting of the Institutional Review Board at which a majority of the membership are present, including at least one member whose primary concerns are in nonscientific areas. For the research to be approved, it must receive the approval of a majority of those members present at the meeting.

**G:**

**GENERALIZABLE KNOWLEDGE:** Information gained from research that can be applied outside of the group involved in the research.

**GUARDIAN:** An individual who is authorized under applicable State or local law who has the legal, effective right to make decisions on behalf of a child.

**H:**

**HARM:** Injury, damage, or hurt to a participant in a research study.

**HIPAA:** Health Insurance Portability and Accountability Act. Insurance and privacy rules which became effective 4/14/03 and apply to health plans and human subjects research records.

**HUMAN SUBJECT/HUMAN PARTICIPANT:** A living person about whom an investigator conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information (e.g., medical records, employment records, or school records).

**I:**

**INCAPACITY:** Refers to a person’s mental status and means inability to understand information presented, to appreciate the consequences of acting (or not acting) on that information, and to make a choice. Often used as a synonym for incompetence.

**INCOMPETENCE:** A legal term meaning inability to manage one’s own affairs, and often used as a synonym for incapacity.

**INFORMED CONSENT:** A person’s voluntary agreement, based upon adequate knowledge and understanding of relevant information, to participate in research or to undergo a diagnostic, therapeutic, or preventive procedure. In giving informed consent, subjects may not waive or appear to waive any of their legal rights, or release or appear to release the investigator, the sponsor, the institution or agents thereof from liability for negligence.

**INJURY:** Harm; for human subjects research purposes, a physical harm to a participant in a research study.

**INSTITUTIONAL REVIEW BOARD (IRB):** The formally appointed review committee at an institution established to protect the welfare of human subjects recruited to participate in biomedical or behavioral research.
INTERACTION: Communication or interpersonal contact between investigator and subject.

INTERVENTION: Both physical procedures by which data are gathered (e.g., venipuncture) and manipulations of the subject or the subject’s environment that are performed for research purposes.

INVESTIGATIONAL DEVICE: Any instrument, apparatus, or other similar or related article, including component, part, or accessory, which is: (1) recognized in the official National Formulary, or the US Pharmacopeia, or any supplement to them; (2) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in humans or other animals; or (3) intended to affect the structure or any function of the human body or in animals; and does not achieve any of its principal intended purposes through chemical action within or on the human body or in animals and is not dependent upon being metabolized for the achievement of its principal intended purposes. In vitro diagnostic products are considered medical devices if they aid in the diagnosis of disease or medical/physiological conditions (e.g., pregnancy) by using human or animal components to cause chemical reactions, fermentation, and the like.

INVESTIGATIONAL DEVICE EXEMPTION (IDE): An investigational device exemption allows the investigational device to be used in a clinical study in order to collect safety and effectiveness data required to support a Premarket Approval (PMA) application or a Premarket Notification [510(k)] submission to FDA. Clinical studies are most often conducted to support a PMA.

INVESTIGATIONAL NEW DRUG (IND): A drug or biological product that is not approved by the FDA.

INVESTIGATIONAL NEW DRUG EXEMPTION: An exemption that allows one to use a drug or biologic before Food and Drug Administration (FDA) licensure. Diagnostic products intended for use in controlling other regulated products (such as those used to screen the blood supply for transfusion transmitted diseases) are regulated as biological products.

INVESTIGATOR: A researcher conducting a project. Investigators can be principal investigators or co-investigators.

IRB: Institutional Review Board

IRB APPROVAL: The determination of the Institutional Review Board (IRB) that the research has been reviewed and may be conducted within the constraints set forth by the IRB and by other institutional, State, and Federal requirements.

J:

JCAHO: Joint Commission of the Accreditation of Healthcare Organizations

JUSTICE: An ethical principle discussed in the Belmont Report requiring fairness in distribution of burdens and benefits; often expressed in terms of treating persons of similar circumstances or characteristics similarly.
**K:**

**L:**

**LEGALLY AUTHORIZED REPRESENTATIVE:** A person authorized either by statute or by court appointment to make decisions on behalf of another person. In human subjects research, an individual or judicial or other body authorized under applicable law to consent on behalf of a prospective subject to the subject’s participation in the procedure(s) involved in the research.

**LINK/LINKAGE:** A code or other encryption that allows information obtained about an individual to be recorded in such a manner as to allow human subjects to be identified, either directly or indirectly.

**LOCAL IRB:** Institutional review board (IRB) responsible for oversight of the research in the geographic proximity of where the research is to be conducted.

**M:**

**MATURE MINOR:** Someone who has not reached adulthood (as defined by state law) but who may be treated as an adult for certain purposes (e.g., consenting to medical care). Note that a mature minor is not necessarily an emancipated minor.

**MINIMAL RISK:** (1) The *probability* and *magnitude* of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examination or tests. (2) *Probability* and *magnitude* of physical or psychological harm that is normally encountered in the daily lives, or in the routine medical, dental, or psychological examination of healthy persons. For prisoners, the probability and magnitude of physical or psychological harm that is normally encountered in the daily lives, or in the routine medical, dental, or psychological examination of healthy persons.

*Note:* The definition of minimal risk for research involving prisoners differs somewhat from that given for non-institutionalized adults.

**N:**

**NCI:** National Cancer Institute

**NCQA:** National Committee for Quality Assurance

**NEONATE:** A newborn.

**NIH:** National Institutes of Health

**NONAFFILIATED MEMBER:** A federally mandated member of an Institutional Review Board who has no ties to the parent institution, its staff, or faculty. This individual is usually from the local community (e.g., minister, business person, attorney, teacher, homemaker).
**NONSCIENTIST:** An individual who does not hold a terminal degree in a scientific discipline and does not practice science.

**NUREMBERG CODE:** A code of research ethics developed during the trials of Nazi war criminals following World War II and widely adopted as a standard during the 1950s and 1960s for protecting human subjects.

**O:**

**OFFICE OF HUMAN RESEARCH PROTECTION (OHRP):** Department of Health and Human Services office responsible for implementation of the DHHS Regulations for the Protection of Human Subjects (45 CFR 46) and the provision of guidance on ethical issues in biomedical or behavioral research. (Formerly known as the Office for Protection from Research risks (OPRR)).

**OFFICE OF RESEARCH INTEGRITY (ORI):** Department of Health and Human Services office which monitors institutional investigations of research misconduct and facilitates the responsible conduct of research through educational, preventive, and regulatory activities.

**P:**

**PARTICIPANTS:** For human subjects purposes, the individuals with whom investigators conduct research.

**PEER REVIEW:** An activity in which scientists submit their work to recognized experts in the field for fair and objective review; intended to screen unsound work and improve communication. Also called expert review and referee review.

**PERMISSION:** The agreement of parent(s) or guardian to the participation of their child or ward in research.

**PERSONAL IDENTIFIERS:** Information obtained and recorded in such a manner that human subjects can be recognized, directly or through links to the subjects. Examples include names, social security numbers, codes.

**PRINCIPAL INVESTIGATOR (PI):** The scientist or scholar with primary responsibility for the design and conduct of a research project.

**PRISONER:** An individual involuntarily confined in a penal institution, including persons: (1) sentenced under a criminal or civil statute; (2) detained pending arraignment, trial, or sentencing; and (3) detained in other facilities (e.g., for drug detoxification or treatment of alcoholism) under statutes or commitment procedures providing such alternatives to criminal prosecution or incarceration in a penal institution. Note that this includes adjudicated youth.

**PRIVATE/PRIVACY:** Control over the extent, timing, and circumstances of sharing oneself (physically, behaviorally, or intellectually) with others.
**PROBABILITY:** For human subjects purposes, used to describe the likelihood or risk (harm) to occur to a participant in a research study; must be balanced with the magnitude of the risk.

**PROTOCOL:** The formal design or plan of an experiment or research activity; specifically, the plan submitted to an IRB for review and to an agency for research support. The protocol includes a description of the research design or methodology to be employed, the eligibility requirements for prospective subjects and controls, the treatment regimen(s), and the proposed methods of analysis that will be performed on the collected data.

**PROSPECTIVE STUDIES:** Studies designed to observe outcomes or events that occur subsequent to the identification of the group of subjects to be studies. Prospective studies need not involve manipulation or intervention but may be purely observational or involve only the collection of data.

**Q:**

**QUALITY ASSURANCE:** Management tool involving procedures/methods for determining how well a program is running.

**QUORUM:** In order for an Institutional Review Board to vote on a protocol, 50% + 1 of the members must be in attendance. One of the attendees must be a nonscientist.

**R:**

**REMUNERATION:** Payment for participation in research. Remuneration should be appropriate for the amount of effort involved, and not excessive and thereby coercive. Remunerations are not considered a benefit.

**RESEARCH:** A systematic investigation (i.e., the gathering and analysis of information) designed to develop or contribute to generalizable knowledge.

**RESPECT FOR PERSONS:** An ethical principle discussed in the Belmont Report requiring that individual autonomy be respected and that persons with diminished autonomy be protected.

**RETROSPECTIVE STUDIES:** Research conducted by reviewing records from the past (e.g., birth and death certificates, medical records, school records, or employment records) or by obtaining information about past events elicited through interviews or surveys. Case control studies are an example of this type of research.

**RISK:** Exposure to injury, loss, or harm; in evaluation risks and benefits, the Institutional Review Board should consider only those risks and benefits that may result from the research (as distinguished from risks and benefits of therapies subjects would receive even if not participating in the research). Both the probability and magnitude of possible harm may vary from minimal to significant. Federal regulations define only “minimal risk.”
S:

SITE VISIT: A visit by agency officials, representatives, or consultants to the location of a research activity to access the adequacy of IRB protection of human subjects or the capability of personnel to conduct the research.

SUBPART A OF 45 CFR 46: The “core” of the Federal Regulations for the protection of research participants; includes requirements for Assurances of Compliance, IRB composition, informed consent, etc.

SUBPARTS B-D OF 45 CFR 46: Federal Regulations where added protections can be found for selected vulnerable populations
   Subpart B: Pregnant women, human fetuses and neonates
   Subpart C: Prisoners
   Subpart D: Children

SURVEILLANCE: Ongoing, systematic collection, analysis, and interpretation of outcome-specific data, closely integrated with the timely dissemination of these data to those responsible for preventing and controlling disease or injury.

SURVEY: Studies designed to obtain information from a large number of respondents through written questionnaires, telephone interviews, door-to-door canvassing, or similar procedures.

SUSPENSION: Interruption of research; Institutional Review Boards have authority to interrupt research when it is found that a previously approved research protocol is not being conducted in accordance with the IRB’s requirements or that the protocol has been associated with unexpected serious harm to participants.

SYSTEMATIC INVESTIGATION: Organized plan or protocol of an investigation.

TERMINATE/TERMINATION: Acknowledgment by the Institutional Review Board that a research study has been completed; also an IRB may stop a study. See suspension.

U:

UNANTICIPATED PROBLEM: Unanticipated problems include, but are not limited to, breakdowns in the consent process, violations of confidentiality of the data, and complaints by research participants.

UNFORESEEABLE: Unanticipated harm to human research participants.

V:

VOLUNTARY: Free of coercion, duress, or undue inducement or influence. Used in the research context to refer to a subject’s decision to participate (or to continue to participate) in a research activity.

VULNERABLE POPULATION: Groups of persons who may lack the capacity to freely decide whether to participate in research due to any number of circumstances such as age, health status, etc. 45 CFR 46 identifies prisoners; children; pregnant women and
human fetuses and neonates as vulnerable populations; however, mentally handicapped, educationally and economically deprived individuals are also vulnerable populations.

**W:**

**WAIVE/WAIVER:** Forgo the requirement of a particular rule, regulation or condition in a protocol and/or consent document.

**X:**

**Y:**

**Z:**