GLOSSARY OF TERMS FOR FDA'S RARE DISEASE DAY 2022

TERM	DEFINITION
Adverse Event	Adverse event is any unfavorable experience associated with the use of a medicine in a patient. Adverse events can range from mild to severe. Serious adverse events are those that can cause disability, are life-threatening, result in hospitalization or death, or are birth defects.
Biological Product	Biological products include a wide range of products such as vaccines, blood and blood components, allergenics, cells, gene therapy, tissues, and recombinant therapeutic proteins. Biologics are isolated from a variety of natural sources — human, animal, or microorganism — and may be produced by biotechnology methods and other cutting-edge technologies. Gene-based and cellular biologics, for example, are at the forefront of biomedical research and may be used to treat a variety of medical conditions with unmet needs.
BLA	Biologic License Application – a submission to FDA to commercialize a biological product. It contains specific information on the manufacturing processes, chemistry, pharmacology, clinical pharmacology and the medical effects of the product.
CBER	**Center for Biologics Evaluation and Research** - advances the public health by ensuring that biological products are safe and effective and available to those who need them. See (1) in FDA Organizational Chart below.
CDER	**Center for Drug Evaluation and Research** - performs an essential public health task by ensuring that safe and effective drugs are available to improve the health of people in the US. CDER regulates over-the-counter and prescription drugs, including biological therapeutics and generic drugs. See (2) in FDA Organizational Chart below.
CDRH	**Center for Devices and Radiological Health** - has responsibility for protecting and promoting the public health through the approval of safe and effective medical devices. See (3) in FDA Organizational Chart below.

Clinical Benefit	A therapeutic intervention may be said to confer clinical benefit if it prolongs life, improves function, and/or improves the way a patient feels.
Clinical Trial **Clinical Investigation** **Clinical Study**	An investigation or research that involves one or more human subjects, undertaken to assess the safety or effectiveness of a drug, biologic, or medical device.
COA	Clinical outcome assessment - assessment of a clinical outcome can be made through report by a clinician, a patient, a non-clinician observer or through a performance-based assessment. There are four types of COAs: (1) patient-reported outcome (PRO) (2) clinician-reported outcome (ClinRO) measures (3) observer-reported outcome (ObsRO), and (4) performance outcome (PerfO).
Compliance **(in relation to clinical trials)**	Adherence to all the trial-related requirements, good clinical practice (GCP) requirements, and applicable federal and local laws and policies.
Confidentiality **(**regarding study participants)	The practice of maintaining as private all information related to clinical trial participants, including their personal identity and all personal medical information. Results from the study will usually be presented in terms of trends or overall findings and will not mention any specific participants.
Control group	The group of participants that receives standard treatment or a placebo. The control group may also be made up of healthy volunteers. Researchers compare results from the control group with results from the experimental group to understand treatment effect of an investigational product.
Digital Health	Health technologies including categories such as mobile health (mHealth), health information technology (IT), wearable devices, telehealth and telemedicine, and personalized medicine. Examples include mobile medical apps and software that support clinical decisions to artificial intelligence and machine learning.
Endpoint	Principal indicator(s) used for assessing the primary question (i.e., hypothesis) of a clinical trial. A variable that pertains to the efficacy or safety evaluations of a trial.

Equipoise	The ability of a study to ensure balance, in that it is based on an ethical principle that there is not a better treatment available.
HDE	Humanitarian Device Exemption - a marketing application for an HUD (see below) – the legal criterion for approval is reasonable assurance of safety and probable benefit
HUD	Humanitarian Use Device - a medical device intended to benefit patients in the treatment or diagnosis of a disease or condition that affects or is manifested in not more than 8,000 individuals in the US per year
IDE	Investigational Device Exemption - A request from a clinical study sponsor to obtain authorization from FDA to administer an investigation device to humans.
Inclusion/Exclusion Criteria	The medical or other guidelines that determines whether a person may or may not be allowed to enter a clinical trial. These criteria are based on such factors as age, gender, the type and stage of a disease, previous treatment history, and other medical conditions. The criteria are used to identify appropriate participants for the trial. Also known as Eligibility or Enrollment Criteria.
Informed Consent Form	A process used by researchers to communicate to potential and enrolled participants the risks and potential benefits of participating in a clinical study. When a participant provides informed consent, it means that he or she has learned the key benefits and risks about a research study and agrees to take part in it.
In vitro	In glass, as in a test tube. An in vitro test is one that is done in glass or plastic vessels in the laboratory. In vitro is the opposite of in vivo.
In vivo	In the living organism. For example, an experiment that is done in vivo is done in the body of a living organism. In vivo is the opposite of in vitro.
IND	Investigational New Drug: A request from a sponsor to obtain authorization from the FDA to administer an investigational drug or biological product to humans.
Investigator	Investigator is an individual who actually conducts a clinical investigation (i.e., under whose immediate direction the drug is administered or dispensed to a subject). In the event an investigation

	is conducted by a team of individuals, the investigator is the responsible leader of the team. "Subinvestigator" includes any other individual member of that team.
IRB	Institutional Review Board - Any board, committee, or other group formally designated by an institution to review, to approve the initiation of, and to conduct periodic review of, biomedical research involving human subjects. The primary purpose of such review is to assure the protection of the rights and welfare of the human subjects. Also known as Ethics Committee (EC).
Medical Device	An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including any component part, or accessory, which is – (1) recognized in the official National Formulary, or the United States 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 man or other animals, or (3) intended to affect the structure or any function of the body of man or other animals, and which does not achieve its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of its primary intended purposes.
Natural History Study	A study in which the investigator collects information about the natural history of a disease in the absence of an intervention, from the disease's onset until either its resolution or the individual's death.
NCTR	**National Center for Toxicological Research** – the only FDA Center located outside the Washington D.C. metropolitan area (located in in Jefferson, Arkansas) - provides interdisciplinary toxicology research solutions and consultations that support and anticipate future FDA needs to guard and improve personal and public health. See (6) in FDA Organizational Chart below.

NDA	New Drug Application – submission through which sponsors formally propose that the FDA approve a new pharmaceutical for sale and marketing in the US. The goals of the NDA are to provide enough information to permit an FDA review team to reach the following key decisions: (1) Whether the drug is safe and effective in its proposed use(s), and whether the benefits of the drug outweigh the risks. (2) Whether the drug's proposed labeling (package insert) is appropriate, and what it should contain. (3) Whether the methods used in manufacturing the drug and the controls used to maintain the drug's quality are adequate to preserve the drug's identity, strength, quality, and purity.
OCE	**Oncology Center of Excellence** - helps expedite development of medical products for oncologic and hematologic malignancies (cancers) and supports an integrated approach to their clinical evaluation. See (4) in FDA Organizational Chart below.
"Off Label Use"	When an FDA-approved medical product is used for a use that has not been approved by FDA. Also called unapproved use of an approved product.
Orphan Drug/Product	Products developed diagnosis, prevention, mitigation, treatment or cure of rare diseases.
Outcome	Events or experiences measured in the context of a study because they may be influenced by the research intervention or exposure.
Patient Engagement	Involves meaningful involvement of patients throughout the product development process from the initial design to the implementation of the trial and the dissemination of the study results. The goal is to improve clinical trials by making them more patient-centric and relevant to patient values.
Patient registry	A type of observational study that collects information about patients' medical conditions and/or treatments to better understand how a condition or treatment affects patients in the real world.
PFDD	Patient-focused drug development - systematic approach to help ensure that patients' experiences, perspectives, needs, and priorities are captured and meaningfully incorporated into the development and

	evaluation of medical products throughout the medical product life cycle.
PRO	Patient-Reported Outcome - An outcome based on a report that comes directly from the patient about the status of a patient's health condition without amendment or interpretation of the patient's response by a clinician or anyone else. Symptoms or other unobservable concepts known only to the patient are measured by PRO measures. PROs can also assess the patient perspective on functioning or activities that may also be observable by others. See also COA definition above.
Placebo	An inactive substance or treatment that looks the same as, and is given in the same way as, an active drug or intervention/treatment being studied.
Protocol	The written description of a clinical study. It includes the study's objectives, design, and methods.
Randomized Controlled Trial (RCT)	A study in which the act of assigning or ordering subjects to treatments and placebo is determined by machine and not determined by the investigators. The purpose of the randomized controlled trial is to: (1) to guard against any use of judgment or systematic arrangements leading to one treatment getting preferential assignment, i.e., to avoid bias; (2) to provide a basis for the standard methods of statistical analysis such as significance tests.
Real-World Data (RWD)	Data relating to patient health status and/or the delivery of health care routinely collected from a variety of sources.
Real-World Evidence (RWE)	The clinical evidence regarding the usage and potential benefits or risks of a medical product derived from analysis of real-world data.
Repurposing	Identification of potential novel uses or indications of existing marketed or unmarketed drugs.
Review	The basis of FDA's decision to approve an application. It is a comprehensive analysis of clinical trial data and other information prepared by FDA drug application reviewers. A review is divided into sections on medical analysis, chemistry, clinical pharmacology, biopharmaceutics, pharmacology, statistics, and microbiology.

Sponsor	A person who takes responsibility for and initiates a clinical investigation. The sponsor may be an individual or pharmaceutical company, governmental agency, academic institution, private organization, or other organization. The sponsor does not actually conduct the investigation unless the sponsor is a sponsor-investigator.
Study Design	The investigative methods and strategies used in the clinical study.
Subject/Participant	An individual who participates in a clinical trial either as a recipient of the investigational product(s) or as a control. A subject may be a healthy volunteer or a patient.
Underserved Population	Populations whose voices and needs may be overlooked. This population includes the economically disadvantaged, racial and ethnic minorities, the uninsured, rural residents, children and the elderly.

Glossary Sources:
ClinicalTrials.gov Glossary of Common Site Terms
FDA Glossary of Clinical Trial Terms
Code of Federal Regulations (CFR) §312.3

FDA Organizational Chart