# GLOSSARY OF TECHNICAL TERMS

*This glossary contains definitions of certain terms used in this Document in connection with our Company and our business.*

*These terms and their definitions may not correspond to any industry standard definitions, and may not be directly comparable to similarly titled terms adopted by other companies operating in the same industries as our Company.*

| | |
|---|---|
| "AAALAC" | means The Association for Assessment and Accreditation of Laboratory Animal Care International, a private, nonprofit organization that promotes the humane treatment of animals in science through voluntary accreditation and assessment programs |
| "absorption" | means within the context of drug metabolism, the process by which drug compounds and other molecules move across cells and tissues such as the gastrointestinal tract into the circulatory system |
| "ADME" | means Absorption, Distribution, Metabolism and Excretion, the analysis of the body's processes of altering, utilizing and eliminating ingested and administered drugs and xenobiotics |
| "Adverse event" | means serious adverse event, any adverse drug event (experience) occurring at any dose that in the opinion of either the investigator or sponsor results in death, is life-threatening, requires inpatient hospitalization or causes prolongation of existing hospitalization, results in persistent or significant disability/incapacity or substantial disruption of the ability to conduct normal life functions, may have caused a congenital anomaly/birth defect, or requires intervention to prevent the foregoing outcomes, according to the regulations of FDA |
| "agrochemicals" | means chemicals developed for use in agriculture, including pesticides and fertilizers |
| "assay" | means an investigative analytical process in medicine, pharmacology or biology that aims to identify either the qualitative or quantitative presence or function of the analytical target, which can be a drug or biochemical substance or a cell in an organism or organic sample |

# GLOSSARY OF TECHNICAL TERMS

| | |
|---|---|
| "antibody" | means a large, Y-shaped protein produced mainly by plasma cells that is used by the immune system to identify and neutralize pathogens such as bacteria and viruses |
| "bioanalytical" | means of or relating to the analytical chemistry covering the quantitative measurement of xenobiotics, which are drugs and their metabolites, and biological molecules in unnatural locations or concentrations, and biotics, which are macromolecules, proteins, DNA, large molecule drugs, metabolites, in biological systems |
| "bioanalysis" | means the analytical and quantitative chemistry of certain compounds in biological systems; covering biotics (macromolecules, proteins, DNA, large molecule drugs and metabolites) and xenobiotics |
| "bioavailability study" | means a studies to determine the proportion of a drug that enters circulation when introduced into the body and is therefore able to elicit an active effect |
| "bioequivalence" | means the absence of a significant difference in the rate and extent to which the active ingredient or active moiety in pharmaceutical equivalents or pharmaceutical alternatives becomes available at the site of drug action when administered at the same molar dose under similar conditions in an appropriately designed study |
| "bioequivalence studies" | means studies to assess the expected in vivo equivalence of two preparations of a drug. If two products are said to be bioequivalent, it means that there is an absence of a significant difference in the rate and extent to which the active ingredient or active moiety in products becomes available at the site of drug action when administered at the same molar dose under similar conditions in an appropriately designed study |
| "biologics" | means a drug that is composed of any virus, therapeutic serum, toxin, antitoxin, vaccine, blood, blood component or derivative, allergenic product, protein or analogous product or arsphenamine or k derivative of arsphenamine (or any other trivalent organic arsenic compound) applicable to the prevention, treatment or cure of diseases or conditions of human beings |

| | |
|---|---|
| "biomarker" | means a biological characteristic that may correlate with health, disease or drug treatment |
| "BSL" | means a set of bio-containment precautions required to isolate dangerous biological agents in an enclosed laboratory facility |
| "CAGR" | means compound annual growth rate |
| "candidate selection" | means a stage in early drug discovery where a compound that indicates highest potential for desirable effects is selected for further intensive study and analysis |
| "carcinogenicity" | means the ability or tendency of a chemical to induce tumours or increase the incidents of tumours or their malignancy, or shorten the time of tumour recurrence when it is inhaled, ingested, dermally applied, or injected |
| "cardiovascular" | means relating to the heart and blood vessels |
| "CAR-T cell" | means chimeric antigen receptor T cells, T cells that have been genetically engineered to produce an artificial T-cell receptor for use in immunotherapy |
| "CDE" | means the center of drug evaluation of China |
| "CDMO" | means Contract Development Manufacturing Organization, a company that mainly provides CMC and manufacturing services in the pharmaceutical industry |
| "central laboratory" | means a laboratory facility used for testing samples from studies conducted at multiple sites |
| "clinical trial" | means an experiment done in clinical research |
| "CNS" | means central nervous system |

| | |
|---|---|
| "contracted future revenue" | represents, at a particular point in time, future revenue from services not yet completed or performed under all signed contracts in effect at that time. Once work begins on a project, revenue is recognized over the duration of the project. Contracted future revenue is assessed by reference to signed contracts (where a customer has agreed to pay for certain services at a certain price) and by reference to the percentage of work completed in relation to such contract |
| "COVID-19" | means coronavirus disease 2019, a disease caused by a novel virus designated as severe acute respiratory syndrome coronavirus 2 |
| "CRA" | means Clinical Research Associate, a professional responsible for activities related to medical research, particularly clinical trials |
| "CRO" | means Contract Research Organization, a company focused on providing R&D services to companies in the pharmaceutical and agrochemical markets |
| "CRU(s)" | means co-managed clinical research units |
| "customer retention rate" | for a given period is calculated as the number of customers in the prior period that remain as our customers in the current period, divided by the number of all customers in such prior period |
| "CVMD" | means cardiovascular and metabolic diseases |
| "DART" | means developmental and reproductive toxicology, the study of fertility, development toxicity and pre/postnatal development and other specialized functional evaluations in connection with the toxicology evaluation for pharmaceuticals |
| "distribution" | means in the context of DMPK, the process by which molecules are transported throughout the body |

| | |
|---|---|
| "DMPK" | means Drug Metabolism and Pharmacokinetics, studies designed to determine the absorption and distribution of an administered drug, the rate at which a drug takes effect, the duration a drug maintains its effects and what happens to the drug after being metabolized by the body |
| "drug discovery" | means the process through which potential new medicines are identified and may involve a wide range of scientific disciplines, including biology, chemistry and pharmacology |
| "drug-drug interaction" | means the cumulative changes in a drug's effect on the body when the drug is taken together with another drug. Drug-drug interaction can delay, decrease, or enhance absorption of either drug |
| "DSA" | means drug safety assessment |
| "FDA" | means the Food and Drugs Administration of the United States |
| "FFS" | means fee-for-service, a payment model whereby services are unbundled and paid for separately |
| "FIH" | means first-in-human |
| "genotoxicity" | means the phenomena of destructive effects on a cell's genetic material (DNA, RNA) affecting its integrity. This can occur through the presence of chemicals, radiation, viruses, etc. that cause mutations |
| "GLP" | means Good Laboratory Practice, a quality system of management controls for research laboratories and organizations to try to ensure the uniformity, consistency, reliability, reproducibility, quality and integrity of chemical and pharmaceuticals non-clinical safety tests |
| "GMP" | means Good Manufacturing Practice, a quality system enforced by relevant regulatory authorities, such as the FDA, to ensure that the products produced meet specific requirements for identity, strength, quality and purity |

| | |
|---|---|
| "Herceptin" | means the brand name of a medicine called trastuzumab, used to treat some types of breast cancer, oesophageal cancer and stomach cancer |
| "Humira" | means a prescription medicine used alone, with methotrexate, or with certain other medicines to reduce the signs and symptoms of moderate to severe rheumatoid arthritis in adults |
| "ICH" | means International Conference on Harmonization |
| "immunogenicity" | means the ability of a particular substance to provoke an immune response in the body of an animal |
| "immunotoxicology" | means a study of the toxicity of foreign substances called xenobiotics and their effects on the immune system |
| "in vitro" | means "in glass" in Latin, studies in vitro are conducted outside of a living organism in a laboratory environment using test tubes, petri dishes, etc. using components of an organism that have been isolated from their usual biological surroundings, such as microorganisms, cells or biological molecules |
| "in vivo" | means "within the living" in Latin, studies in vivo are those in which the effects of various biological entities are tested on whole, living organisms as opposed to a partial or dead organism, or those done in vitro |
| "IND" | means Investigational New Drug, an application submitted to the US FDA or NMPA to seek permission or no objection to ship unapproved, experimental drug or biologic agents across jurisdictions (usually to clinical investigators) for use in clinical studies before a marketing application for the drug has been approved |
| "LC-MS" | means liquid chromatography-mass spectrometry, an analytical chemistry technique that combines the physical separation capabilities of liquid chromatography with the mass analysis capabilities of mass spectrometry |
| "lead optimization" | means the stage of early drug discovery where promising lead compounds are further optimized in preparation for toxicity assessment prior to human clinical trials |

| | |
|---|---|
| "metabolism" | means the chemical processes that occur within a living organism in order to maintain life, comprising catabolism (breakdown of large molecules into components) and anabolism (the synthesis of smaller molecules into larger ones with specific structures, characteristics and purposes) |
| "metabolite" | means a substance formed in or necessary for metabolism. A "metabolite" of a drug is a compound formed from the drug's original components through metabolism |
| "molecule" | means an electrically neutral group of two or more atoms held together by chemical bonds |
| "MRCT" | means multi-regional international clinical trial |
| "NDA" | means New Drug Application, the formal application to the FDA or NMPA proposing approval of a new pharmaceutical product for sale and marketing |
| "NHP(s)" | means non-human privates |
| "non-clinical studies" | means *in vivo* or *in vitro* experiments in which test articles in relation to a drug or medical device candidate are studied prospectively in test systems under laboratory conditions to determine their safety and efficacy. The term does not include studies utilizing human subjects or clinical studies or field trials in animals |
| "OECD" | means Organization for Economic Cooperation and Development |
| "oncology" | means the study and treatment of tumors |
| "ophthalmology" | means the branch of medicine concerned with the function and health of the eyes |
| "pathogenic process" | means a process where bacterium, virus, or other microorganism cause diseases |

| | |
|---|---|
| "patient recruitment" | means the enrollment of healthy participants and patients in clinical trials |
| "PD1" | means programmed cell death protein 1, also known as CD279, a protein on the surface of cells that has a role in regulating the immune system's response to the cells of the human body by down-regulating the immune system and promoting self-tolerance by suppressing T cell inflammatory activity |
| "PDL1" | means a protein that helps keep immune cells from attacking normal cells in the body |
| "pharmacodynamics" or "PD" | means the branch of pharmacology concerned with the effect of a means drug on the body |
| "pharmacokinetics" or "PK" | means the branch of pharmacology concerned with the movement of drugs within the body |
| "pharmacology" | means the branch of medicine concerned with the uses, effects, and modes of action of drugs |
| "pharmacovigilance" | means the practice of monitoring the effects of medical drugs after they have been licensed for use, especially in order to identify and evaluate previously unreported adverse reactions |
| "phototoxicity" | means photoirritation, a chemically induced skin irritation, requiring light, that does not involve the immune system |
| "pre-clinical" | means a stage preceding the clinical trial stage |
| "protein binding" | means the situation in which medications attach to proteins within the blood. Often an integral measurement in the understanding of the efficacy of a drug, as the less protein bound a drug is, the more efficiently it can interact with the drug target and effect its action |
| "QAU" | means quality assurance unit, an independent unit that takes quality assurance measures |
| "R&D" | means research and development |

| | |
|---|---|
| "research model" | means purpose-bred animals of various species intended for medical and biological research |
| "SOP" | means standard operational practice, a procedure specific to companies' operation which is necessary to complete tasks in accordance with industry regulations, provincial laws or internal standards |
| "SPF" | means specific-pathogen free, a term used for research models that are guaranteed free of particular pathogens |
| "sponsor" | means a biopharmaceutical company or research institute that funds, organizes and undertakes an R&D project for a drug or medical device product |
| "Test article" | means a substance or mixture to be assessed the drug safety by being administered or added to a test system in the non-clinical studies |
| "TCM(s)" | means traditional Chinese medicine(s) |
| "Truvada" | means a once-daily prescription medicine for adults and adolescents at risk of HIV who weigh at least 77 pounds |
| "validation" | means a process that involves performing laboratory tests to verify that a particular instrument program, or measurement technique is working properly and is capable of being relied upon |