
GLOSSARY OF TECHNICAL TERMS

This glossary contains definitions of certain terms used in this prospectus in connection with us and our business. Some of these may not correspond to standard industry definitions.

“active pharmaceutical ingredient”	the substance in a pharmaceutical drug that is biologically active
“ADCC”	antibody-dependent cellular cytotoxicity
“AE”	adverse event, any untoward medical occurrence in a patient or clinical investigation subject administered a drug or other pharmaceutical product during clinical trials and which does not necessarily have a causal relationship with the treatment
“ALK”	anaplastic lymphoma kinase
“AMD”	age-related macular degeneration
“angiogenesis”	the growth of blood vessels
“ankylosing spondylitis”	a form of arthritis that primarily affects the spine, although other joints can become involved. It causes inflammation of the spinal joints (vertebrae) that can lead to severe, chronic pain and discomfort. In more advanced cases this inflammation can lead to ankylosis-new bone formation in the spine-causing sections of the spine to fuse in a fixed, immobile position
“apoptosis”	programmed cell death
“assay”	an analysis done to determine (1) the presence of a substance and the amount of that substance and (2) the biological or pharmacological potency of a drug
“AUC”	the area under the curve, a measure of how much of a drug is in a patient’s system over a given time period. In order to calculate the AUC, both the AUC_{0-t} and the AUC_{0-inf} must be calculated
“ AUC_{0-inf} ”	area under the concentration-time curve from the first time point measured (0) extrapolated to infinity (inf)

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“AUC _{0-t} ”	area under the concentration-time curve from the first time point measured (0) to the last time point measured (t)
“auto-immunology”	the branch of immunology that studies the misdirected immune response that occurs when the immune system goes awry and attacks the body itself. Autoimmunity is present to some extent in everyone and is usually harmless. However, autoimmunity can cause a broad range of human illnesses, known collectively as autoimmune diseases
“B cell”	a type of white blood cell that differs from other types of lymphocytes by expressing B cell receptors on its surface, and responsible for producing antibodies
“bioequivalence”	the absence of a significant difference in the rate and extent to which the active ingredient or active molecular portion in pharmaceutical equivalents or pharmaceutical alternatives becomes available at the site of drug action when administered
“bioequivalents”	drugs having the equivalent bioavailability, i.e. the equivalent rates and extents of absorption of parent drugs or active metabolites from a dosage form into the systemic circulation.
“binding kinetics”	the time in which a drug and its target associate and dissociate
“biosimilars”	biological drugs which are designed to have the same amino acid sequence and the equivalent (but not identical or clinical better) active properties as compared to, and which are not necessarily clinically interchangeable with, reference originator drugs that have already received marketing approvals, not to be confused with such other terms as “biobetters” (which are clinically better than reference originator drugs), “biogenerics” (which are clinically interchangeable with reference originator drugs) or “follow-on biologics” (which may or may not include biosimilars) even though these terms are used interchangeably under certain regulatory regimes and in certain contexts

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“bi-specific”	antibody that combines two antigen-recognizing elements into a single construct, able to bind to two different antigens at the same time
“BLA”	biologic license application
“C3a”	a part of the complement protein known as complement component 3
“carcinoma”	a cancer that begins in the lining layer (epithelial cells) of organs
“CD8”	a transmembrane glycoprotein that serves as a co-receptor for the T-cell receptor
“CD8/T _{reg} ”	a proximate measure of blockade of PD-1 action in tumors, which is the ratio of cytotoxic T lymphocytes (CD8) to T _{reg} lymphocytes. An increase in the CD8/T _{reg} ratio is a beneficial change in the immune status within the tumors
“CD20”	a cell surface protein widely expressed on immune system B cells
“CD47”	cluster of differentiation 47, also known as integrin associated protein (IAP), a membrane protein which provides a “do not eat me” signal to macrophages
“CD155”	a transmembrane glycoprotein in the immunoglobulin superfamily
“CDC”	complement-dependent cytotoxicity
“cell line”	a population of cells which descend from a single cell and contain the same genetic makeup, thereby producing the same proteins. The productivity of a cell line determines the cost of manufacturing and the quality of a cell line is directly related to the quality of the relevant biologics
“cellular lysis”	technique used in laboratories to break open cells and purify or further study their contents. Lysis refers to the breaking down of the membrane of a cell, often by viral, enzymic, or osmotic mechanisms that compromise its integrity

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“cGMP”	current good manufacturing practice
“chemotherapy”	a category of cancer treatment that uses one or more anti-cancer chemotherapeutic agents as part of its standardized regimen
“chronic lymphocytic leukemia”	a type of cancer of the blood and bone marrow – the spongy tissue inside bones where blood cells are made. The term “chronic” in chronic lymphocytic leukemia comes from the fact that it typically progresses more slowly than other types of leukemia
“CID”	complement inhibitor domain
“cisplatin”	a class of chemotherapy medication used to treat a number of cancers
“C _{max} ”	maximum measured serum concentration
“CMC”	chemistry, manufacturing, and controls processes in the development, licensure, manufacturing, and ongoing marketing of pharmaceutical products
“CNV”	Choroidal neovascularization, a non-specific response to specific damage of Bruch’s membrane (the middle layer of the retina) and is the pathobiology behind wet and dry AMD
“cohort”	a group of patients as part of a clinical study who share a common characteristic or experience within a defined period and who are monitored over time
“colorectal cancer,” “colon cancer” or “CRC”	a cancer of the colon or rectum, located at the digestive tract’s lower end
“combination therapy”	treatment in which a patient is given two or more drugs (or other therapeutic agents) for a single disease
“complement proteins”	part of the innate immune system that can be recruited and brought into action by antibodies generated by the adaptive immune system.
“CR”	complete response or complete response rate

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“CR1”	complement receptor 1
“CT”	computerized tomography
“CTLA-4”	a cytotoxic T-lymphocyte-associated protein 4, which down-regulates T-cell immune response to cancer cells
“cytokine”	a broad and loose category of small proteins that are important in cell signalling. Their release has an effect on the behaviour of cells around them
“cytotoxic”	toxic to living cells
“DCR”	disease control rate
“DLBCL”	diffuse large B cell lymphoma
“DNA”	Deoxyribonucleic acid
“docetaxel”	a chemotherapy medication used to treat a number of types of cancer, including breast cancer, head and neck cancer, stomach cancer, prostate cancer and NSCLC
“electrochemiluminescence”	electrogenerated chemiluminescence, a process whereby a kind of luminescence is produced during electrochemical reactions in solutions
“endometrial carcinoma”	uterine cancer, which is a type of cancer that begins in the lining of the womb (uterus)
“endoproteinase Lys-C”	a protease that cleaves proteins on the C-terminal side of lysine residues. This enzyme is naturally found in the bacterium <i>Lysobacter enzymogenes</i> and is commonly used in protein sequencing
“endothelial cells”	a thin layer of simple, or single-layered, squamous cells that line the interior surface of blood vessels and lymphatic vessels, forming an interface between circulating blood or lymph in the lumen and the rest of the vessel wall
“ENKTL”	extranodal NK/T-cell lymphoma

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“erythrocytes”	red blood cells that (in humans) are typically biconcave discs without nuclei. Erythrocytes contain the pigment hemoglobin, which imparts the red color to blood, and transport oxygen and carbon dioxide to and from the tissues
“ESCC”	esophageal squamous cell carcinoma
“Fc region”	fragment crystallisable region, which is the tail region of an antibody that interacts with cell surface receptors called Fc receptors and some proteins of the complement system
“first-line”	with respect to any disease, the first line therapy, which is the treatment regimen or regimens that are generally accepted by the medical establishment for initial treatment of a given type and stage of cancer. It is also called primary treatment or therapy
“flow cytometry”	a laser- or impedance-based, biophysical technology employed in cell counting, cell sorting, biomarker detection and protein engineering, by suspending cells in a stream of fluid and passing them through an electronic detection apparatus
“GCP”	good clinical practice
“gemcitabine”	chemotherapy medication used to treat a number of types of cancer
“glioblastoma”	tumors that arise from astrocytes – the star-shaped cells that make up the “glue-like,” or supportive tissue of the brain
“GMP”	good manufacturing practice
“Grade”	term used to refer to the severity of adverse events, using Grade 1, Grade 2, Grade 3, etc.
“granulomatosis with polyangiitis”	also called Wegener’s granulomatosis, a condition that causes inflammation of the blood vessels and can affect the ears, nose, throat, lungs, and kidneys

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“Hatch-Waxman Act”	the Drug Price Competition and Patent Term Restoration Act, informally known as the Hatch-Waxman Act, which is a 1984 U.S. federal law
“HER2”	human epidermal growth factor receptor 2
“Hodgkin’s lymphoma”	a type of lymphoma
“hybridoma technology”	a method for producing large numbers of monoclonal antibodies. The myeloma cell line that is used in this process is selected for its ability to grow in tissue culture and for an absence of antibody synthesis
“human xenografts”	models, derived from human tumor cell lines, used for pre-clinical assessment of anti-cancer drug development by evaluating and comparing the therapeutic efficacy and toxicity of an antibody versus a competitor in changing the types of tumor infiltrating T lymphocytes
“hypercholesterolemia”	an excess of cholesterol in the bloodstream
“hyperlipidemia”	an abnormally high concentration of fats or lipids, including cholesterol and triglycerides, circulating in the blood
“ICH”	The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use
“idiopathic thrombocytopenic purpura”	low levels of the blood cells that prevent bleeding (platelets), which may occur when the immune system mistakenly attacks platelets
“IFN- γ ”	type II interferon, which is a cytokine that is critical for innate and adaptive immunity against viral, some bacterial infections and protozoal infections (infections caused by parasites)
“IL-2”	Interleukin-2 (IL-2), which is an interleukin, a type of cytokine signalling molecule in the immune system. It is a protein that regulates the activities of white blood cells that are responsible for immunity

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“immunogenicity”	the ability of a particular substance, such as an antigen or epitope, to provoke an immune response in the body of a human and other animal (i.e., the ability to induce humoral and/or cell-mediated immune responses)
“immunoglobulin”	A protein that is made by B cells and plasma cells (types of white blood cells). Some immunoglobulins may be found in higher than normal amounts in patients with certain conditions or certain types of cancer, including multiple myeloma and Waldenstrom macroglobulinemia. Measuring the amount of specific immunoglobulins in the blood and urine may help diagnose cancer or find out how well treatment is working or if cancer has come back. Some immunoglobulins may be used as tumor markers. Also called Ig.
“immuno-oncology”	a type of immunotherapy that is specifically targeted to fight cancer
“immunotherapy”	use of the immune system to treat disease
“IND”	investigational new drug or investigational new drug application, also known as clinical trial application in China
“LAG-3”	lymphocyte-activation gene 3, which is an immune checkpoint receptor protein found on the cell surface of effector T cells, NK cells, B cells and plasmacytoid dendritic cells
“LC-MS/MS”	liquid chromatography-mass spectroscopy/mass spectroscopy
“LDL”	Low-density lipoprotein, one of the five major groups of lipoprotein which transport all fat molecules around the body in the extracellular water
“LDL-C”	low-density lipoprotein cholesterol
“LDL-R”	low-density lipoprotein receptor
“lymphocytes”	a sub-type of white blood cells, such as T cells, B cells and NK cells

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“Lys-C peptide mapping”	an analytical method used within the biopharmaceutical industry, by using endoproteinase Lys-C, to aid in the identity confirmation of a protein therapeutic and to monitor degradative events, such as oxidation or deamidation
“lytic bone lesions”	destruction of an area of bone due to a disease process, such as cancer
“MabThera”	tradename for rituximab
“MAC”	membrane attack complex
“‘march-in’ right”	the right of the U.S. federal government to grant to entities other than the holder of a patent licenses or to take a license for itself if the U.S. federal government funded the development of such patent
“MHC”	major histocompatibility complex
“MHC class II”	with respect to an antigen, the major histocompatibility complex class II
“melanoma”	a form of skin cancer that arises when pigment-producing cells – known as melanocytes – mutate and become cancerous
“Merkel cell carcinoma”	a rare type of skin cancer that usually appears as a flesh-colored or bluish-red nodule, often on a person’s face, head or neck. It is also called neuroendocrine carcinoma of the skin
“metastatic”	in reference to any disease, including cancer, disease-producing organisms or of malignant or cancerous cells transferred to other parts of the body by way of the blood or lymphatic vessels or membranous surfaces
“monoclonal antibodies” or “mAbs”	antibodies generated by identical immune cells that are all clones of the same parent cell
“mono-specific”	in reference to antibodies, are those whose specificity to antigens is singular in any of several ways: antibodies that all have affinity for the same antigen; antibodies that are specific to one antigen or one epitope; or antibodies specific to one type of cell or tissue.

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“monotherapy”	therapy that uses a single drug to treat a disease or condition.
“Mouse CNV model”	Mouse Choroidal Neovascularization model, used in studies of wet AMD
“myasthenia gravis”	a weakness and rapid fatigue of muscles under voluntary control
“NCCR”	National Central Cancer Registry of China
“NDA”	new drug application
“NK cells”	natural killer cells, a type of cytotoxic lymphocyte
“NK/T cell lymphoma”	a type of lymphoma that occurs commonly in the nasal and upper aerodigestive region
“non-Hodgkin’s lymphoma”	a type of lymphoma
“non-squamous NSCLC”	non-squamous non-small cell lung cancer
“NSCLC”	non-small cell lung cancer
“off-rate”	the rate at which the antibody releases an antigen
“on-rate”	the rate at which the antibody binds to an antigen
“ORR”	objective response rate
“OX40”	surface receptor expressed on T cells following stimulation by foreign antigens and provides a survival signal to antigen specific T cells
“PBMCs”	peripheral blood mononuclear cells
“PBS”	phosphate buffered saline
“PCSK9”	proprotein convertase substilisin/kexin type 9 enzyme

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“PD-1”	programmed cell death protein 1, an immune checkpoint receptor expressed on T cells, B cells and macrophages. The normal function of PD-1 is to turn off the T cell mediated immune response as part of the process that stops a healthy immune system from attacking other pathogenic cells in the body. When PD-1 on the surface of a T cell attaches to certain proteins on the surface of a normal cell or a cancer cell, the T cell turns off its ability to kill the cell
“PD-L1”	PD-1 ligand 1, which is a protein on the surface of a normal cell or a cancer cell that attaches to certain proteins on the surface of the T cell that causes the T cell to turn off its ability to kill the cancer cell
“PD-L2”	PD-1 ligand 2, which is a protein on the surface of a normal cell or a cancer cell that attaches to certain proteins on the surface of the T cell that causes the T cell to turn off its ability to kill the cancer cell
“pemphigus vulgaris”	a rare autoimmune disease that causes painful blistering on the skin and mucous membranes
“PET”	positron emission tomography, a nuclear medicine functional imaging technique
“phagocytosing”/“phagocytosis”	the process by which a cell – often a phagocyte or a protist – engulfs a solid particle to form an internal compartment known as a phagosome. Phagocytes are particle eating cells and protists are microscopic organisms that have cells with nuclei and are not animal, plant or fungi
“pharmacodynamics” or “PD”	the study of how a drug affects an organism, which, together with pharmacokinetics, influences dosing, benefit, and adverse effects of the drug
“pharmacokinetics” or “PK”	the study of the bodily absorption, distribution, metabolism, and excretion of drugs, which, together with pharmacodynamics, influences dosing, benefit, and adverse effects of the drug

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“plasmacytoid dendritic cells”	a rare type of immune cell that are known to secrete large quantities of type 1 interferon (IFNs) in response to a viral infection. They circulate in the blood and are found in peripheral lymphoid organs
“PR”	partial response or partial response rate
“pre-clinical study(ies)”	pre-clinical studies testing a drug on non-human subjects, to gather efficacy, toxicity, pharmacokinetic and safety information and to decide whether the drug is ready for clinical trials
“progression free survival” or “PFS”	the length of time during and after the treatment of a disease, such as cancer, that a patient lives with the disease but it does not get worse. In a clinical trial, measuring the progression-free survival is one way to see how well a new treatment works
“psoriasis”	a condition in which skin cells build up and form scales and itchy, dry patches
“psoriatic arthritis”	a form of arthritis that affects some people who have the skin condition psoriasis. Symptoms include joint pain, stiffness, and swelling, which may flare and subside. Many people with the condition are affected by morning stiffness. Even mild skin psoriasis can have a significant degree of arthritis
“Q2W”	every two weeks
“Q3W”	every three weeks
“RA”	rheumatoid arthritis
“RANKL”	Receptor activator of nuclear factor kappa-B ligand
“receptor occupancy” or “RO”	the binding of PD-1 antibodies to PD-1, which is a measure of the fraction of PD-1 that is blocked on the surface of T lymphocytes. By repeatedly measuring the receptor occupancy over time, the duration of receptor blockade can be directly observed. A higher fraction of occupied receptor for a longer period of time could result in better clinical efficacy

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“reference drugs” or “reference products”	a standardized substance or approved drug which is used as a measurement base for biosimilar drug candidates
“refractory”	when used in reference to any type of cancer, cancer that does not respond to treatment. The cancer may be resistant at the beginning of treatment or it may become resistant during treatment
“relapsed”	when used in reference to any disease, including cancer, the return of a disease or the signs and symptoms of a disease after a period of improvement. With respect to cancer, the likely relapse occurs because a few of the original cancer cells survived the initial treatment. Sometimes, this is because cancer cells spread to other parts of the body and were too small to be detected during the follow-up immediately after treatment
“renal cell cancer” or “renal cell carcinoma”	kidney cancer, the symptoms for which may include blood in the urine (hematuria), low back pain on one side (not caused by injury), a mass (lump) on the side or lower back, fatigue (tiredness), loss of appetite, weight loss not caused by dieting, and/or a fever that is not caused by an infection and that doesn’t go away
“r/r”	relapsed/refractory
“SC”	Subcutaneous
“sCR1”	soluble complement receptor type 1
“SD”	stable disease. In oncology, it refers to cancer that is neither decreasing nor increasing in extent or severity

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“second-line”	with respect to any disease, such as “second-line squamous NSCLC,” “second-line NSCLC” and “second-line melanoma,” the therapy or therapies that are tried when the first-line treatments do not work adequately. The management of a cancer case requires regular evaluation of treatment and adjustment as needed. A break with the primary treatment and an adoption of a new regimen signals “second-line treatment.” The first-line therapy may not have worked, may have had some limited efficacy, or may have produced unacceptable side effects, damaged organs in the body, or jeopardized the patient’s life. Sometimes first-line therapies show progress for a period of time followed by a stalling or continued growth of the cancer. Often the FDA, the NMPA or other drug regulatory authority will specifically approve a new drug for second-line therapy. This labeling is common for new drugs that treat cancers which already have accepted treatments.
“serious adverse events” or “SAEs”	any untoward medical occurrence in a patient during clinical trials that results in death, is life-threatening, requires inpatient hospitalisation or prolongation of existing hospitalisation, results in persistent or significant disability/incapacity, or is a congenital anomaly/birth defect
“SIRP α ”	signal regulatory protein α , a regulatory membrane glycoprotein from SIRP family expressed mainly by myeloid cells and also by stem cells or neurons.
“solid tumor”	an abnormal mass of tissue that usually does not contain cysts or liquid areas. Solid tumors may be benign (not cancer), or malignant (cancer). Different types of solid tumors are named for the type of cells that form them. Examples of solid tumors are sarcomas, carcinomas, and lymphomas
“spongioblastoma”	a fast-growing malignant brain tumor composed of spongioblasts, embryonic epithelial cells that develop around the neural tube and transform into cells of the supporting connective tissue of nerve cells or cells of lining membranes of the ventricles and the spinal cord canal. It is nearly always fatal

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“squamous NSCLC”	a type of non-small cell lung cancer, which begins in squamous cells
“standard-of-care”	treatment that is accepted by medical experts as a proper treatment for a certain type of disease and that is widely used by healthcare professionals. Also called best practice, standard medical care, and standard therapy
“superiority trial”	a clinical trial designed to prove that the response to the investigational product is superior to a comparable active agent or placebo control
“ $t_{1/2}$ ”	the time required for the concentration to fall to 50% of its peak value
“target occupancy”	based on in vivo pharmacodynamics comparison data, the ability of an antibody to occupy more of the available binding sites at a given drug concentration
“T cell” or “T lymphocyte”	a lymphocyte of a type produced or processed by the thymus gland and actively participating in the immune response, which plays a central role in cell-mediated immunity. T cells can be distinguished from other lymphocytes, such as B cells and NK cells, by the presence of a T cell receptor on the cell surface
“TEAE” or “treatment emergent adverse events”	adverse events not present prior to medical treatment, or an already present event that worsens either in intensity or frequency following the treatment
“TIGIT”	a receptor expressed on the surface of T cells and NK cells that can drive inhibition of immune function after binding to CD155 expressed on cancer cells or dendritic cells. TIGIT is a checkpoint inhibitor protein expressed on tumor antigen specific T cells and is associated with turning off anti-tumor T cells
“TNF- α ”	a protein called tumor necrosis factor- α that stimulates the inflammatory response in the body

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“toxicity”	the degree to which a substance or a mixture of substances can harm humans or animals. Acute toxicity involves harmful effects in an organism through a single or short-term exposure. It is expressed generally as a dose response
“TRAE”	treatment related adverse events, which are adverse events present after medical treatment
“T _{reg} lymphocytes” or “Tregs”	regulatory T cells, which are a subpopulation of T cells that modulate the immune system, maintain tolerance to self-antigens, and prevent autoimmune disease
“TSH”	thyrotropin, which is a hormone secreted by the pituitary gland that regulates the production of thyroid hormones
“ulcerative colitis”	A chronic, inflammatory bowel disease that causes inflammation in the digestive tract
“urothelial cancer” or “urothelial carcinoma”	a type of cancer that typically occurs in the urinary system. It is the most common type of bladder cancer and cancer of the ureter, urethra, and urachus
“VEGF”	vascular endothelial growth factor, a gene critical for the growth and development of cancer cells. There are three main subtypes of VEGF receptors, including VEGFR-1 and VEGFR-2
“VEGF-A”	vascular endothelial growth factor A is a protein that stimulates the growth of blood vessels (this growth is referred to as angiogenesis) which in turn promotes the growth of certain solid tissues, including solid tumors
“VID”	VEGF Inhibit Domain
“wet AMD”	wet age-related macular degeneration, a form of AMD which is a leading cause of blindness in the elderly