

GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains explanations of certain technical terms used in this document in connection with our Company and our business. Such terminology and meanings may not correspond to standard industry meanings or usages of those terms.

“ACTB”	β-Actin
“AFP testing”	alpha-fetoprotein testing, the use of alpha-fetoprotein as a serum biomarker for the detection and monitoring of liver cancer, especially HCC
“AFT”	aflatoxin
“AS-Cap Technology”	amplification selective capture, refers to a proprietary target capture technology that uses specific probes to capture target methylated fragments and enrich them to improve detection performance
“CE-IVD Mark”	a certification mark that indicates conformity with In Vitro Diagnostic Regulation (IVDR 2017/746) in the European Union, which outlines specific requirements for the safety and performance of IVD medical devices
“cfDNA”	cell-free DNA
“CpG site”	a “CG” dinucleotide sequence in genomic DNA, where a cytosine (C) is followed by a guanine (G) and the two nucleotides are connected by a phosphodiester bond
“CRC”	colorectal cancer
“CRO”	contract research organization, an entity that provides support to the pharmaceutical, biotechnology, and medical device industries in the form of research services outsourced on a contract basis
“Ct”	cycle threshold
“ctDNA”	circulating tumor DNA, tumor-derived fragmented DNA in the bloodstream that is not associated with cells
“DNA”	deoxyribonucleic acid, a self-replicating material which is present in nearly all living organisms as the main constituent of chromosomes. It is the carrier of genetic information
“EAC”	esophageal adenocarcinoma

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“EMC test”	Electromagnetic compatibility (EMC) test can verify whether a product’s stability, safety, and capacitance parameters in an electromagnetic environment comply with industry standards, ensuring product quality, reducing the risk of electromagnetic interference, and guaranteeing reliable operation in complex electromagnetic environments
“ESCC”	esophageal squamous-cell carcinoma
“FAM channel”	the detection of the fluorescent dye FAM, which emits green light at approximately 520 nm, and in qPCR it is used to monitor the amplification of a specific target gene such as TFPI2
“HBV”	Hepatitis B Virus, it causes chronic liver inflammation, long-term infection may lead to liver fibrosis and liver cirrhosis, and eventually progress to hepatocellular carcinoma (HCC)
“HCC”	Hepatocellular carcinoma
“HCV”	Hepatitis C Virus
“Hp”	Helicobacter pylori
“HPV”	human papillomavirus
“IVD”	in vitro diagnostics products
“iTB Finder Database”	Intelligent Tumor Biomarker Finder, can integrate multi-dimensional data and algorithms for tumor biomarker detection, validation and prioritization
“KOLs”	Key Opinion Leaders, refers to renowned physicians that influence their peers’ medical practice
“MCED”	multi-cancer early detection
“MHRA”	the Medicines and Healthcare Products regulatory agency of the United Kingdom
“MLP”	multilayer perceptron
“MRD”	minimal residual disease, the name given to small numbers of cancer cells that remain in the person during treatment or after treatment
“MRI”	magnetic resonance imaging, refers to a high-precision imaging technique that uses magnetic fields and radio waves to generate detailed 3D images of the liver

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“NAFLD”	Non-Alcoholic Fatty Liver Disease, refers to the accumulation of fat in the liver caused by non-alcoholic factors such as obesity.
“NGS”	next-generation sequencing
“NMIBC”	Non-Muscle-Invasive Bladder Cancer
“NSCLC”	non-small cell lung cancer
“PCR”	polymerase chain reaction, a method widely used to rapidly make millions to billions of copies of a specific DNA sample
“PLC”	Primary Liver Cancer
“Primary liver cancer”	a type of cancer that begins in the cells of the liver, rather than spreading (metastasizing) to the liver from another organ. The most common form is HCC
“qPCR”	real-time quantitative polymerase chain reaction, a method for measuring the total amount of product after each polymerase chain reaction cycle with fluorochemicals in a DNA amplification reaction
“ROX channel”	the detection of the fluorescent dye ROX, which emits orange-red light at approximately 610 nm, and in qPCR it can be used either as a target reporter for genes such as SDC2 or as a passive reference dye for normalization
“Random Forest”	a machine learning algorithm that builds and combines many decision trees to make predictions. Each tree is trained on a random subset of the data and a random subset of features, and the final output is based on the majority vote (for classification) or the average prediction (for regression) from all the trees
“Sanger sequencing”	a method of DNA sequencing based on the selective incorporation of chain-terminating dideoxynucleotides by DNA polymerase during in vitro DNA replication
“SCLC”	small cell lung cancer
“SMO”	site management organization, an organization that provides clinical trial related services to medical device companies having adequate infrastructure and staff to meet the requirements of the clinical trial protocol
“SEM-PCR”	sensitivity enhanced methylation PCR, refers to a high-sensitivity detection technology for low-abundance methylated DNA which optimizes PCR reaction and amplifies signals to detect trace targets

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“Tumor Recurrence”	refers to the situation where a tumor, after undergoing systemic or radical treatment, reappears in the original organ or tissue of the primary lesion or in distant sites after a certain period of time.
“UC”	urothelial carcinoma, the most common form of bladder cancer, originates in the urothelial cells that line not only the bladder but also the urethra, ureters, and renal pelvis. These cells are specialized to expand and contract in response to urine storage and release
“US”	ultrasound, refers to a non-invasive medical imaging technique that uses high-frequency sound waves to create real-time images of internal body structures
“VIC channel”	the detection of the fluorescent dye VIC, which emits yellow-green light at approximately 555 nm, and in qPCR it is commonly used to measure internal control genes such as ACTB
“XGBoost”	Extreme Gradient Boosting, an open-source software library providing regularizing gradient boosting framework to implement machine learning algorithms