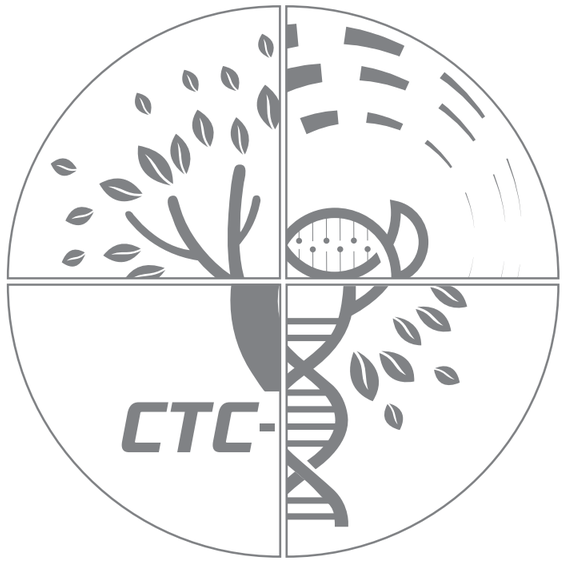
In-Vitro Diagnostic Solutions



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WUHAN YZY MEDICAL SCIENCE AND TECHNOLOGY CO.,LTD.

CONTENTS

Pharmacogenetics Testing

Individualization of drug therapy, described as tailoring drug selection and drug dosing to a given patient, has been an objective of physicians and other health-care providers for centuries. An understanding of the pathogenesis of the disease, the mechanism of action of the drug, and exposure-response relation-ships provides the framework for individualization.The goal of individualization is to optimize the efficacy of a drug, minimize its toxicity, or both.YZY MED takes “The right drug for the right patient” as continuous mission to help clinicians choose the most effective treatment for diseases.

SLCO1B1/APOE Gene Polymorphism Detection Kit

■ Corresponding drug: Statins

■ Drug Background

Statins are currently the most effective drugs to reduce the risk of cardiovascular disease by lowering LDL-C.However, different individuals respond differently to different statins; The key factor contributing to the differences is the different genetic properties of statin metabolism and transport in the liver. In particular, the key transport proteins involved in the liver metabolism of statins, such as anion transport polypeptide (OATP1B1) (encoded by SLCO1B1 gene) and apolipoprotein E (ApoE) gene polymorphisms, can affect the plasma and liver concentrations of statins, thus affecting the efficacy and safety of statins. Guiding patients according to the test results has important clinical significance in selecting drugs.

■ Testing Genes

Gene	Clinical Medication Guidance
SLCO1B1	To access the risk of myopathy and reduce the side effects of statins
APOE	To evaluate the effectiveness of statins, predict the risk of dementia and cardiovas-cular and cerebrovascular diseases

■ Application

- Statin users , hyperlipidemia
- People with family history of cardiovascular disease, diabetes or Alzheimer's disease
- Health management of healthy people
- Application departments: Cardiology, neurology, cardiac surgery, physical examination, geriatrics, Endocri-nology, etc

CYP2C19 Gene Polymorphism Detection Kit

Corresponding drugs: Clopidogrel, omeprazole, diazepam, phenytoin sodium, etc

Drug Background

CYP2C19 is one of the most important drug metabolism enzymes in CYP450 family. Studies have found that CYP2C19 can affect the metabolism of many important clinical drugs such as clopidogrel, omeprazole, diazepam, phenytoin sodium, and its gene polymorphism is one of the important reasons for the different metabolic ability of the same drug between individuals and races. The detection of CYP2C19 genotype can determine the type of metabolic rate of patients and adjust the dosage reasonably, which is an effective way to improve the cure rate of related diseases and reduce toxic side effects.

Testing Gene

Gene	Clinical Medication Guidance
CYP2C19	To assist doctors to control the dose of clopidogrel and avoid the risk of thrombosis or bleeding.

Application

- Patients requiring clopidogrel during PCI procedures
- Patients requiring long-term clopidogrel
- Cardiovascular risk group
- Medications related to CYP2C19 metabolism, like PPIS, antiepileptic drugs, and antidepressants
- Application departments: Cardiology, neurology, psychiatry, Gastroenterology, etc

MTHFR Gene Polymorphism Detection Kit

Corresponding drug: Folic acid

Drug Background

Folic acid, also known as folic acid, is one of the B vitamins. It is used for folate deficiency caused by various reasons and megaloblastic anemia caused by folate deficiency. Prophylatic administration for pregnant and lactating women; Folate deficiency due to chronic hemolytic anemia. MTHFR gene mutations can lead to a decrease in MTHFR enzyme activity, leading to folate metabolism disorders. In early pregnancy, it may interfere with the closure of the neural tube, resulting in lip and palate cleft, neural tube malformation and other birth defects. At the same time, studies have shown that hyperhomocysteemia caused by MTHFR gene polymorphism at 677 site can induce endothelial cells to activate procoagulable factors, leading to thrombosis, thereby increasing the risk of cardiovascular disease.

Testing Gene

Gene	Clinical Medication Guidance
MTHFR	To assess the metabolic ability of folic acid and guide the rational supplement. To prevent H-type hypertension and reduce the risk of stroke.

Application

- Fertility risk screening and folic acid supplementation for pre-pregnancy couples
- Pregnant women who need individualized advice on folic acid risks during pregnancy and folic acid supplementation
- The cause of abortion should be investigated for women who have had an abortion or have a history of habitual abortion
- Physical examination of healthy people
- People with a family history of hypertension or stroke
- People with hypertension and elevated homocysteine
- People with elevated plasma Hcy
- Applied departments: Gynecology, obstetrics, pediatrics, cardiology, physical examination

CYP2C9/VKORC1 Gene Polymorphism Detection Kit

■ Corresponding drugs：Warfarin, ibuprofen

■ Drug Background

Warfarin is a widely used oral anticoagulant in clinical practice. However, warfarin dosing is difficult to master. Bleeding side effects occur in 15.2% of patients taking warfarin each year. CYP2C9 and VKORC1 gene polymorphisms are closely related to anticoagulant efficacy, and patients with different genotypes require different doses of warfarin

Ibuprofen is a non-steroidal anti-inflammatory drug. CYP2C9*3 mutation can reduce the metabolic activity of ibuprofen, enhance the efficacy of ibuprofen, and cause potential adverse drug effects such as gastrointestinal bleeding in individuals carrying this mutant allele.

■ Testing Genes

Gene	Clinical Medication Guidance
CYP2C9	To predict the tolerated dose of warfarin in patients, reduce the risk of bleeding and thrombosis, and shorten the medication time. To guide the dosage of non-steroidal anti-inflammatory drugs.
VKORC1	

■ Application

- Patients taking warfarin
- Patients taking ibuprofen
- Application departments: Cardiology, Endocrinology

ALDH2 Gene Polymorphism Detection Kit

■ Corresponding drug: Nitroglycerin

■ Drug Background

Nitroglycerin is used for the treatment and prevention of angina pectoris in coronary heart disease, reducing blood pressure or treat congestive heart failure.
ALDH is a quadruplex protease that catalyzes the oxidation of acetaldehyde and other aliphatic aldehydes. Among them, ALDH2 is highly expressed in liver and stomach and is one of the key enzymes in the human ethanol metabolism pathway. The dose and frequency of nitroglycerin in patients with mutant ALDH2*2 should be increased accordingly, and the drug cycle should be extended.

■ Testing Gene

Gene	Clinical Medication Guidance
ALDH2	To evaluate the ability of alcohol metabolism and guide the clinical use of nitroglycerin.

■ Application

- Long-term alcohol users and patients who need to take nitroglycerin tablets
- Can be used for public health examination
- Application Department: Physical examination department, geriatrics department, cardiology department and other departments prescribing nitroglycerin tablets

AGTR1/ACE/ADRB1/CYP2D6/CYP2C9 Gene Polymorphism Detection Kit

Corresponding drugs: Angiotensin II receptor blockers, beta-adrenergic receptor blockers, angiotensin converting enzyme inhibitors,etc.

Drug Background

The prevalence of hypertension is obviously increasing in recent years. For the treatment of hypertension, a variety of antihypertensive drugs are usually taken at the same time in clinical practice now, aims to achieve better efficacy. Clinical practice has found that for the same antihypertensive drug, there are individual differences in the response of different patients to the drug, and gene polymorphism is an important factor affecting the individual difference of drug response.

Testing Gene

Gene	Clinical Medication Guidance
ACE	ACE is the target of ACEI and affects the efficacy of drugs. There are three genotypes: I/I, I/D and D/D.
CYP2D6	CYP2D6*10 mutation reduces the ability of CYP2D6 to metabolize β1 receptor blockers, resulting in body accumulation and toxic side effects
ADRB1	The ADRB1 Arg 389 allele may reduce the risk of hypertension.
CYP2C9	CYP2C9 is a drug metabolizing enzyme with polymorphism, which can metabolize mutiple drugs. CYP2C9 also affects the metabolism of the endogenous substance arachidonic acid (AA), and the epoxy-eicosanoic acids (EETs) produced by CYP2C9 play an important role in regulating vascular tone.
AGTR1	The AGTR1 gene encodes the type I receptor, which is the target of ARB drugs and regulates the main cardiovascular effects of angiotensin Ⅱ. Its 1166A>C polymorphism affects the efficacy of ARB drugs.

Application

- Patients who require antihypertensive medication
- Elderly physical examination population
- Application departments: Cardiology, neurology, hypertension

HLA-B*5801 Gene Polymorphism Detection Kit

Drug Background

Allopurinol is the first-line drug for the treatment of gout, which is mainly used for the treatment of gout, secondary hyperuricemia and as an adjuvant treatment for severe epilepsy. The HLA-B*5801 allele shows a strong correlation with severe dermatitis side effects induced by allopurinol. Therefore, the 2012 gout management guidelines in the United States recommend that HLA-B*5801 allele testing be performed before the use of allopurinol in people at high risk of severe allergic reactions. It can assist doctors to predict the dose and adverse reactions of allopurinol.

Testing Gene

Gene	Clinical Medication Guidance
HLA-B*5801	To judge the risk of allopurinol asn assist in guiding the safety of gout medication

Application

- Patients who require antihypertensive medication
- Elderly physical examination population
- Application departments: Cardiology, neurology, hypertension

Targeted companion solutions

In recent years, with the development of new molecular targeted drugs and the application of individualized treatment, the survival rate of cancer patients has been significantly improved. People have gradually realized that there is a close relationship between targeted drug therapy and related gene detection. Therefore, the research on molecular biology and molecular targeted therapy has become one of the hotspots in tumor treatment and prognosis judgment. Detection of gene mutations in patients has important guiding significance for clinical treatment selection and prognosis evaluation.

Lung Cancer Solutions

Lung cancer is one of the most common malignant tumors. The occurrence of lung cancer is the result of the accumulation of mutations in dozens of genes (including oncogenes, tumor suppressor genes, etc.) under the influence of in vivo and in vitro factors. Among them, a few genes such as EGFR, EML4–ALK, ROS1, KRAS, BARF, etc. play a key role in the occurrence and progression of tumors.

Application

Test Item	Result Analysis	Medication Regimen/Detection Significance
EGFR/EML4-ALK/ ROS1/BRAF **Combo Test for Lung Cancer**	EGFR mutation	Osimertinib, Almonertinib, Gefitinib, Erlotinib, Icotinib, Dakotinib, Afatinib
	ALK gene fusion	Alectinib, Crizotinib, Ceritinib
	ROS1 gene fusion	Crizotinib, Ceritinib
	BRAF mutation	Dabrafenib + Trametinib
	No mutation	Chemotherapy

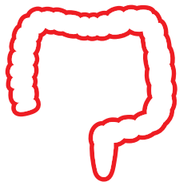
Testing Gene

Gene	Type	Detecting sites
EGFR	DNA	11：Exon 18 G719X, Exon 19 del, Exon 20 ins, Exon 20 T790M, Exon 20 S768I, Exon 21 L858R, Exon 21 L861Q
EML4-ALK	RNA	12： V1, V2, V3a, V3b, V4, V5a, V5b, V5" , V6, V7, V8a, V8b
ROS1	RNA	14： Exon 32（COSF 1260/1197/1203/1266/1279)、 Exon 34（COSF 1261/1198/1201/1280/1268）、Exon 35（COSF 1270/1274/1251）、Exon 36 （COSF 1295）
BRAF	DNA	1：V600E

Application

- Patients with stage Ⅱ－Ⅲ primary non-small cell lung cancer;
- Patients with primary or advanced non-small cell lung cancer;
- Lung cancer patients who developed drug resistance after the use of targeted drugs.

Colorectal Cancer Solutions



Colorectal cancer is one of the most common digestive system tumors, and its incidence ranks among the top three in the world.Because there are no obvious symptoms in the early stage, colorectal cancer is often not diagnosed until the advanced stage, which has been called the "silent killer".With the development of the concept of precision medicine and the research on tumor-related molecular markers, the reasonable detection and application of colorectal cancer related molecular markers has become an important part of current clinical practice.

Application

Test Item	Result Analysis	Medication Regimen/Detection Significance
KRAS/NRAS/ BRAF/PIK3CA **Combo Test for Colorectal Cancer**	No mutation	Cetuximab/Panitumumab + Chemotherapy
	BRAF mutation	Dabrafenib + Trametinib
	PIK3CA mutation	Chemotherapy Chemotherapy + Aspirin aspirin
	No PIK3CA mutation	Chemotherapy

Testing Gene

Gene	Type	Detecting sites
KRAS	DNA	7sites：G12C、G12S、G12R、G12V、G12D、G12A、 G13D
NRAS	DNA	8sites：G12D、G13R、G13D、G13V、A59D、Q61R、K117N（2 sites）、A146T
PIK3CA	DNA	5sites：：E542K、E545K、E545D、H1047R、 H1047L
BRAF	DNA	1site：V600E

Application

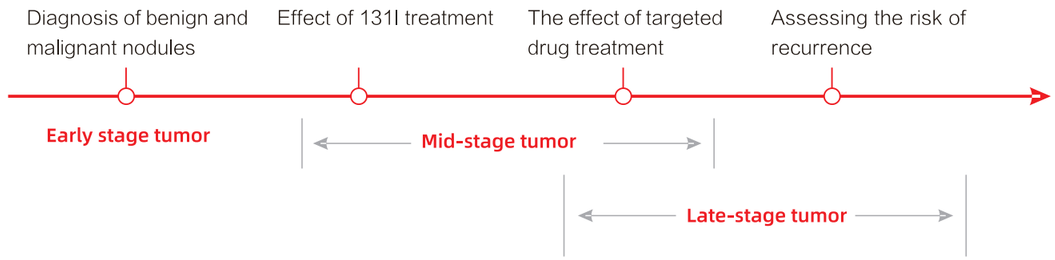
- Patients with primary advanced colorectal cancer;
- Patients with colorectal cancer resistant to first-line therapy.

Thyroid Cancer Solutions

Thyroid cancer (TC) is the most common endocrine malignancy, accounting for 3.4% of all cancers diagnosed each year. Over the past four decades, the incidence of thyroid cancer (TC) has increased worldwide.

Application

Test Item	Detection Significance
BRAF+TER	Auxiliary diagnosis of malignant thyroid nodules
	To predict the effect of 131I treatment for papillary thyroid
	To evaluate the prognosis and recurrence risk of thyroid cancer patients
	To guide the effect of targeted drug therapy for thyroid cancer



Application

- The population with benign and malignant thyroid nodules needs to be further confirmed;
- Patients who need fine-needle aspiration to confirm the pathological status of nodules;
- Thyroid cancer patients who received iodine 131 after thyroidectomy;
- Population of thyroid cancers treated with BRAF inhibitor targeted therapy.

Melanomas Solutions

Melanomas are the most aggressive skin cancers. According to statistics, in 2020, there were 325,000 new cases of cutaneous melanoma and 57,000 deaths worldwide.According to the guidelines, all patients need to undergo genetic testing before treatment, which can provide individualized guidance for patient treatment and prognosis.

Testing Gene

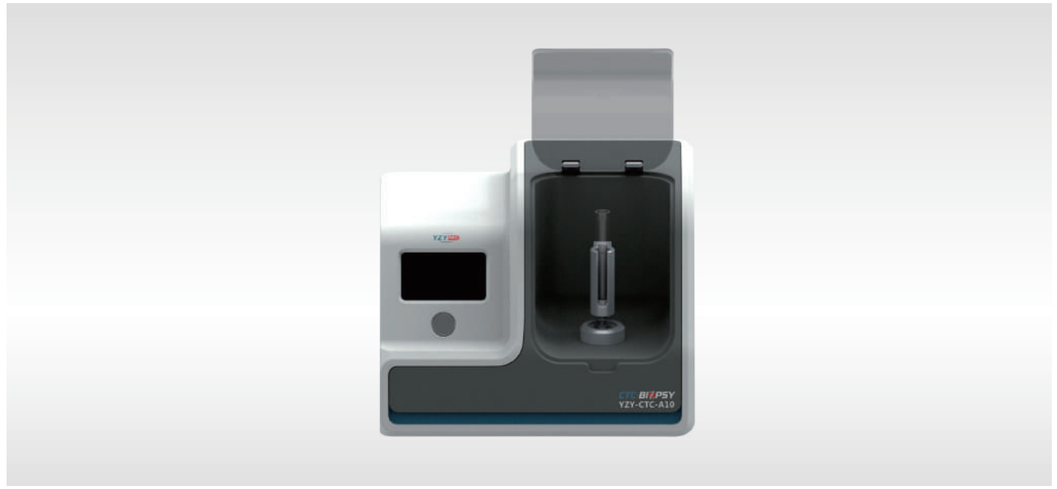
Test Item	Detection Significance
BRAF	To guide vemurafenib targeted therapy
	To guide the targeted therapy of dabrafenib combined with trametinib
	To guide the prognostic effect of melanoma patients

Application

- All patients with melanoma.

CTCBIOPSY® Platform

Circulating tumor cells (CTCS) refer to tumor cells that shed from the primary or metastatic tumor and enter the systemic circulation system, which contain all the biological information (genomics, transcriptomics, proteomics, etc.) of tumor cells. They have been proved to have good applications in tumor prognosis evaluation, recurrence and metastasis monitoring, efficacy evaluation, auxiliary diagnosis, and high-risk screening. As a new tumor marker, CTC has the characteristics of high sensitivity and specificity, and is superior to serum markers in tumor dynamic monitoring, which can indicate the treatment effect earlier than serum markers and imaging examination.



Introduction

CTCBIOPSY® Autoanalyzer system A10 is an automated instrument for abnormal blood cells analysis. By using a microporous filtration device made of polymer materials, the instrument can quickly and accurately separate circulating tumor cells from blood cells based on the differences in physical characteristics such as size, deformation ability, and fluid dynamics between CTC and blood cells. Combined with Wright-Giemsa staining solution, the morphology of CTC and CTM could be observed under an ordinary optical microscope.

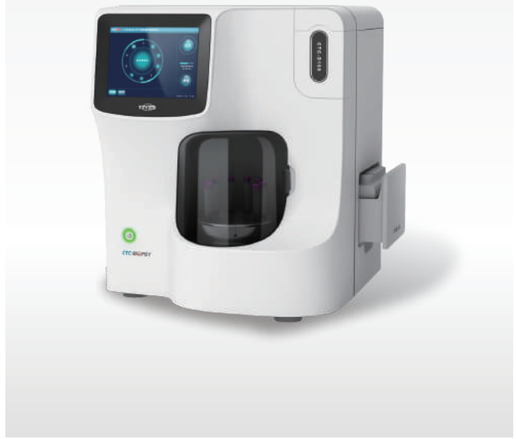
CTCBIOPSY® A10 can effectively detect the number of CTCs in the peripheral blood of patients, help clinicians to evaluate the disease progression of tumor patients, and guide them to formulate follow-up diagnosis and treatment measures and the best treatment plan as soon as possible.

CTCBIOPSY® Autoanalyzer System-A10

CTCBIOPSY ® AUTOANALYZER SYSTEM - A10

CTCBIOPSY® Separation & Staining Instrument-D100

CTCBIOPSY ® ABNORMAL CELL SEPARATION & STAINING INSTRUMENT-D100



Introduction

The microporous filtration device made of polymer material can accurately separate and enrich circulating tumor cells from blood cells in peripheral blood, and use patented technology to stain and identify CTCS, so as to effectively detect the presence and number of CTCS in peripheral blood of patients, and help clinicians evaluate the disease progression of tumor patients. Guiding them to formulate follow-up diagnosis and treatment measures and the best treatment plan as soon as possible.

Specifications

01 Mutiple testing applications

02 High sensitivity and accuracy

03 Exclusive capture of CTM

04 Strong downstream compatibility

Introduction

Based on the pathological work Circulating Tumor Cell Pathology Map and Application, through the perfect combination of automated digital pathological scanning platform and AI intelligent learning system, the first circulating tumor cell morphology identification platform in China was created.

CTCBIOPSY® Circulating Tumor Cell Scanning System -D800

CTCBIOPSY ® CIRCULATING TUMOR CELL SCANNING SYSTEM-D800

Specifications

Automatic and efficient

Sample capacity:5 slides/time, 10 min/slide, CTC automatic scanning

High scanning accuracy

Missed detection rate < 10%

AI learning system

Built-in AI learning system to continuously improve the identification efficiency

Fluorescence In Situ Hybridization(FISH) Solutions

Tumor has gradually become one of the main causes of human death. Early diagnosis of tumor is of great help to the treatment. In the past, cytochemical staining was used to diagnose the presence of tumor cells in cell samples. Emerging auxiliary diagnostic techniques are faster and simpler, such as fluorescence in situ hybridization (FISH). FISH is an in situ hybridization technique using fluorescent signal detection probes, which is a widely used molecular cytogenetic diagnostic technique in clinical pathological detection. Through the detection and diagnosis of cell and tissue samples with chromosomal or genetic abnormalities, it provides accurate basis for the classification, prognostication and prognosis of various gene-related diseases. FISH has been widely used in the auxiliary diagnosis of breast cancer, bladder cancer, lymphoma, etc.

Lymphoma-FISH Comprehensive Solution

Lymphoma, as one of the common malignant tumors, has complex classification. Different types of lymphoma often involve changes in specific genes and chromosomes, the prognosis of lymphoma with different molecular characteristics varies greatly.

FISH is the most common method for detecting these genetic or chromosomal abnormalities, especially in cases where protein expression does not correspond to genetic abnormalities.

Product Application

Before treatment

To determine the classification of lymphoma

In treatment

To guide the selection of treatment options for lymphoma

After treatment

To assess prognosis and recurrence

Product List

Probe Name	Probe Name
BCL2（18q21）Break Apart	BCL6/MYC/IGH/[BCL2/IGH] Gene
IRF4（6p25）Break Apart	BCL6/MYC/[CCND1/IGH]/[BCL2/IGH] Gene
MALT1/IGH Gene Fusion t（14; 18）	MYC（8q24）/BCL6（3q27）/BCL2（18q21）Break Apart
ITK/SYK Gene Fusion t（5;9）	11q23.3/11q24.3 Gene Deletion
TP63 （3q28）Break Apart	BCL6 Break Apart
PAX5/IGH Gene Fusion t（9;14）	MYC Break Apart
PD-L1（9p24）/ABL1（9q34）Gene Amplification	MYC/IGH Gene Fusion
PD-L1（9p24）/CSP 9 Gene Amplification	CCND1（BCL1）/IGH Gene Fusion
PD-L1（9p24）Break Apart	BCL2/IGH Gene Fusion
SRD（1p36）Gene Deletion	IGH Break Apart
PD-L2（9p24）Gene Amplification	MALT1 Break Apart
BCL6/IGH Gene Fusion t（3; 14）	CCND1（11q13）Break Apart

Bladder Cancer-FISH Comprehensive Solution

Bladder cancer is a malignant tumor originating from the bladder urothelium. FISH analysis of aneuploidy of specific chromosomes and sites in urine or bladder washes may be helpful to early detection of tumors or recurrence.

Product Application

Auxiliary diagnosis:

auxiliary clinical diagnosis of bladder cancer, suggesting the invasive nature of the tumor

1.

Evaluating recurrence:

predicting the risk of recurrence in patients with bladder cancer after surgery

2.

Product List

Probe Name	Probe Name
Bladder Cancer Cell Chromosomal & Genetic Abnormalities	Chr7/Chr17/Chr3/P16 gene

Product Composition (Chr7/Chr17/Chr3/P16 Gene)

Abnormal form	Clinical significance
Chr3 abnormality	The abnormality of Chr3 accounts for 47.4% in bladder cancer, It often coexists with other chromosome abnormalities, so it can be used as **a prediction of tumor invasion**
Chr7 abnormality	The incidence of chromosome polyploidy of Chr7 in bladder cancer is about 13.0% -76.2%, and is significantly related to the pathological stage and grading. The invasion of bladder cancer is related to the high incidence of Chr7 triploid, which can predict **the invasion of tumors**
Chr17 abnormality	The aberration rate of Chr17 is 74%, polyploidy is 47%. The aneuploidy of Chr17 is significantly related to the stage and grading. Aneuploidy of Chr17 is considered as a marker of the progress and invasion of bladder cancer
Chr9(9p21deletion)（P16/CDKN2A）	The homozygous deletion rate of Chr9 P16 is 28.6% -83.0%. P16 deletion is one of the most common changes in the early stage of bladder cancer. It can be used as an important marker for early diagnosis and recurrence monitoring of bladder cancer

MDS -FISH Comprehensive Solution

Myelodysplastic syndrome (MDS) is a type of rare blood cancer. MDS can affect people of any age, but is most common in adults over the age of 70.20%-30% of MDS patients can progress to AML, which is fatal. Cytogenetic abnormalities are found in 40%-70% of primary MDS and 95% of treatment-related MDS. The frequency of chromosome aberrations in advanced MDS is higher and the types are more complex than those in early MDS.

Product Application

Product List

Probe Name	Probe Name
Chr8/20q Gene	D7S522（7q31） Gene
P53 Gene Deletion	D20S108
7q	CSF1R(5q32) Dual Color Break Apart

Technology Comparison

Comparison	Routine Karyotype Analysis	FISH
Clinical Diagnosis Value	Both are indispensable for the diagnosis of MDS	
Number of cells detected	Nearly 20 metaphase cells	Up to thousands of cells were analyzed in a short time
Sensitivity	Low sensitivity (30%-50%)	High sensitivity（80%）

Leukemia -FISH Comprehensive Solution

Leukemia is one of the most common cancer. FISH has important clinical significance in the diagnosis, treatment, prognosis and MRD detection of hematological malignancies,meanwhile FISH has been recommended by guidelines such as NCCN for the diagnosis and treatment of hematological malignancies, including acute and chronic leukemia, myelodysplastic syndrome (MDS), multiple myeloma (MM),and other hematological malignancies.

Product Application

Auxiliary diagnosis
AML1-ETO acute myeloid leukemia, M2 type

Guiding medication
BCR-ABL , Imatinib

Assess prognosis
AML1/ETO for minimal residual monitoring

Product List

Probe Name	Probe Name
MYC(8q24) Gene Amplification	PDGFRB Break Apart
KMT2A（11q23）Gene Deletion	CCND3/IGH Gene Fusion
GLI1（12q13） Break Apart	RARA Break Apart
NUP98（11p15） Break Apart	IGH Break Apart
Chr12/D13S25 Gene Deletion	CHIC2（PDGFRA Break）Gene Deletion
11q23/DLEU1 Gene Deletion	Chr12 Centromere
ATM/p53/13q14/RB1/CSP12 Gene	7q
ABL1/ABL2/PDGFRB/CRLF2/JAK2 Break Apart	AML1 Break Apart
i（17q）Gene	ETV6/AML1 Gene Fusion
p53/[CCND1/IGH]/ATM/CSP12/D13S25 Gene	ETV6 Break Apart
FGFR1/PDGFRA/PDGFRB Break Apart	KMT2A（MLL）Break Apart
P53 Gene Deletion	6q
MYC Break Apart	ASS（9q34） Gene
BCL2/IGH Gene Fusion	CBFB/MYH11 Gene Fusion
Chr8 Centromere	EVI（3q26） Break Apart
JAK2 Break Apart	CDKN2A（9p21）Gene
ATM Gene Deletion	CBFB Break Apart

Soft Tissue Tumor-FISH Comprehensive Solution

Soft tissue tumors are a group of highly heterogeneous tumors, sometimes it's difficult to identify. About 1/3 of soft tissue tumors have molecular changes, such as Ewing's sarcoma, liposarcoma, synovial sarcoma, alveolar soft tissue sarcoma etc. FISH, as a stable, reliable and simple molecular genetic detection technique, has become a useful auxiliary method for the diagnosis of soft tissue tumors.

Product Application

- Auxiliary diagnosis 1
- Subtype identification 2
- Assess prognosis 3

Product List

Probe Name	Probe Name
HMGA2（12q14）Break Apart	C11ORF95（11q13）Break Apart
FRS2（12q15）Gene Amplification	EP400（12q24）Break Apart
PLAG1（8q12）Break Apart	RARA Break Apart
RB1Gene Deletion	MYCN Gene Amplification
MGEA5（10q24）Break Apart	MDM2（12q15）Gene
USP6（17p13）Break Apart	CDK4(12q14) Gene Amplification
TGFBR3/MGEA5 Gene Fusion t（1;10）	KMT2A（11q23）Gene Deletion
PDGFB（22q13）Break Apart	EWSR1/WT1Gene Fusiont（11;22）
ETV6/NTRK3 Gene Fusion t（12;15）	EWSR1/FLI1Gene Fusion t（11;22）
COL1A1/PDGFB Gene Fusion t（17;22）	EWSR1/CREB1Gene Fusion t（2；22）
EWSR1Break Apart	PRCC/TFE3Gene Fusion t（X;1）
NCOA2（8q13）Break Apart	EWSR1/ATF1Gene Fusion t（12；22）
PAX3（2q36）Break Apart	WT1（11p13）Break Apart
FKHR（13q14）Break Apart	CIC（19q13）Break Apart
WWTR1（3q25）Break Apart	BCOR/CCNB3Gene Fusion inv（X）（p11.4;p11.22）
FOSB（19q13）Break Apart	BCOR（Xp11.4) Break Apart
FOS（14q24）Break Apart	MYC Break Apart
WWTR1/CAMTA1Gene Fusion t（1;3）	SMARCB1（22q11）Gene Deletion
CAMTA1（1p36）Break Apart	CSF1（1p13）Break Apart
TFE3 Break Apart	MYB Break Apart
SRD（1p36）Gene Deletion	/

Breast Cancer -FISH Comprehensive Solution

Breast cancer is the most common malignancy among women worldwide, with the highest morbidity and mortality rates.

Product Application

- Assess prognosis
- Guiding medication
- Chemotherapy selection

Product List

Probe Name	Probe Name
HER-2 DNA Probe	ZNF217 Gene
TOP2A Gene Amplification	ESR1(6q25）Gene Amplification

Prenatal Diagnosis -FISH Comprehensive Solution

FISH is a common molecular biology technique used to detect chromosomal abnormalities. It is widely used in prenatal diagnosis to detect chromosomal abnormalities and prevent birth defects.

Product Application

- Rapid prenatal diagnosis
- Prompt pregancy risk
- Assist screening validation

Product List

Probe Name	Probe Name
ChrX /Y Probe	DiGeorge Syndrome Gene
SHOX Gene Deletion	GLPB/GLP21/CSP18/GLPX/CSPY Probe