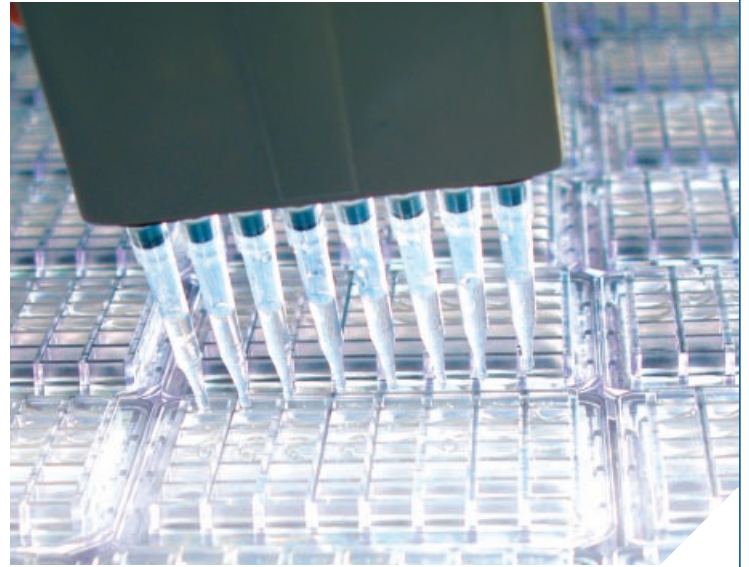


“ **Multi-Tumor Markers
Detection and
Evaluation System (C-12)
– Early Warning Radar
for Cancer Intruders** ”



WHAT ARE TUMOR MARKERS?

A host of blood tests can assess the health of different organs and systems in our body. Some doctors use tumor markers to detect possible cancer activity in the body. If cancer is present, it will usually produce a specific protein in the blood that can serve as a "marker" for the cancer. Biochemical method such as C-12 measures tumor markers and predicts the development of tumors based on marker concentration.

Bio-chemically no single tumor marker is sensitive or specific enough for tumor detection. Combined measurement of multiple tumor markers is being adopted for more accurate detection of tumors in recent years.

WHAT IS C-12?

Protein Chip System for Multi-Tumor Marker Detection (C-12) is a parallel analysis of 12 different types of tumor markers together for cancer screening with greater cost efficiency and result accuracy. It can diagnose simultaneously several types of tumor including liver cancer, breast cancer, stomach cancer, prostate cancer, esophagus cancer, colon/rectum cancer, lung cancer, ovarian cancer, pancreas cancer, and endometrial cancer.

C-12 has the characteristics of high sensitivity and specificity. It is fast and cost-efficient in detecting tumor markers. It measures 12 common tumor markers and is most efficient for cancer screening in large population.

C-12: AN ECONOMICAL AND EFFECTIVE WAY FOR CANCER SCREENING

Tumor markers can be used for one of four purposes:

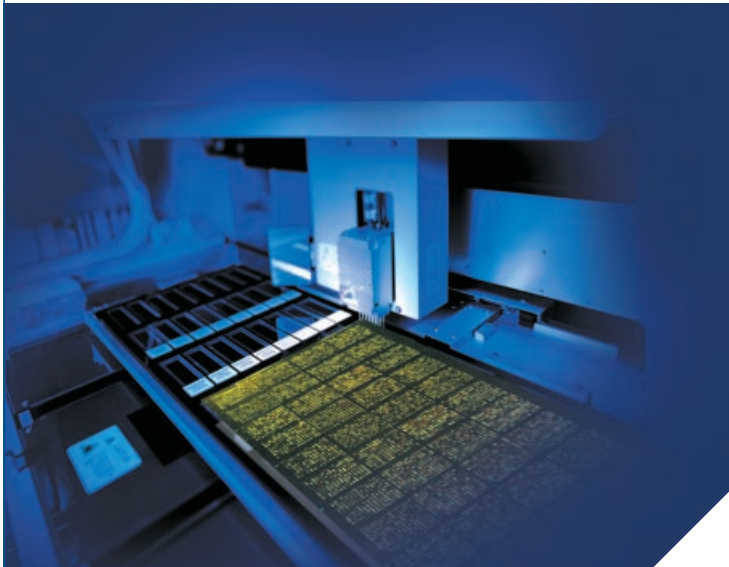
- (1) screening a healthy population or a high risk population for the presence of cancer;
- (2) making a diagnosis of cancer or of a specific type of cancer;
- (3) determining the prognosis in a patient;
- (4) monitoring the recovery of a patient or while receiving surgery, radiation, or chemotherapy.

Common Diagnosis Methods of Cancer :

- CT scan
- Magnetic Resonance Imaging (MRI)
- Ultrasound Scan
- PET scan
- Endoscopy
- Biopsies
- Tumor Marker Dosages

Common Treatments of Cancer :

- Surgery
- Radiotherapy
- Chemotherapy
- Hormonal Therapy
- Immunotherapy



“ HPV DNA Cervical Cancer Screening - Technology To Save Lives ”

WHAT IS HPV?

HPV stands for human papilloma virus and is the most common sexually transmitted infection. More than 80 percent of the women will have an HPV infection in their lifetime. The infection normally occurs after sexual debut and often is asymptomatic and clears spontaneously – approximately 70 percent of infections clear in one year and approximately 91 percent within two years.

Virtually all cases of cervical cancer begin with HPV infection, and more than 100 known HPV types have been identified and are labeled in numbers. HPV may cause skin warts, genital warts, genital head and neck cancers, genital cancers and cervical cancers. It has been identified that 13 high risk HPV viruses (Type 16/18/31/33/35/39/45/51/52/56/58/59/68), if left undetected and untreated, would lead to the development of cervical cancer.

WHAT IS CERVIX?

The cervix is a very strong muscle that connects a woman's womb and her vagina. It forms a small opening which lets out menstrual blood and sperm. During the childbirth the cervix opens up to let the baby out.

WHAT IS CERVICAL CANCER?

Cervical cancer is the second most common disease in women worldwide and it is estimated that more than 80 percent of the cervical cancer mortality occurred in developing countries including China and India. This cancer type usually starts in the cell on the surface of the cervix and becomes cancerous when the cell begins to grow and divide out of control. These cells gradually spread into the tissue of the cervix. From there they may move to other parts of the body such as vagina, womb or bowel.

WHY OUR HPV DNA TESTING IS THE TEST FOR EARLY DETECTION FOR CERVICAL CANCER?

In the past 60 years, cervical cancer screening has been based on the pap test which has an effectiveness of between 50 and 70 percent for detecting pre-cancerous cervical lesions. Recently, liquid-based pap technologies and computer enhanced screening methods have improved the effective rate but not entirely.

Despite the fact that high risk HPV types would cause cervical cancer, traditional methods of cervical cancer screening could not detect HPV specifically. Medical research shows that it takes years for the cells to develop into cancer after HPV infection. If HPV infection can be detected early and the infected women are monitored closely, most cervical cancer can be found early and treated successfully.

The HPV DNA Detection Kits are far more sensitive than traditional methods of cervical cancer screening because it is based on real time polymerase chain reaction (PCR) method. PCR laboratory process is commonly used in medical laboratories in Asia Pacific region, including China and is also referred to as DNA amplification process. The entire process of DNA extraction and amplification is easy to administer at low costing and high level of efficiency. This method of cervical cancer screening has a high sensitivity rate of over 95 percent.

WHAT IS THE SIGNIFICANCE OF HPV VACCINATION?

Currently, the market available HPV vaccine protects against HPV strains 6, 11, 16 and 18. Almost 70 percent of cervical cancer cases (Type 16 and 18) and 90 percent of genital warts cases (Type 6 and 11) are linked to these four strains of HPV but the HPV vaccine will not protect against diseases caused by other high risk HPV types. The vaccination is most effective in seronegative and HPV negative women – in young women before sexual debut. The vaccine is only effective only when given prior to infection exposure to that type.

The vaccine is only applicable to women without any previous exposure to HPV Types 6, 11, 16 and 18. HPV DNA testings will reveal current and not past infections, and the vaccine will not have therapeutic effect for HPV infections. For infected population, the vaccine does not have any preventive effect. Although the vaccination has the potential of eliminating 70 percent of cervical cancers, it is important to remember that the other 30 percent of cervical cancers must continue. It is generally accepted that cervical cancers could only be reduced over time worldwide when a number of measures are taken, namely, offer vaccination to appropriate candidates, continue to educate women about HPV risks and other effective means to prevent HPV-related diseases (e.g. abstinence, monogamy, condom use, limited partners), screen and treat patients.

Common Diagnosis Methods of Cervical Cancer:

- Medical history (reviews the past and present medical conditions of the patients and relatives)
- Pelvic examination (involves palpation of the woman's uterus, cervix and other pelvic organs)
- Pap smear (involves the scraping of cell for examination under a microscope)
- Colposcopic biopsy (involves the removal of a sample of tissue from the cervix or vagina during the colposcopy)
- Imaging tests such as CAT Scan, Pet Scan and MRI (screens of a possibility of cancer spread).

Common Treatments of Cervical Cancer:

- Surgery (remove cancer cells)
- Radiotherapy (which uses high-energy radiation to destroy cancer cells)
- Chemotherapy (medications that kill cancer cells)