Non-invasive blood tests for early detection and accurate management of cancer

OncoLUNG Dx

Non-invasive blood and urine test to help in differential diagnosis of patients with suspected malignancy in the lungs, reducing inappropriate diagnostic tests, unnecessary invasive tissue biopsies, days of hospitalization and morbidity.
WHAT IS ONCOLUNG DX?

- Innovative: Multiple Biomarkers Disease Activity Algorithm (MBDAA) developed with an Artificial Intelligence (AI) software.
- Non-invasive: First test based on a simple blood and urine test that analyses a panel consisting of several serum tumor markers with other general biochemistry values.
- Accurate: Very high capabilities to confirm or discard previous suspicious imagen findings.
- Effective: Solution to help in Differential Diagnosis for Lung Cancer —as an adjunct to suspicious image findings—, in order to reduce turnaround time (TAT) for diagnosis confirmation as well as the number of unnecessary tissue biopsies.
- More complete: If cancer, it also determines Non-Small Cell Lung Cancer (NSCLC) or Small Cell Lung Cancer (SCLC), as well as Adenocarcinoma or Squamous Cell Carcinoma.

USES AND PURPOSES

- Confirm or discard Lung Cancer from suspicious images.

FOR WHOM IS IT INTENDED?

- Patients with low-risk lung image results (but non-normal lung or benign lesion —Lung-RADS 1—), classified as Lung-RADS 2 that should be monitored in 12 months for surveillance.
- Patients with lung image results classified as Lung-RADS 3 or Lung-RADS 4 that should be followed by a tissue biopsy.
- Patients with other image findings besides Lung-RADS, with suspicion of Lung Cancer that should be biopsied to confirm or discard malignancy.

LUNG CANCER PROGNOSIS

Survival in Lung Cancer is strongly associated with tumor stage: when the cancer is detected at early stages —localized—, the 5-year survival rate (percentage of people who live at least 5 years after being diagnosed) is the highest one (55.60%).

However, survival is lower (close to 29%) for those diagnosed with advanced stages —regional—. Furthermore, survival for those cases with metastasis —distant—, is the lowest one (less than 5%), therefore an early diagnosis saves lives.

Survival rate at 5 years according to SEER 18 (Surveillance, Epidemiology and End Results program based on stage distribution between 2007-2013)

Currently, doctors consider age and smoking habits of patients with symptoms such as the two main factors to model the risk of Lung Cancer. If patients fall into this consideration, it is recommended a Computerized Tomography (CT) —a test with a high cost that sometimes detects benign nodules as potentially cancerous—. Approximately 28% of high-risk individuals who are subjected to CT Scans obtained a positive finding, since the test often identifies all existing pulmonary nodules, resulting in unnecessary lung tissue biopsies that patients have to undergo when suspicious finding.