



## LungSign™ - A New Test for Early Detection of Lung Cancer

### LungSign™ - How can it help?

In the past, if you were worried about having lung cancer, there was no simple test to take.

Fortunately, times have changed. LungSign™ is a sputum test assessing individual risk of lung cancer for people:

- Over 50 years old
- Who have had significant exposure to:
  1. Cigarette smoke (one pack a day for 20 years)
  2. Industrial carcinogens
- With symptoms such as persistent cough or shortness of breath or other indicators such as suspicious radiography

### Battling cancer one test at a time

When it comes to lung cancer, early detection is key to extending lives and improving the quality of life for those who have the disease. LungSign™'s innovative technology brings new hope to the battle; with a safe, simple, non-invasive test for the early detection of lung cancer. By analyzing the lung cells commonly found in sputum, LungSign™ can detect cancer before it spreads, increasing the likelihood of successful treatment.

### Lung Cancer

According to the World Health Organization, lung cancer is a global problem, accounting for 1.2 million new cases worldwide every year. In North America, lung cancer kills more men and women than any other type of cancer.

Over the last 30 years, doctors have greatly improved the survival rates for many types of cancer. Sadly, lung cancer survival rates remain unchanged. Aggressive but silent, lung cancer typically grows without symptoms, not betraying its presence until it's too advanced to be cured.

The good news is that when lung cancer is detected early, the chances for survival are greatly improved. Early detection of lung cancer offers patients the best hope for a favorable outcome.

### How to order LungSign™

Three easy methods:

1. By phone (toll-free): [1.888.629.8779](tel:18886298779)
2. By email: [info@LungSign.com](mailto:info@LungSign.com)
3. Online: [www.LungSign.com](http://www.LungSign.com)

Note: A physician's requisition is required. The cost of the test is CAD\$175.



## Risk Factors for Lung Cancer\*

Cigarette smoking is the primary risk factor for lung cancer. It is estimated that 85 percent of all lung cancer cases are caused by cigarette smoking. An individual's risk of developing lung cancer depends on how much they've smoked, the age at which they started smoking, and the age at which they quit.

For non-smokers, second-hand smoke is the main cause of lung cancer, but other risk factors include: exposure to industrial or environmental carcinogens such as asbestos and radon; and lung disease, especially diseases which scar or damage the lungs. The risk of developing lung cancer also increases with age and heredity.

\* *Canadian Cancer Society; <http://www.cancer.ca> November, 2006.*

## Taking the LungSign™ Test

The LungSign™ test is performed on sputum - material brought up from the lungs by a deep cough.

The LungSign™ home test kit includes a simple, hand-held device which, when blown into, vibrates the chest to stimulate the production of sputum. The vibration painlessly shakes sputum from the lung's lining, and helps you cough deeply, to produce the sample necessary for LungSign™ analysis.

Producing a sputum sample using the LungSign™ kit causes very little physical discomfort. Almost anyone can use the kit, with the following exceptions:

- Patients who have had thoracic or cardiac surgery within the last 6 months
- Patients with asthma or COPD exacerbation in the last 5 days
- Patients with flu-like symptoms such as fever or chills

## Analysis

Sputum samples are sent via the kit's prepaid mailer to PMI Labs in Vancouver, Canada for LungSign™ analysis. Reports are typically sent to the requesting physician within 3-5 working days of sample receipt.

## LungSign™ Results

LungSign™, similar to the PSA test for prostate cancer, is not a diagnostic test. It does not provide a definitive "yes or no" answer to the question: "Do I have lung cancer?". Instead, LungSign™ results are presented as a "risk multiplier", indicating the statistical likelihood that an individual harbors lung cancer.

Although not a diagnostic test, the existence of a likelihood predictor such as LungSign™ is potentially of enormous value in the fight against lung cancer.

LungSign™ scores should be interpreted in context to an individual's overall health and medical history. Therefore, LungSign™ results are sent to your doctor, who has the expertise necessary to interpret them and recommend any further action.

## Talk with your Doctor

If you would like to take the LungSign™ test, talk with your doctor about your risk of lung cancer, and about whether or not LungSign™ is right for you.

## Test Cost

LungSign™ costs CAD\$175 and is not currently reimbursed by health care payers.

## PMI Labs

LungSign™ was developed by PMI Labs (Perceptronix Medical Inc. Vancouver, Canada).

PMI Labs believes that early diagnosis is the key to improving outcomes for lung cancer patients. The company, a spin-off of the BC Cancer Agency (Vancouver, Canada), has worked collaboratively with scientists and clinicians from around the world to develop technologies that address the problem of early cancer detection.