

MEDICAL BREAKTHROUGHS

RESEARCH SUMMARY

TOPIC: SOTORASIB: NEW DRUG DESTROYS LUNG CANCER
REPORT: **MB #4969**

BACKGROUND: Lung cancer is when cancerous cells develop in the lungs. Lungs are sponge-like and sit in the chest area. The left lung has three lobes, and the right has two. Cancerous cells usually start in the cells lining the bronchi and in the parts of the lung called bronchioles or alveoli which are located at the base of the trachea/opening of the lung. There are different types of lung cancer, non-small cell lung cancer which makes up 80 – 85 percent of patient diagnoses and small cell lung cancer which makes up about 10 – 15 percent of patient diagnoses. Non-small cell lung cancer mainly occurs in patients who have previously or currently smoke cigarettes, but it is also common in people who have never smoked. It is also more common for women and younger adults to develop this type of lung cancer. Small cell lung cancer grows and spreads faster than non-small cell lung cancer, 70 percent of patients diagnosed with this type of lung cancer have already had exponential spreading throughout the lung. Even though this cancer does respond well to chemotherapy and radiation, it will unfortunately return for most patients.

(Source: <https://www.cancer.org/cancer/lung-cancer/about/what-is.html>)

DIAGNOSING: Discussing previous smoking and increased risk of lung cancer with your doctor could mean that you are eligible to get an annual lung cancer screening through a low-dose CT scan. This is generally offered to elderly adults or people who have smoked heavily or quit within the last 15 years. Imaging tests are used to look for any mass or nodule on the patient's lungs. A CT scan is also needed to detect any smaller lesions that the X-Ray could have missed. If the patient has been coughing and is producing a mucus-like substance from their chest called sputum, doctors can test the mucus for any cancerous cells. A tissue sample from areas involving abnormal cells may also be tested for cancerous cells. If cancer cells are found, doctors would perform more tests to determine the stage.

(Source: <https://www.mayoclinic.org/diseases-conditions/lung-cancer/diagnosis-treatment/drc-20374627>)

NEW THERAPY: Sotorasib is the newest development in combating the KRAS gene in non-small cell lung cancer. It works by attacking the gene protein which will keep the cancer cell from growing. The common side effects are diarrhea, joint and muscle pain, nausea, feeling tired or weak, cough, low white blood cell or red blood cell counts changes in certain other blood tests.

(Source: <https://www.cancer.org/cancer/lung-cancer/treating-non-small-cell/targeted-therapies.html>)

FOR MORE INFORMATION ON THIS REPORT, PLEASE CONTACT:

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com