Electromagnetic Navigation Bronchoscopy® (ENB™)

What it is and how it can help?

In addition to its capabilities to diagnose lung nodules, ENB can also enable physicians to place gold or other types of metal markers in patients who will be undergoing stereotactic radiotherapy to treat tumors in the lung.

A fiducial (fih-DOO-shal) marker is a small piece of metal that is about the size of a grain of rice and comes in different shapes. It is used to mark tumors in the lung. Fiducial markers can be seen on x-ray and act as a tracking device for the stereotactic treatment machine to follow. Often, you will have 1 to 4 fiducial markers placed and you cannot feel them. The fiducial markers are not magnetic or radioactive and cannot be removed.

FOR ADDITIONAL INFORMATION VISIT:
www.superdimension.com
www.spotonyourlung.com
Similar to GPS-like technology, ENB guides the physician through the patient's natural airways. This procedure, performed by a pulmonologist, thoracic surgeon or cardiothoracic surgeon, enables the physician to take tissue samples in regions of the lung that are not reachable with traditional bronchoscopy. Until now, physicians have relied on needle biopsy or surgery to take tissue samples – both of which can cause complications.

**WHY SHOULD I HAVE AN ENB PROCEDURE?**

The most common reason for having an ENB procedure includes abnormal findings on a chest x-ray or CT-scan – a spot on the lung. ENB enables your physician to take tissue samples from very small nodules earlier and more safely than other methods, potentially detecting lung cancer earlier and enhancing treatment options for patients.

**HOW DOES IT WORK?**

- Prior to the procedure, the patient’s chest CT-scan is loaded onto a computer creating a virtual "roadmap" of the lungs.
- During the procedure, a bronchoscope is placed through the patient’s mouth and into the airways of the lungs.
- Electromagnetic sensors then guide a catheter to the exact location where the physician wants to take a tissue sample or place fiducial markers.
- A sample is then taken and sent to a lab for diagnosis.

**WHO IS ELIGIBLE FOR AN ENB PROCEDURE?**

ENB can be used with a wide-range of patients. This even includes those who suffer from poor lung function or have had cancer surgery, chemotherapy, or radiation therapy.

**RECOVERY AND RISKS**

After the ENB procedure you will be observed until you are awake enough to return home. The most common risk is pneumothorax (collapsed lung), which occurs in 2-3% of patients. This is comparable to a traditional bronchoscopy.¹

You may experience a mild sore throat, hoarseness or cough following the ENB procedure. If you feel chest pain or increased shortness of breath, contact your doctor immediately.