St. Luke’s Comprehensive Lung/Thoracic Cancer Program

The Comprehensive Lung/Thoracic Cancer Program at St. Luke’s brings together a team of highly skilled cancer experts in a single location to ensure people with lung cancer receive the best course of treatment, and the hope, reassurance and confidence needed to fight the disease to the fullest.

**St. Luke’s Cancer Center takes a multidisciplinary approach to care. A team of specialists works together to develop the most appropriate, comprehensive treatment plans for patients with lung cancer, esophageal cancer and other cancers of the chest.**

**Surgical expertise.** William R. Burfeind, Jr., MD and Matthew Puc, MD are board-certified cardiothoracic surgeons who practice purely thoracic surgery.

**Sophisticated diagnostic options** are available to diagnose and accurately stage lung cancer. Accurate staging of lung cancer is the first critical step in designing an individual treatment plan for the patient.

**Lung Cancer Screening** is available at St. Luke’s University Health Network. Based on data from the National Lung Screening Trial, patients who are between 55 and 74 years of age and have smoked a pack a day for 30 years are eligible for the low-dose CT screening for lung cancer. The screening is designed to pick up early-stage lung cancers before they have had time to spread.

**Advanced staging and treatment options are available, including:**

- **Integrated PET/CT Scanner**
  A state-of-the-art imaging system that provides the latest technology in non-invasive lung cancer staging. Our thoracic surgeons will review the importance of this test and how the results will be used to compile a personalized treatment regimen for each individual patient.

- **Bronchoscopy**
  Flexible bronchoscopy involves the placement of a video scope into the airways, allowing the thoracic surgeon to inspect the airway and look for any area of tumor involvement and potential blockage of the air passages. This procedure can be performed for either diagnostic purposes or therapeutic purposes. Bronchoscopy can be performed as a separate procedure or at the time of surgical resection of a lung tumor.

- **Navigation Bronchoscopy**
  A minimally invasive bronchoscopic procedure used to biopsy difficult to reach lung nodules. It uses a GPS-like technology through your natural lung airways. Biopsies performed with this technology carry a lower risk of pneumothorax than when the procedure is done with a needle through the chest wall.

- **Endobronchial Ultrasound (EBUS) & Transbronchial Needle Aspiration (TBNA)**
  This is a specialized type of bronchoscopy that examines the airway with ultrasound technology to help visualize tumors or lymph nodes outside of the airway. This minimally invasive procedure can be performed for the staging of lung cancers to look for the spread of tumor cells to the surrounding lymph nodes. This procedure may help avoid an open approach to biopsying these lymph nodes. St. Luke’s thoracic surgeons were the first to perform this innovative technique in the Lehigh Valley.
- **Video-Assisted Mediastinoscopy**
  This procedure is performed in the operating room under general anesthesia. A scope is placed through an incision in the lower portion of the neck allowing the visualization and biopsy of lymph nodes along the windpipe called mediastinal lymph nodes. This helps determine lung cancer staging and the next step in lung cancer treatment.

- **Video-Assisted Thoracoscopic Surgery (VATS) with Biopsy**
  This is a minimally invasive approach for biopsying a suspicious lung nodule or lymph node, which sometimes is required before a formal lung cancer operation. This involves making two small incisions (1 to 2 cm) on the side of the chest and then placing a video scope into the chest space. This allows for the visualization of the lung nodule and its removal with specialized long instruments. If a cancer is found, a formal lung cancer operation generally can be performed through these same incisions.

- **Thoracoscopic (VATS) Lobectomy**
  This is a minimally invasive approach to lung cancer surgery. The standard treatment for a lung cancer requires removing the lobe in which the tumor resides. This operation is performed through two small incisions with no rib spreading. A thoracoscopic lobectomy generally results in less post-operative pain, a shorter hospital stay, fewer complications and an earlier return to prior activities. Currently, St. Luke’s thoracic surgeons perform more than 85 percent of lobectomies thoracoscopically. At the time of consultation, the option for a thoracoscopic approach will be discussed. Individuals who are not candidates for a minimally invasive approach will be offered other options.

- **Complex Lung Resections**
  Occasionally, lung cancers are found in difficult locations that do not make them amenable to a thoracoscopic resection. These types of tumors may require a larger incision to be removed (thoracotomy incision). This requires going between the ribs to adequately and safely remove the lung tumor. The thoracic surgeons at St. Luke’s have extensive experience with complex lung resections which may involve intricate airway reconstruction such as a sleeve lobectomy in order to perform lung-sparing operations.

- **Clinical Trials**
  The thoracic surgeons at St. Luke’s are members of the Alliance for Clinical Trials in Oncology and have many active protocols for the treatment of lung cancer. At the time of consultation, the thoracic surgeons determine eligibility for any ongoing national clinical trials.