

# 2016 CANCER CARE REPORT TO THE COMMUNITY

## NON-SMALL CELL LUNG CARCINOMA SITE SPECIFIC STUDY

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### INTRODUCTION:

Non-Small Cell Lung Carcinoma (NSCLC) is the most common type of lung cancer. About 80-85% of lung cancers are NSCLC. Adenocarcinoma, Squamous Cell Carcinoma and Large Cell Carcinoma are subtypes of NSCLC. The majority of lung cancers are caused by tobacco smoking; of these about 10-15% is Small Cell Lung Cancer, 40% are Adenocarcinoma, 25-30% are Squamous Cell Carcinoma and about 10-15% are Large Cell (undifferentiated) Carcinoma.

### EPIDEMIOLOGY:

The American Cancer Society (ACS) estimates for lung cancer in the United States for 2016 are as follows:

There will be about 224,390 new cases of lung cancer, 117,920 in men and 106,470 in women. There will be approximately 158,080 deaths from lung cancer, 85,920 in men and 72,160 in women.

Lung cancer is by far the leading cause of cancer death among both men and women. There are about 1 out of 4 cancer deaths from lung cancer each year. Most cases of lung cancer, when diagnosed, are in the advanced stage. However, some lung cancers are diagnosed in an early stage and are curable. The signs and symptoms of lung cancer are usually a cough that persists as well as sometimes blood in the sputum, chest pain, shortness of breath, weight loss, poor appetite, hoarseness, feeling tired or weak and wheezing.

### AJCC STAGING AND WORK-UP:

Work-up includes a chest x-ray, CT scan of the chest followed by biopsy. Metastatic work-up includes CT scan of the abdomen and pelvis, as well as CT scan of brain or MRI of brain and PET CT scan. A bone scan is also helpful in staging. Depending upon the presentation, cytology could be obtained from sputum or removal of pleural fluid if applicable. A needle biopsy under CT guidance of the lung mass is also frequently done. A bronchoscopic examination and biopsy is also part of the work-up. Sometimes a mediastinoscopy and mediastinotomy is necessary in order to obtain proper tissue for diagnosis. Molecular testing is now routinely done which helps in treatment decision. EGFR (Epidermal Growth Factor Receptor) as well as ALK (Anaplastic Lymphoma Kinase) is done.

Staging is important in lung cancer, as it will determine the treatment and prognosis. Five year survival rate for Stage I NSCLC is about 45-50%. For Stage II, the five year survival rate is about 30%. For Stage III, the five year survival rate is 5-14% and for stage IV, five year survival is about 1%.



## TREATMENT:

Treatment for NSCLC is dependent on stage, age, pulmonary function studies and other co-morbidities. The most common treatments are surgery, radiation therapy and chemotherapy. Less common treatments are radiofrequency ablation, targeted therapy and immunotherapy. Palliative treatment for symptoms is also considered, as a high number of patients usually present with advanced disease.

## NORWOOD HOSPITAL PATIENT DATA REVIEW:

Norwood Hospital Cancer Data was reviewed for NSCLC patients diagnosed and treated in Norwood Hospital in 2014 and 2015. There were 19 patients in 2014 and 19 patients in 2015. There were 3 patients in Stage I, 3 patients in Stage II, 7 patients in Stage III, and 25 patients in Stage IV. Therefore 25 patients out of 38 (65.8%) had advanced disease at presentation. All 3 patients with Stage I disease underwent surgery. Out of 3 patients with Stage II disease, 1 patient underwent concurrent chemotherapy and radiation therapy, as he was not a surgical candidate, 1 patient passed away due to a stroke prior to any treatment and 1 patient had severe COPD and was not a surgical candidate and received Radiation Therapy only. Most of the Stage III patients received concurrent chemotherapy and radiation therapy. All Stage IV patients received palliative chemotherapy or palliative radiation therapy as needed. Some patients did not receive any treatment and chose comfort measures only. All patients receiving treatment at Norwood Hospital were treated in accordance with NCCN guidelines.

## CONCLUSION:

Carcinoma of the lung usually presents at an advanced stage and is incurable. Many patients are elderly and have poor lung function and received palliative care. Early diagnosis is important in lung cancer. A high risk patient can now undergo a low dose chest CT scan screening which is approved by Medicare. Hopefully, this will pick up lung cancers at an early stage and will improve survival. The prevention of smoking and smoking cessation is of utmost importance.

### Norwood Hospital Cancer Care Services

Norwood Hospital offers community-based care for most cancers. Services are conveniently located at the hospital and it's Cancer Center in Foxboro. Our goal is to provide local access to current treatment to achieve the best possible outcomes. We offer:

- Leading-edge radiology
- Medical oncology
- Surgical services
- Outpatient chemotherapy clinic
- Intensity-Modulated Radiation Therapy
- Seed implants
- National cancer research trials
- Community health screenings and education, including American Cancer Society programs.
- Pain management
- Rehabilitation

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