

# *LAKE CUMBERLAND REGIONAL HOSPITAL*

2007 Cancer Program  
Annual Report  
2006 Data Presented

Only programs offering the best in cancer care earn this accreditation

# LAKE CUMBERLAND REGIONAL HOSPITAL 2007 ANNUAL REPORT

## 2007 Cancer Program Summary

The cancer program at Lake Cumberland Regional Hospital is approved by the Commission on Cancer (CoC) American College of Surgeons (ACOS). Compliance with the required standards of care set by the CoC assures our patients that we will provide the highest quality of cancer care in meeting their needs through the continuum of care. In December of 2006, we were surveyed by ACOS and earned a three year approval with commendation. This special designation places the LCRH program in an elite group of about 1,400 cancer programs approved by the commission.

## 2007 CANCER COMMITTEE MEMBERS LAKE CUMBERLAND REGIONAL HOSPITAL

### NON-PHYSICIAN MEMBERS

Harper, Shona, RHIA, CTR (*Tumor Registrar*)

Bowers, Tonya (*Quality Coordinator*)

Brock, Tim, R.N. (*Director of Med/Surg*)

Parker, Robert (*Director of Radiology*)

Travis, Jeanne (*Executive Director of Hospice*)

Wilson, Susan (*Director of Community Relations*)

Cary, Brooke (*American Cancer Society*)

Hammer, Leslie (*American Cancer Society*)

Sams, Gloria (*Kentucky Cancer Program*)

Bowman, Tammy, RT(R)(T)ARRT, Cancer Program Administrator  
(*CTC Director*)

Upton, John (*CTC, physicist*)

Grant, Kim (*CTC, RN*)

La Cour, Cathe (*Social Worker*)

## 2007 CANCER COMMITTEE MEMBERS LAKE CUMBERLAND REGIONAL HOSPITAL PHYSICIAN MEMBERS

CHAD PATTERSON, MD, GENERAL SURGERY

MICHAEL CITAK, MD, GENERAL SURGERY

N. MULLAI, MD, MEDICAL ONCOLOGY

BACHAR KASSEM, MD, CHAIR (2007) MEDICAL ONCOLOGY

AMTULLAH KHAN, MD, RADIATION ONCOLOGY

ERIC RUBY, MD, UROLOGY

PAT JENKINS, MD, FAMILY PRACTICE

ANDREA HILL, MD, GYNOCLOGY

MARILYN MCMILLEN, MD, PATHOLOGY

SANDRA SCHULDHEISZ, MD, PULMONOLOGY

SAMIR COOK, MD, GASTROENTEROLOGY

ALBERTO GONZALEZ, MD, DIAGNOSTIC RADIOLOGY

HOSSEIN FALLAHZADEH, MD, ACOS LIASION (2007) GENERAL SURGERY

# Cancer Registry Data

The cancer registry at LCRH is a community-based hospital registry. The cancer program makes accurate data collection a priority. This is done by coordinating the collection, management, analysis, lifetime follow-up and dissemination of cancer information of registry data. The Cancer Registry develops a detailed computerized cancer-focused record on every patient who is diagnosed and/or treated at our hospital. The confidentiality of each patient entered into the cancer database is maintained according to HIPAA regulations.

Cancer Registry data is submitted 100% error free to the National Cancer Data Base (NCDB) annually as a requirement of the CoC for all approved cancer programs. Submission of data to the NCDB provides feedback to assess the quality of patient care. This feedback enables cancer programs to compare treatment and outcomes with the regional, state and national patterns. Major differences between the facility data and the national data are reviewed in an effort to identify the reason for these differences.

The cancer data is also submitted error-free to the Kentucky Cancer Registry. All reported data are used to support research, track trends, initiate epidemiologic studies, generate journal articles and provide data for allocation of services. The data are analyzed to identify opportunities for community cancer awareness and screening. This data also provides a means of identifying possible cancer clusters within the state.

Registry data are utilized at Cancer Conference to facilitate discussion of treatment, AJCC stage, follow-up and survival of various cancers throughout the year.

Due to the high incidence and mortality of lung cancer in the nation and in our state, the Cancer Committee of LCRH approved the study of small cell lung cancer.

In the following study, we will present our findings in comparison with the available data of the National Cancer Database.

The analysis will include a review of small cell lung cancer incidence and mortality, diagnostic methods, prognostic factors such as histology, age, and stage at diagnosis, and treatment and survival by stage for small cell.

# 2005 Cancer Site Distribution Summary Lake Cumberland Regional Hospital Total Cases 496

## 2006 Cancer Data Summary

During 2006, 496 analytic cases were accessioned into the LCRH cancer registry database, with additional 7 non-analytic cases abstracted and accessioned. Analytic cases were diagnosed and/or received first course of treatment at our facility. Non-analytic cases are cases that were previously diagnosed and treated elsewhere and were treated for recurrence of cancer at our facility. Non-analytic cases are excluded from analysis of data.

PRIMARY SITE	TOTAL	SEX				STAGE				UNK	N/A
		M	F	O	I	II	III	IV			
ALL SITES	496	249	247	25	110	79	83	100	39	58	
LUNG/BRONCHUS	128	71	57	1	18	4	43	57	4	1	
BREAST	73	0	73	8	28	20	8	5	4	0	
COLON	42	23	19	2	13	9	6	4	6	2	
PROSTATE	34	34	0	0	0	27	1	3	0	2	
RECTUM/ANUS	25	16	9	1	4	6	3	3	6	2	
MELANOMA	17	9	8	2	9	2	1	2	1	0	
BLADDER	17	14	3	11	3	0	1	1	1	0	
NON-HODGKINS	16	8	8	0	5	2	2	4	1	0	
BENIGN BRAIN/CNS	16	4	12	0	0	0	0	0	0	16	
CORPUS UTERI	13	0	13	0	10	0	0	1	2	0	
THYROID	12	2	10	0	6	0	3	3	0	0	
PANCREAS	11	9	2	0	0	4	0	6	1	0	
UNKNOWN PRIMARY	9	5	4	0	0	0	0	0	0	9	
BRAIN (MALIGNANT)	9	6	3	0	0	0	0	0	0	9	
STOMACH	8	5	3	0	1	0	0	1	3	3	
CONNECTIVE/SOFT TISSUE	6	4	2	0	0	0	1	0	5	0	
ESOPHAGUS	6	5	1	0	0	1	4	1	0	0	
KIDNEY	5	2	3	0	3	1	0	1	0	0	
HODGKINS	4	4	0	0	0	2	0	2	0	0	
OROPHARYNX	4	3	1	0	0	0	3	1	1	0	
CERVIX	4	0	4	0	0	1	2	1	0	0	
LARYNX	4	4	0	0	3	0	1	0	0	0	
PLASMA CELL TUMORS	3	3	0	0	0	0	0	0	0	3	
MYELOID LEUKEMIAS	3	1	2	0	0	0	0	0	0	3	
SMALL INTESTINES	3	2	1	0	1	0	0	0	0	2	
GALLBLADDER	3	1	2	0	1	0	0	0	2	0	
OTHER CNS	2	0	2	0	0	0	0	0	0	2	
LIP	2	2	0	0	2	0	0	0	0	0	
TONGUE	2	1	1	0	0	0	1	0	1	0	
FLOOR OF MOUTH	2	2	0	0	0	0	0	2	0	0	
OTHER SKIN	2	2	0	0	0	0	0	0	0	2	
HYPOPHARYNX	2	2	0	0	0	0	1	1	0	0	
OVARY	2	0	2	0	0	0	0	1	0	1	
LIVER	2	1	1	0	1	0	0	0	1	0	
BONE	1	1	0	0	1	0	0	0	0	0	
LYMPHOCYtic LEUKEMIAS	1	1	0	0	0	0	0	0	0	1	
OTHER FEMALE GENITAL ORGANS	1	0	1	0	0	0	1	0	0	0	
TESTIS	1	1	0	0	1	0	0	0	0	0	
OTHER MALE GENITAL ORGANS	1	1	0	0	0	0	1	0	0	0	

# ***Lake Cumberland Regional Hospital Cancer Treatment Center***

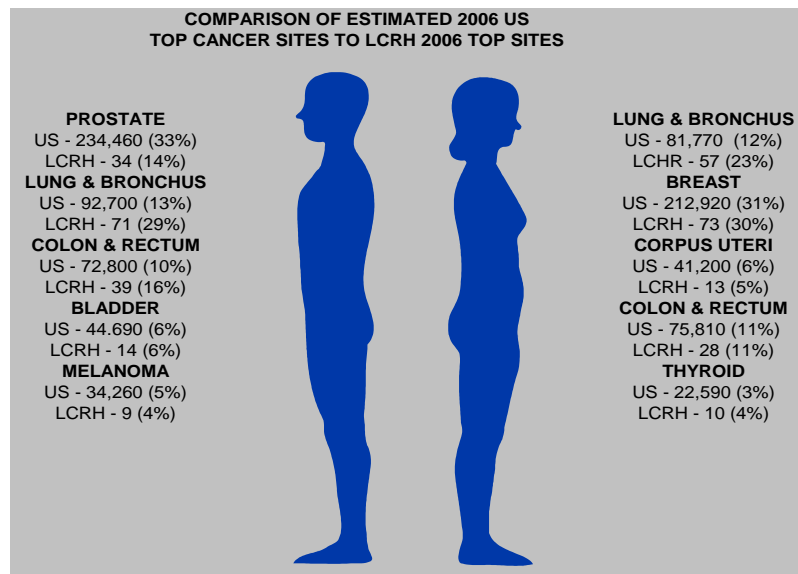
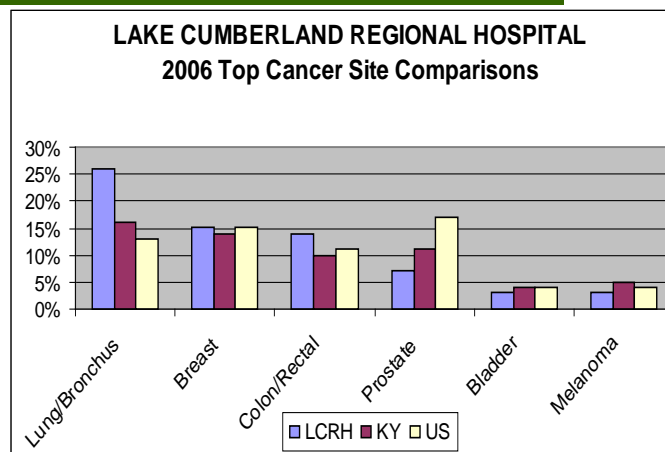
Our state of the art facility offers patients access to leading edge equipment, with the latest advances in Radiation Oncology. The Varian Clinac 21 EX linear accelerator is capable of delivering dual energy photon therapy as well as five electron energies. The Clinac is capable of delivering 3-D conformal radiation therapy as well as IMRT (Intensity Modulated Radiation Therapy). IMRT provides a more precise definition of the delivered radiation treatment volume by varying the beam intensity across each treatment field. This allows us to maximum dose to the tumor while minimizing dose to the surrounding normal tissue. We also perform Respiratory Gated treatments as well as Dynamic Wedging. We utilize an electronic Record and Verify system to ensure accuracy and consistency with patient records.

The staff of the Cancer Treatment Center includes a board certified Radiation Oncologist with 18 years experience, two Registered nurses, five licensed Radiation Therapists, one licensed Radiologic Technologist, one Medical Physicist, one Dosimetrist, one Oncology Social Worker, two office personal, and dieticians are available as needed.

Our focus at the Cancer Treatment Center is to treat all of our patients and their families as if they were our own family.

# LCRH Top Cancer Sites Comparison to US and Kentucky

The most frequent sites for LCRH in 2006 were lung (26%), breast (15%), colon/rectal (14%), prostate (7%), bladder (3%), melanoma (3%). Compared with the state and national data, our incidence of lung cancer was higher than the state and national incidence.



Distribution of our analytic cases by gender revealed that 247 (50%) were females and 249 (50%) were males. The most frequent cancer sites in men were prostate, lung & bronchus, colon & rectum, bladder, and melanoma of skin. In women, the most frequent sites were lung & bronchus, breast, corpus uteri, colon & rectum and thyroid. Compared with national data, LCRH incidence of lung cancers is higher in both men and women.

\*Estimated new cancer cases for 2006 in the US and Kentucky – ACS Cancer Facts & Figures 2006. LCRH percentages are actual analytic 2006 cases.

# Lung Cancer Incidence and Mortality in the U.S. and Kentucky

According to National statistics, lung cancer is the third most commonly diagnosed cancer in the United States and account for the highest number of cancer deaths.

The American Cancer Society, Facts & Figures 2006 estimates 174,470 newly diagnosed cases of lung cancer nationally for 2006, accounting for 12% of cancer diagnoses. In Kentucky, lung cancer is expected to account for 16% of the cancers in our state, with 3,760 new cases in Kentucky for 2006. Estimated for 2006 are approximately 162,460 deaths from lung cancer in the US, accounting for 29% of cancer deaths. The number of deaths from lung cancer in Kentucky during 2006 is estimated at 3,500, representing 37% of cancer deaths in the state. Kentucky mortality rate for lung cancer is 8% higher than national average for 2006.

Based on data from the American Cancer Society, Facts and Figures 2006, the incidence of lung cancer varies considerably by state. Between the years of 1998-2002, rates per 100,000 were the lowest in Utah at 42.3 for males and 21.5 for females. Kentucky had the highest rates in the country, at 138.2 for males and 72.3 for females.

## Estimated 2006 Cancer Incidence

<b>ALL CANCERS</b>
US - 1,399,790
Kentucky - 23,690
<b>PROSTATE</b>
US - 234,460 (17%)
Kentucky - 2570 (11%)
<b>LUNG &amp; BRONCHUS</b>
US - 174,470 (12%)
Kentucky - 3760 (16%)
<b>COLON &amp; RECTUM</b>
US - 148,610 (11%)
Kentucky - 2450 (10%)
<b>BLADDER</b>
US - 61,420 (4%)
Kentucky - 890 (4%)
<b>MELANOMA</b>
US - 62,190 (4%)
Kentucky - 1180 (5%)
<b>BREAST</b>
US - 214,640 (15%)
Kentucky - 3,220 (14%)
<b>LEUKEMIA</b>
US - 35,070 (3%)
Kentucky - 520 (2%)
<b>UTERINE CORPUS</b>
US - 41,200 (3%)
Kentucky - 500 (2%)
<b>NON-HODGKIN'S LYMPHOMA</b>
US - 58,870 (4%)
Kentucky - 970 (4%)

## Estimated 2006 Cancer Mortality

<b>ALL CANCERS</b>
US - 564,830
Kentucky - 9,560
<b>LUNG &amp; BRONCHUS</b>
US - 162,460 (29%)
Kentucky - 3500 (37%)
<b>BREAST</b>
US - 41,430 (7%)
Kentucky - 620 (7%)
<b>PANCREAS</b>
US - 32,300 (6%)
Kentucky - 450 (5%)
<b>COLON &amp; RECTUM</b>
US - 55,170 (10%)
Kentucky - 910 (10%)
<b>PROSTATE</b>
US - 27,350 (5%)
Kentucky - 300 (3%)
<b>LEUKEMIA</b>
US - 22,280 (4%)
Kentucky - 330 (4%)
<b>NON-HODGKIN'S LYMPHOMA</b>
US - 18,840 (3%)
Kentucky - 310 (4%)
<b>LIVER</b>
US - 16,200 (3%)
Kentucky - 220 (2%)
<b>OVARY</b>
US - 15,310 (3%)
Kentucky - 220 (2%)

# Outcome Study on Lung Cancer

## Small Cell Lung Cancer

### *Risk Factors*

Lifestyle, environmental and occupational risk factors play a major role in the prevalence of cancer. Lung cancer has been called the most preventable cancer and smoking is considered the leading cause of this disease as well as other cancers and diseases. Among these are cancers of the cervix, esophagus, kidney and renal pelvis, larynx, oral cavity and pharynx, pancreas, stomach, urinary bladder and acute myeloid leukemia. Other smoking-related chronic diseases include cardiovascular and cerebrovascular diseases and respiratory diseases such as chronic obstructive lung disease, emphysema, and chronic bronchitis. Other risk factors include non-lifestyle-related factors such as some types of pneumonia and tuberculosis and having a first-degree relative who has had lung cancer. Lifestyle related risk factors include environmental and occupational exposure such as air pollution, radon, and asbestos. A diet inadequate in fruits and vegetables can also increase the risk of cancer.

*The US Department of Health and Human Services reports that 87% of lung cancer deaths and 30% of all cancer deaths can be attributed to smoking.*

*According to the American Cancer Society, the prevalence of cigarette smoking has declined drastically among adults age 18 and older, from 42% to 23% between 1965 and 2002.*

*Among high school students, 58% had tried smoking, suggesting a continued need to prevent youth experimentation.*

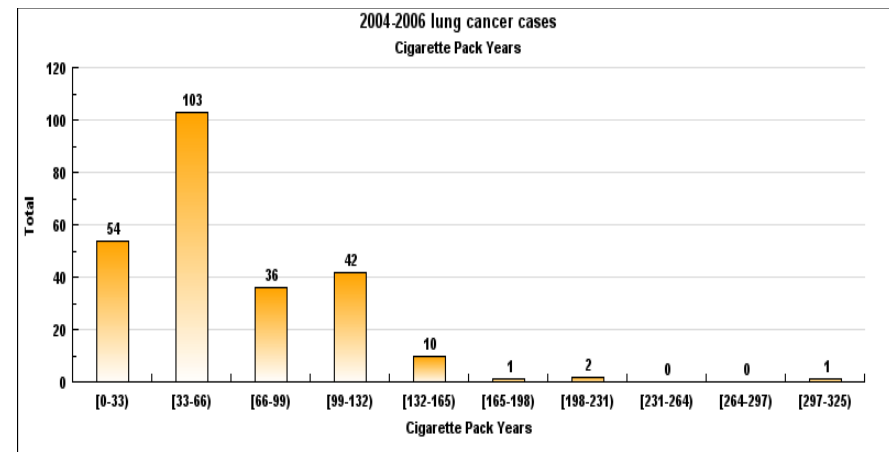
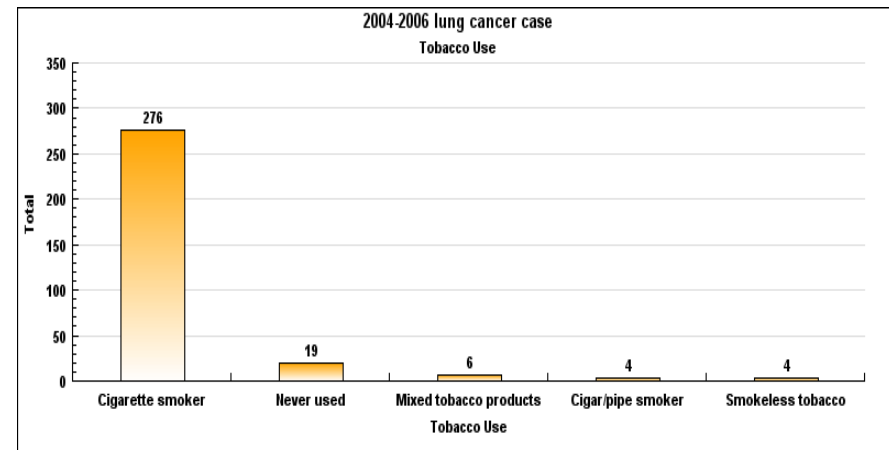
# Outcome Study on Lung Cancer

## Small Cell Lung Cancer

### *Risk Factors*

Cigarette smoking is by far the most important risk factor for lung cancer. Risk increases with quantity of cigarette consumption and years of smoking duration.

In relation to patients diagnosed with lung cancer, the LCRH registry data below demonstrates that 94% used some type of tobacco product and only 6% of patients diagnosed with lung cancer never used any form of tobacco. The length of time smoked, increases the amount of pack years (length of time smoking multiplied by the numbers of cigarette packs smoked).



# Outcome Study on Lung Cancer

## *Screening and Early Detection*

Research is underway to develop better screening and early detection methods for lung cancer. Newer tests such as low-dose spiral computerized tomography (CT) scans and molecular markers in sputum have shown promising results in diagnosing the disease at an earlier, more operable stage, thereby increasing treatment options and improving prognosis. The National Lung Screening Trial (NLST), a cancer screening clinical trial funded by the National Cancer Institute, was started in 2003. The goal of the NLST is to determine if screening individuals at high-risk for lung cancer by spiral CT or chest x-ray can reduce cancer deaths.

## *Signs and Symptoms of Lung Cancer*

Experiencing bloody or rusty-colored sputum, shortness of breath, recurrent pneumonia or bronchitis, persistent cough, loss of weight and/or appetite, and chest pain, especially with deep breathing can be a sign of lung cancer or other health problems. In early stage lung cancer, there are usually no symptoms, so lung cancer is often found when tests are being done for something else.

## *Diagnostic Methods*

When symptoms of lung cancer are present, one or more methods may be used to confirm the diagnosis. Blood tests, chest x-ray, computed tomography (CT), magnetic resonance imaging (MRI), and bronchoscopy are often used to rule out/confirm a suspected diagnosis. Sputum cytology and needle biopsy can confirm the diagnosis and provide information such as cell type that helps determine treatment options.

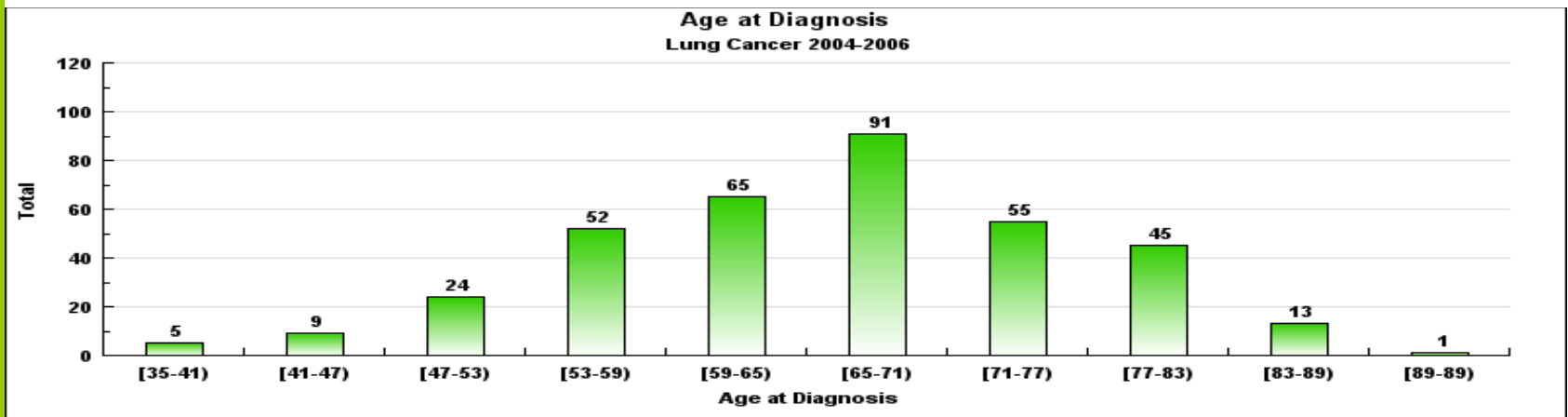
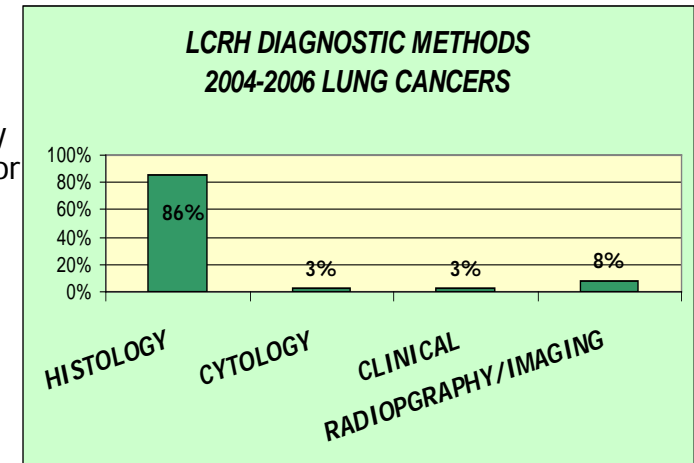
# Outcome Study on Lung Cancer

## *Diagnostic Methods*

Review of the diagnostic methods for lung cancers diagnosed at LCRH between 2004 and 2006 demonstrated that (86%) of our cases were histology confirmed by either biopsy or resection. Diagnosis by cytology (3%), radiological exams (3%) and clinical diagnosis (3%) accounted for (9%) of our diagnosis.

## *Factors that Determine Prognosis and Treatment*

Both prognosis and treatment options primarily depend on the patient's age and general health, histology type, tumor grade, and the stage at diagnosis. Review of age at diagnosis, based on Cancer registry data for 2006 lung cases, demonstrated that the majority of lung cancer patients were diagnosed in the late stage of life.



# Outcome Study on Lung Cancer

## *Lung Cancer Histology's*

Generally, lung cancers are either a non-small cell (NSC) or small cell histology. Non-small cell cancers are more common, offer the most treatment options and overall, have a better prognosis. In the U.S., Ohio, and at Mercy Anderson, during 2000-2003, non-small cell cancers were the most common, with adenocarcinoma and squamous cell having the highest percentage. Small cell types at our hospital are higher than in the U.S. and Ohio. The percentage of our other histology's (those that are not grouped as either SCLC or NSCLC) is slightly higher compared to the US and Ohio.

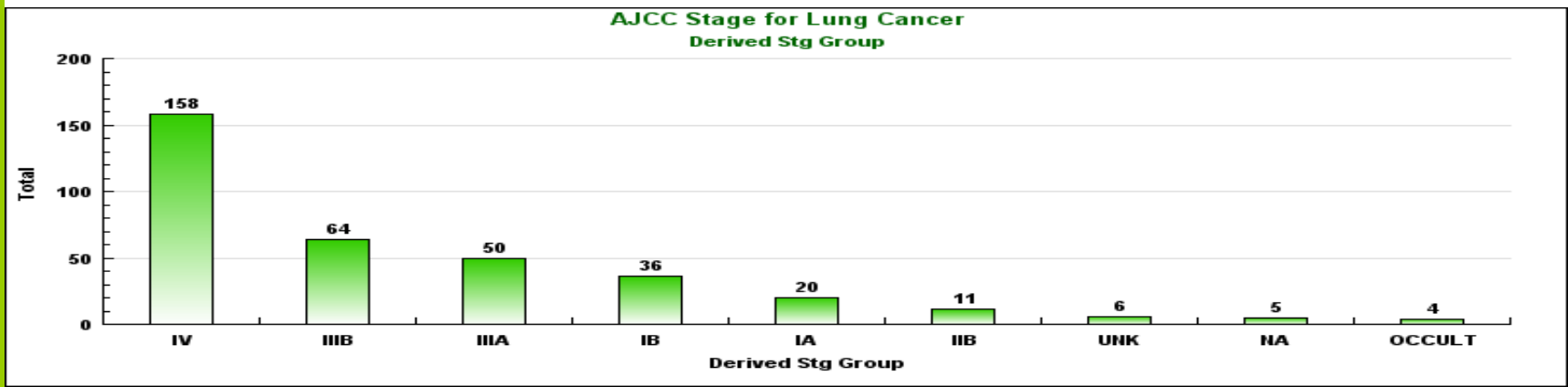
# Outcome Study on Lung Cancer

## *Stage at Diagnosis*

Unlike most cancers, which are staged with a 4-stage system describing tumor size, lymph node involvement and spread of disease to distant sites, small cell lung cancer usually is staged by a 2-stage system. These are described as limited stage and extensive stage. Most physicians consider cancer in one only lung and in lymph nodes on the same side of the chest, limited stage. When the cancer has spread to the other lung, to lymph nodes on the other side of the chest, or to distant organs it is considered extensive disease. Many doctors consider small cell lung cancer that has spread to the fluid around the lung an extensive stage.

Stage at diagnosis is an important factor in determining treatment choices and the patient's prognosis. Unfortunately, most lung cancers are not diagnosed at an early stage. Diagnosis at later stages is due in part to a failure of individuals to take advantage of screening methods currently available at Lake Cumberland Regional Hospital. In addition, lung cancer symptoms often mimic other respiratory diseases, such as pneumonia, chronic lung diseases, and bronchitis.

According to Lake Cumberland Regional Hospital Registry data for lung cancer, diagnosis years 2004-2006, 77% were diagnosed at a late stage (Stages 2-4, regional and distant stage). 3% were stage unknown or not applicable.



# Outcome Study on Lung Cancer

## *Treatment Options*

Different types of treatment are available for patients with lung cancer and are dependent on the histology and stage at diagnosis with consideration given to the patient's overall health status. Some treatments are standard and some are being tested in clinical trials. Treatment may include a combination of both standard treatments and other treatment offered by participation in a clinical trial. The main types of standard treatment are surgery, radiation, chemotherapy (alone or in combination), and targeted biological therapies, such as Iressa, which block activity of growth factor receptors. Goals of treatment may be curative or palliative. Palliative treatment alone is also an option.

### ***Surgery***

As with nearly all cancers, surgical treatment is preferred for localized disease. However, in the treatment of lung cancer, surgery may not be an option. Histology, location of the tumor, local involvement (particularly mediastinal node involvement) and the patient's ability to withstand surgery may preclude the option of resection. Non-small cell cancers are generally more amenable to resection than are small cell cancers which have a greater tendency to be widely spread at diagnosis. Tumors involving large blood vessels or other vital structures or the presence of local spread of disease may make resection unadvisable. Patients with serious co-morbidities may be unable to endure surgery and the rigors of the post-operative period.

### ***Surgery with Adjuvant Therapies***

Even when all visible cancer is surgically removed, some patients may be offered adjuvant therapy after surgery to kill any remaining cancer cells. Recent studies show that adjuvant chemotherapy for early stage NSCLC improves survival rates. For later stages, chemotherapy and radiation are often used, sometimes combined with surgery. Iressa, a biological therapy, is approved for later stage NSCLC.

### ***Chemotherapy and Radiation Therapy***

In cases where surgery is not an option, and for small cell cancers, treatment usually consists of chemotherapy, (either single-agent or a combination of antineoplastic drugs), external beam radiation or both.

# Outcome Study on Lung Cancer *Treatment Options*

## *Targeted Biological Therapy (Immunotherapy)*

Immunotherapy is a relatively new type of cancer treatment, in use for the last few decades. Researchers believe many of the advances in cancer treatment will likely come from this field. Immunotherapy is more likely to be used for small cancers; therefore it is recommended that other forms of treatment be used to treat lung cancer. In cases where these are contraindicated, immunotherapy may prolong life without the severe side-effects sometimes seen with use of chemotherapy.

In a recent study on treatment for certain non-small cell lung cancers, Avastin (a monoclonal antibody) added to chemotherapy helped patients live an average of a couple of months longer, compared to those receiving only chemotherapy.

Other studies that may prove to prolong life in patients with advanced non-small cell lung cancer include using an autologous whole cell vaccine (GVAX). The vaccine is made by removing, modifying and irradiating the patient's own cancer cells, then giving them back to the patient to stimulate the immune system. Another study involves a vaccine encased in a fat droplet to make it more effective. Further studies are needed to confirm the effectiveness of these new treatments.

## *Palliative Treatment*

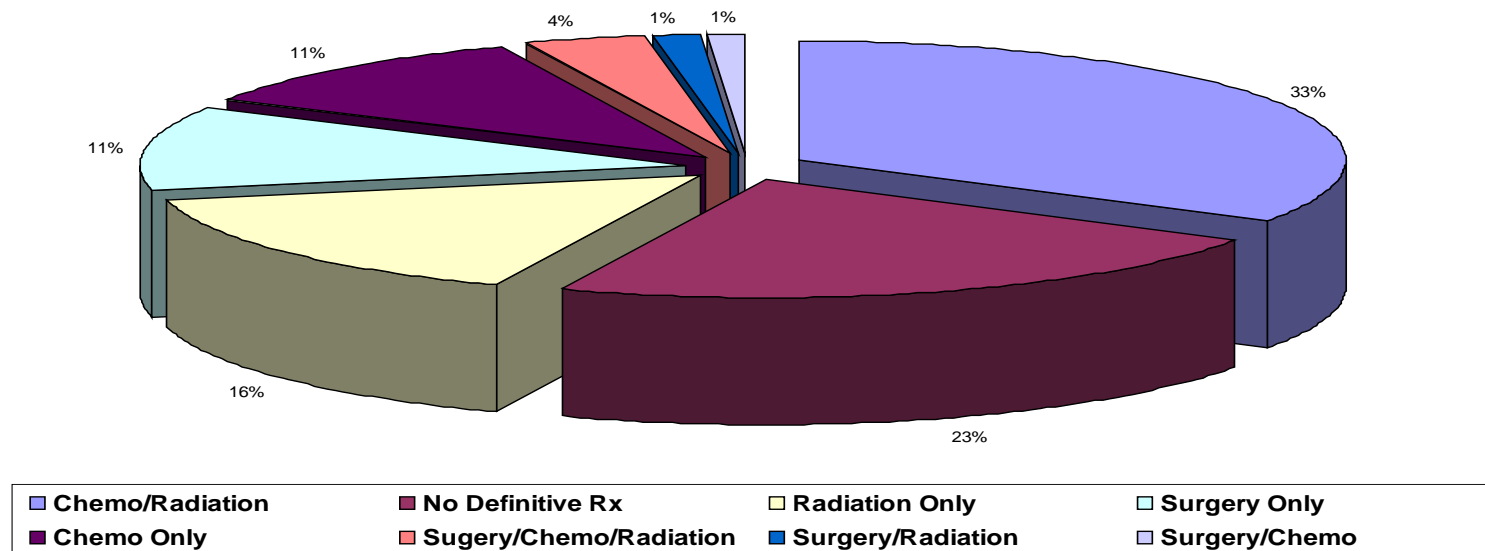
When lung cancer is diagnosed in late stage, either advanced local disease or metastatic spread to distant sites, most commonly the adrenal glands, the liver and the bones, the focus of treatment, for either the primary site or the metastatic site, is often palliative. Palliative treatment can include surgery, chemotherapy, radiation, a combination of these, or simply consist of comfort measures alone. Palliative care is also an option when the cancer recurs after a disease-free period.

# Outcome Study on Lung Cancer

## *Other Treatment Types - Clinical Trials*

Other types of treatment are being tested in clinical trials. These include chemotherapy and biologic therapy. Clinical trials are research studies meant to obtain information on new treatments or help improve current treatments for patients with cancer. When clinical trials show that a new treatment is better than the standard treatment, the new treatment may become the standard treatment. Before starting treatment, patients may want to think about taking part in a clinical trial. Ideally, the patient, family, and health care team should be involved in the decision on choosing the most appropriate cancer treatment.

**Lung Cancer First Course Treatment in 2004 - 2006**



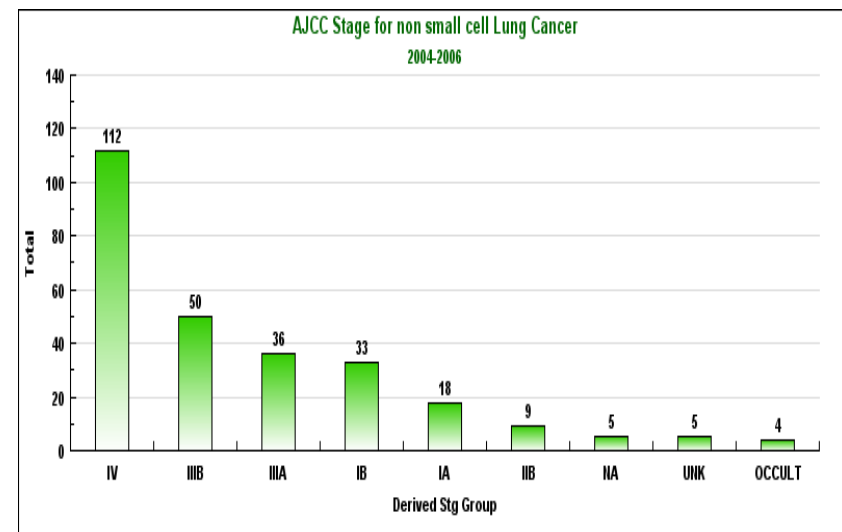
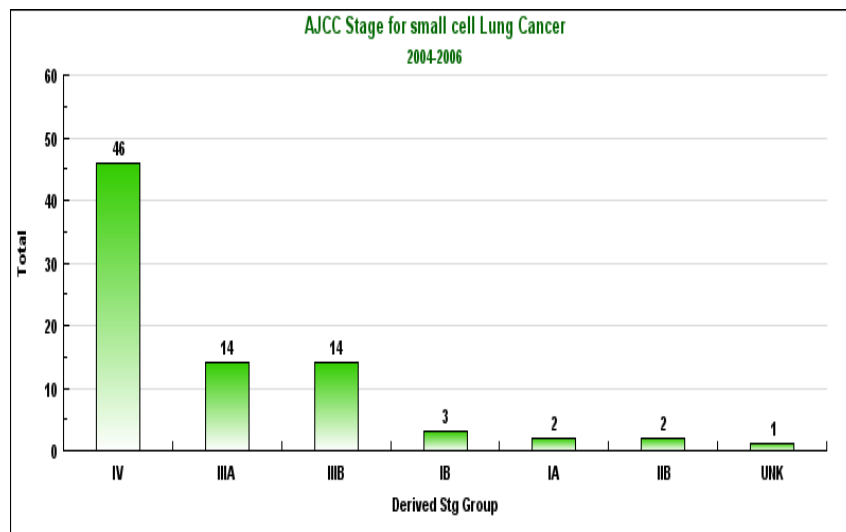
# Outcome Study on Lung Cancer

## Small Cell Lung Cancer Comparison

Because the staging criteria and prognosis for small cell lung cancers and non-small cell lung cancer are different and small cell are less common than non-small cell lung cancer. We have chosen to compare our small cell treatment and survival to non-small cell lung cancer.

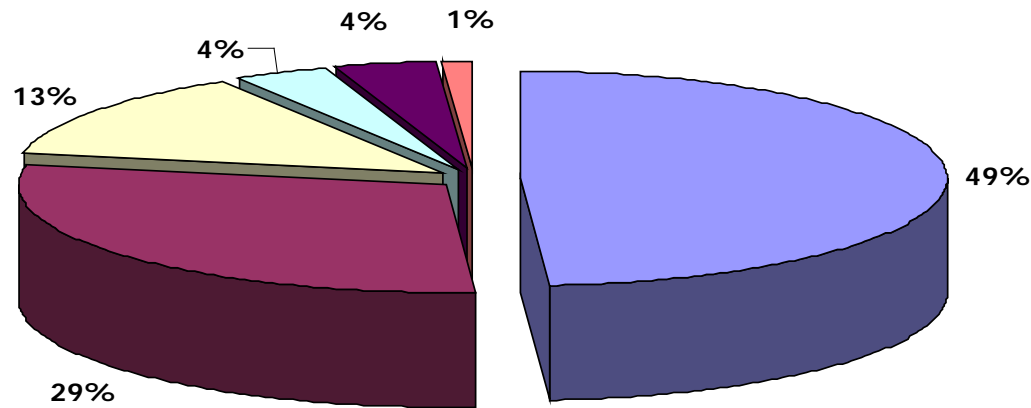
Stage at diagnosis for 2004-2006, 272 were non small cell and 36 were small cell lung cancers. The non-small cell (NSCLC) showed 27% early stage (Stages 0-1, localized stage) and 73% at late stage (Stages 2-4, regional and distant stage) and 1% were stage unknown or not applicable. There were only 36 small cell lung cancer (SCLC), therefore only 22% are diagnosed in the early stage (Stages 0-1, localized stage) and 78% at late stage (Stages 2-4, regional and distant stage) and only 1% unknown or not applicable.

Analysis showed an increased amount of SCLC diagnosed in the late stage, especially for the small amount diagnosed during that period.



# Small Cell Lung Cancer First Course Treatment 2004 - 2006

Small Cell Lung Cancer First Course Treatment 2004-2006



■ Chemo/Radiation

■ No Definitive Rx

■ Surgery/Chemo/Radiation

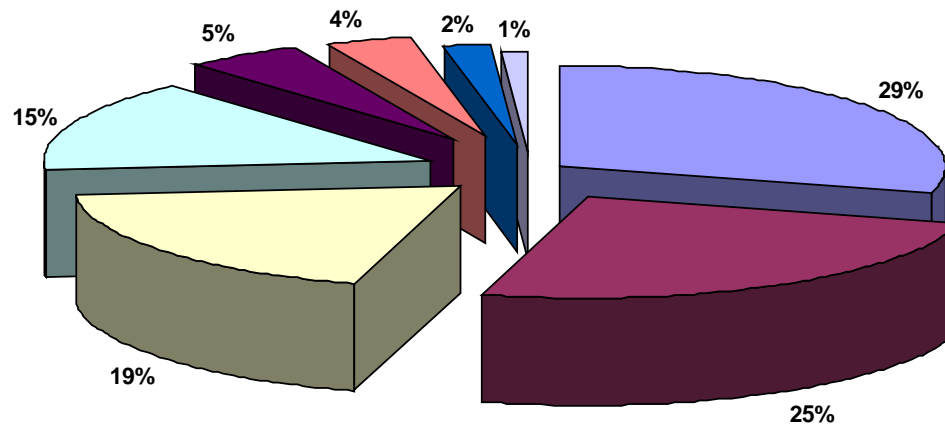
■ Chemo Only

■ Radiation Only

■ Surgery/Chemo

# Non Small Cell Lung Cancer First Course Treatment 2004 - 2006

Non Small Cell Lung Cancer First Course Treatment 2004-2006



■ Chemo/Radiation	■ No Definitive Rx	■ Radiation Only	■ Surgery Only
■ Chemo Only	■ Surgery/Chemo/Radiation	■ Surgery/Radiation	■ Surgery/Chemo

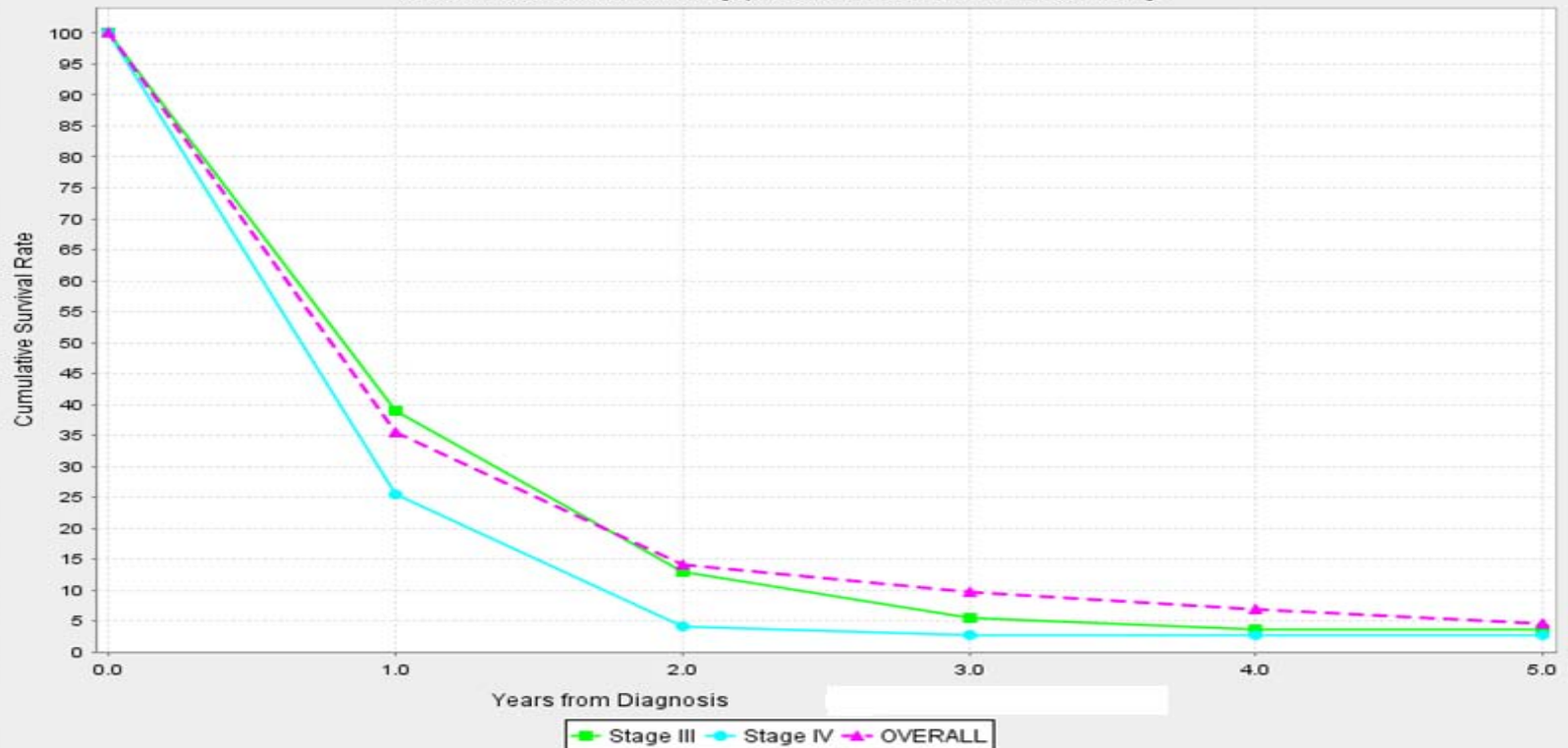
# Outcome Study on Lung Cancer Survival Analysis

## Observed Survival For Lung, Bronchus - Other Types ,Lung, Bronchus - Non-Small Cell Carcinoma ,Lung, Bronchus - Small Cell Carcinoma

Cases Diagnosed in 1998 - 2002

Data from 1 Programs [Lake Cumberland Regional Hospital]

WARNING: The information within this graphic is not to be used for clinical decision making.



# Outcome Study on Lung Cancer

## *Summary of Findings*

### *Summary of Findings*

The analysis of our experience with lung cancer incidence, prognostic factors, treatment and survival, revealed the following:

- Our service area reflects the high national incidence of lung cancer and predominance of diagnosis at late stage and the effects this has on survival.
- Considering the present limitations in effective screening methods and resulting inadequacy to detect lung cancer at an early stage, efforts towards prevention and improving treatment options through participation in clinical trials appear to play the most important role in our battle against the disease.
- Continued research in developing effective screening methods to improve early diagnosis is critical. We have the availability of screening CT scans here at Lake Cumberland Regional Hospital, though it is not a commonly ordered test.
- National, state and local prevention programs are essential to continue the campaign against lung cancer.
- Our cancer committee will continue to promote prevention and awareness through participation in facility-wide and community smoking cessation and lung cancer awareness programs.
- Included in our study is a list of some of the programs available to promote and assist in smoking cessation, along with information on how to access information on these programs.
- Based on the overall survival analysis chart, the survival after 1 year is significantly declined for stage 3 and stage 4 lung cancers. Considering the significant number of lung cancer cases are diagnosed are stage 3 and stage 4. Screening is important and awareness programs play an all important role with lung cancer.

Lake Cumberland Regional and our Cancer Programs, led by our Cancer Committees, are committed to making a difference in our communities. We do this through several means, including promotion of clinical trials and participation in local Health Fairs and American Cancer Society programs, as well as through our hospitals' smoking cessation program. This regional program continues to provide smoking cessation education, advice and cessation assistance to our patients. By monitoring smoking cessation counseling for the high-risk diagnoses of congestive heart failure (CHF), pneumonia and acute myocardial infarction (AMI), our program assures we are achieving our target goals.