

## Focus on Lung Cancer

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There were an estimated 170,000 new cases of lung cancer in 2002, accounting for 13% of cancer diagnoses. The incidence rate is declining significantly in men, from a high of 86.5 per 100,000 in 1984 to 69.8 in 1998. In the 1990s, the increase among women reached a plateau, with incidence in 1998 at 43.4 per 100,000.

During 1992-1998, mortality from lung cancer declined significantly (1.9% per year) among men, while rates for women continued to increase, but at a much slower pace (0.8% per year). Since 1987, more women have died each year of lung cancer than breast cancer, which, for over 50 years, had been the major cause of cancer death in women. Decreasing lung cancer incidence and mortality rates most likely result from decreased smoking rates over the past 30 years. However, decreasing smoking patterns among women lag behind those of men. There were an estimated 155,000 lung cancer deaths in 2002, accounting for 28% of all cancer deaths making it the number one cancer killer for both men and women.

In 2002, lung cancer was the third most commonly diagnosed and treated malignancy at Greater Baltimore Medical Center (GBMC), 178 analytic cases compared to 234 in 2001. Nearly 30% of the patients were diagnosed at stage I or II, when the cancer was still confined to the lung and the organ's lymph nodes. These numbers are about the same as the National Cancer Database (NCDB) statistics which show that nationally 33% of patients are diagnosed in these early stages of disease. Unfortunately, more patients are diagnosed with metastatic disease at presentation. Locoregionally advanced (stage III) disease was seen in 25% of patients at GBMC similar to national statistics (26%). Distant (stage IV) disease was seen more frequently at GBMC (42%) than nationally (33%). See Table 1: Stage at Diagnosis

Because of the relatively long latency period for the development of lung cancer, it is mostly a disease of older patients. At GBMC, as well as nationally, most cases are seen in the sixth or seventh decade of life. See Table 2: Age at Diagnosis

GBMC offers a comprehensive multidisciplinary stage specific individualized treatment program for each patient with lung cancer. Patients are offered treatment ranging from definitive surgical resection, to the latest advances in external beam radiation therapy and chemotherapy. At GBMC, 18% of patients with stage I disease were treated with radiation alone compared with 9.8% in the NCDB. More patients with stage II disease were treated with radiation alone (29%) or surgery and adjuvant radiation (27%) at GBMC when compared to treatment strategies in the NCDB (11% radiation alone and 12.5% surgery and radiation). Similarly, more patients with stage III disease were treated with radiation alone (32%) or surgery and adjuvant radiation (10.6%) at GBMC when compared to treatment strategies in the NCDB (16.6% radiation alone and 3.7% surgery and radiation). These differences may reflect the increased use of advanced techniques for delivery of external beam radiation, pathologic up-staging among patients who undergo surgery rather than clinical staging with radiologic studies alone and increased tendency to use multimodality approaches. See Table 3: Treatment Combinations, Stage 1

Individual tailored multimodality treatment strategies at GBMC have been as successful or better than national approaches. Stage specific five year survival at GBMC is comparable (stage II, stage IV) or better (stage I, stage III) than NCDB five-year survival data. See Table 4: 5 Year Survival Rates

Table 1

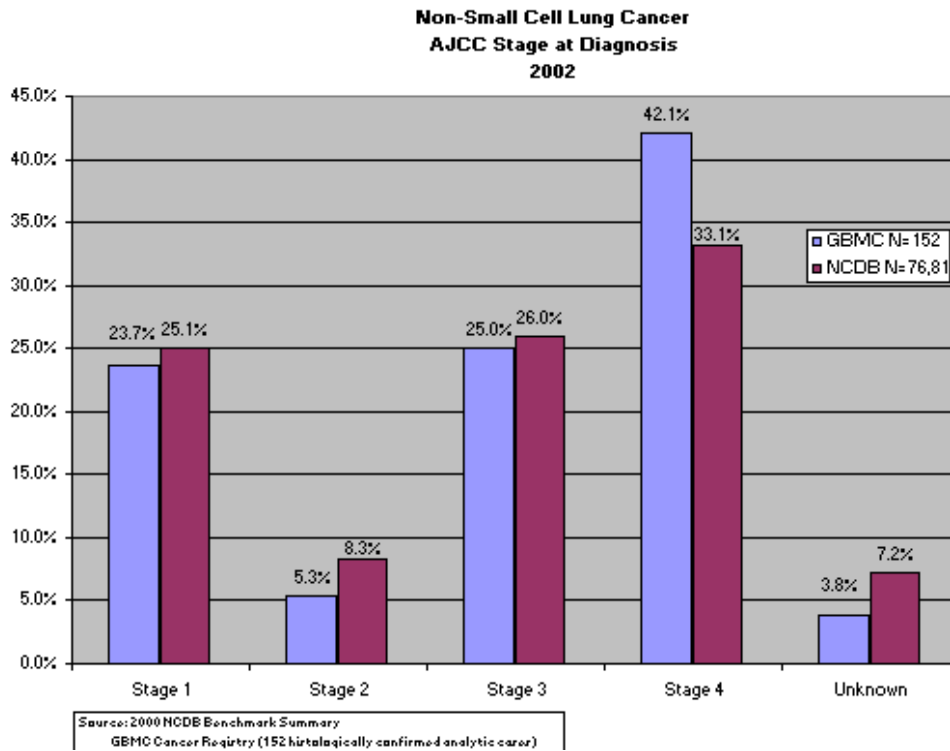


Table 2

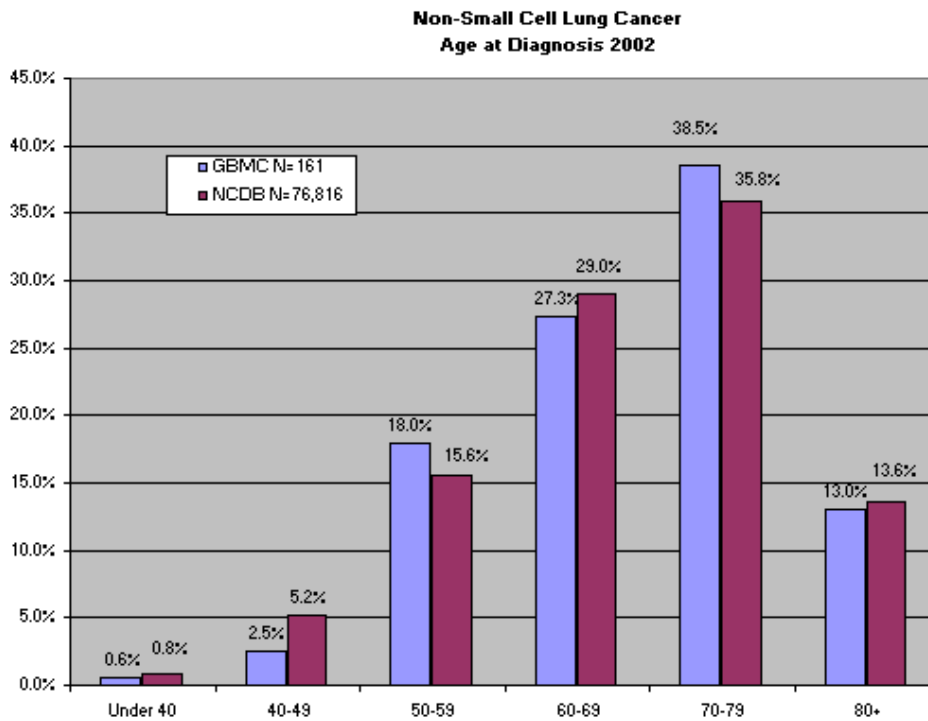


Table 3

**Treatment Combinations  
Non-Small Cell Lung Cancer at GBMC 1994-1998  
Stage I**

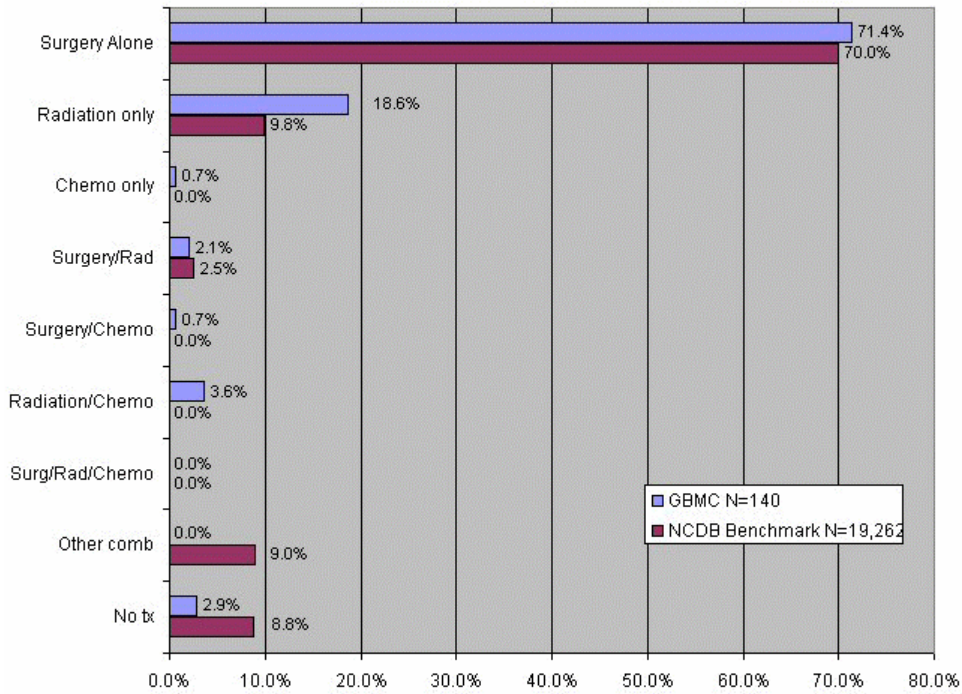


Table 4

**5 Year Survival  
Non-Small Cell Lung Cancer at GBMC  
1994 - 98**

