



Public Reporting of Outcomes
Blessing Hospital Cancer Program
December 2017

Each calendar year, the Blessing Hospital Cancer Committee develops and disseminates a report of patient or program outcomes to the public in compliance with Standard 1.12 of the Commission on Cancer accreditation standards.

Lung and Bronchus Non-Small Cell Lung Cancer Treatment

INCIDENCE

Lung cancer (both small cell and non-small cell) is the second most common malignancy in men and women in the U.S. About 14% of all new cancers are lung cancer. Lung cancer is by far the leading cause of cancer deaths among both men and women; about 1 out of 4 cancer deaths are from lung cancer. Each year, more people die of lung cancer than colon, breast and prostate cancers combined.

According to the American Cancer Society¹, lung cancer mainly occurs in older people. About 2 out of 3 people diagnosed with lung cancer are 65 or older, while less than 2% are younger than 45. The average age at time of diagnosis is 70. Overall, the chance that a man will develop lung cancer in his lifetime is about 1 in 14; for a woman, the risk is about 1 in 17. These numbers include both smoker and nonsmokers. For smokers the risk is much higher, while for non-smokers the risk is lower.

- About 222,500 new cases of lung cancer (116,990 in men and 105,510 in women)
- About 155,870 deaths from lung cancer (84,590 in men and 71,280 in women)

NON-SMALL CELL LUNG CANCER SURVIVAL RATES, BY STAGE

- The 5-year survival rate for people with stage IA NSCLC is about 49%. For people with stage IB NSCLC, the 5-year survival rate is about 45%.
- For stage IIA cancer, the 5-year survival rate is about 30%. For stage IIB cancer, the survival rate is about 31%.
- The 5-year survival rate for stage IIIA NSCLC is about 14%. For stage IIIB cancers the survival rate is about 5%.
- NSCLC that has spread to other parts of the body is often hard to treat. Metastatic, or stage IV NSCLC, has a 5-year survival rate of about 1%. Still, there are often many treatment options available for people with this stage of cancer.

According to ASCO^{®2}, “patients decide to participate in clinical trials for many reasons. For some patients, a clinical trial is the best treatment option available...Even if they do not benefit directly from the clinical trial, their participation may benefit future patients with NSCLC.” Blessing Cancer Program offers specific clinical trials for NSCLC patients or patient may be referred elsewhere. Six patients in total, (4) in 2012 and (2) in 2013, were enrolled and treated with Anamorelin HCL vs. Placebo. Results of a 12-week study, Anamorelin HCl (ANAM³), which is a novel investigational ghrelin receptor agonist, increased loss of body mass (LBM), body weight, total body mass and fat mass indicating anabolic activity and suggesting restoration of energy balance in advanced NSCLC patients with cachexia. ANAM also improved anorexia-cachexia symptoms/concerns.

Four patients in total, (1) in 2014 and (3) in 2015, were enrolled diagnosed with advanced stage or stage IV NSCLC. Nivolumab⁴ monotherapy as first-line therapy for patients with advanced NSCLC was generally well tolerated, showing promising activity with a manageable safety profile. Nivolumab is currently being evaluated in phase III trials versus standard first-line therapies for patients with PD-L1–positive advanced NSCLC. Randomized clinical trials with Nivolumab in advanced NSCLC are ongoing.

Newest update 10/27/2017 regarding clinical trials for nonsquamous, NSCLC, KEYTRUDA⁵ is an anti-PD-1 therapy that works by increasing the ability of the body’s immune system to help detect and fight tumor cells. KEYTRUDA is a humanized monoclonal antibody that blocks the interaction between PD-1 and its ligands, PD-L1 and PD-L2, thereby activating T lymphocytes which may affect both tumor cells and healthy cells.



Merck has the industry’s largest immuno-oncology clinical research program, which currently involves more than 600 trials studying KEYTRUDA (pembrolizumab) across a wide variety of cancers and treatment settings. The KEYTRUDA clinical program seeks to understand the role of KEYTRUDA across cancers and the factors that may predict a patient’s likelihood of benefitting from treatment with KEYTRUDA, including exploring several different biomarkers.

BLESSING HOSPITAL CANCER PROGRAM

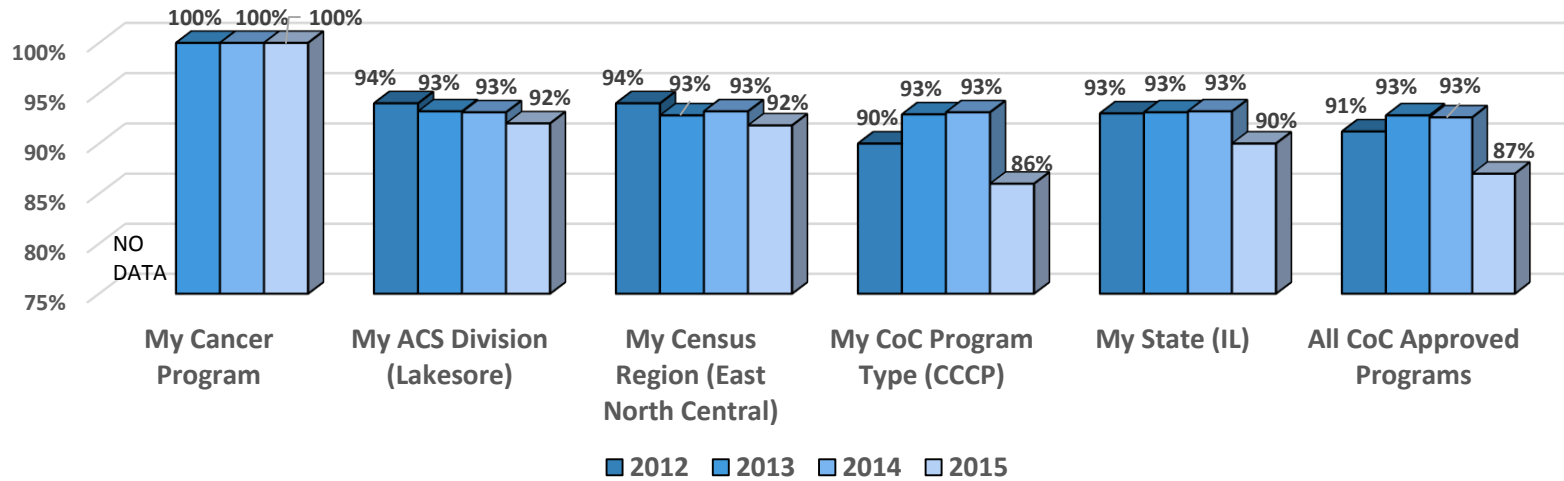
The Blessing Hospital Cancer Center treated a total six patients (2013-2015) according to the nationally recognized guideline of care for stage III lung cancer which states systemic chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months postoperatively, or it is recommended for surgically resected cases with pathologic lymph node-positive (pN1) and (pN2) NSCLC.

A total of 22 patients (2012-2015) diagnosed with stage IIIA - IIIB lung cancer were treated according to the nationally recognized guideline of care for stage III lung cancer which states that surgery is not the first course of treatment for cN2, M0 lung cancer. Results from the National Cancer Data Base quality measuring tool indicates that at Blessing, no surgery was performed for cN2 disease and systemic chemotherapy was incorporated into the treatment plan for each patient who met this measure based on their stage of disease and general medical condition.

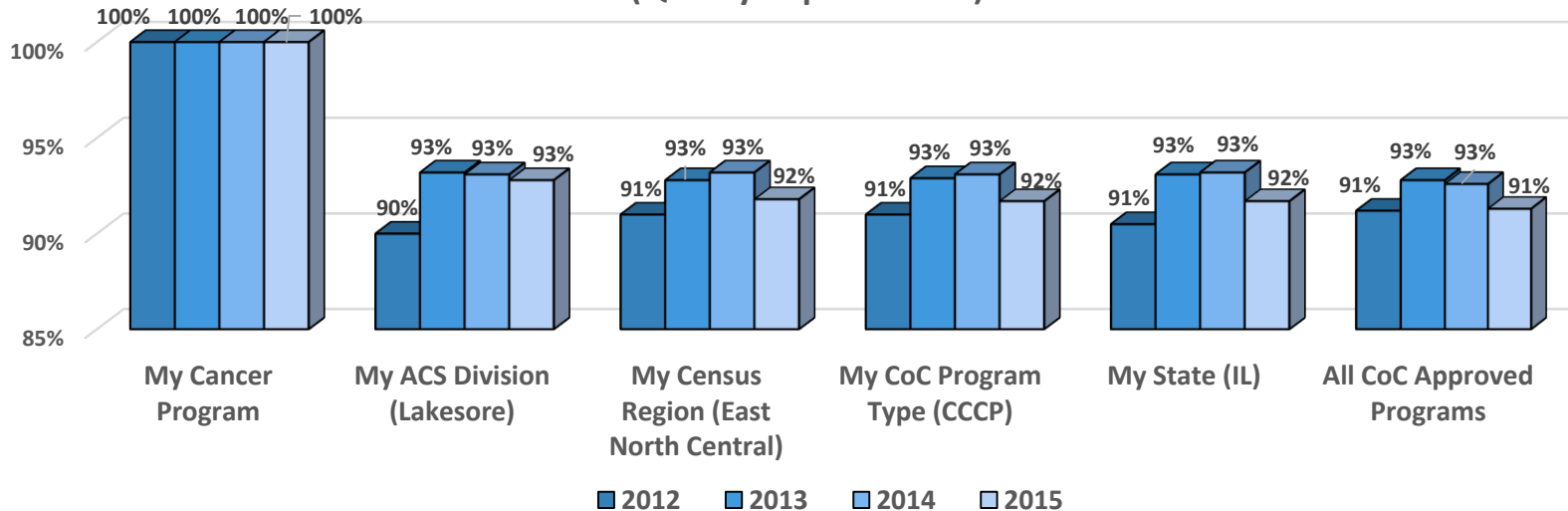
These results compare very favorably with other cancer programs in Illinois and the U.S.

Select Measures	Measure	CoC Std / % ▲	Estimated Performance Rates (%)				Review
			2012	2013	2014	2015	
Systemic chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months postoperatively, or it is recommended for surgically resected cases with pathologic lymph node-positive (pN1) and (pN2) NSCLC (Quality Improvement)	LCT	4.5 / 85%	no data	100.00	100.00	100.00	
Surgery is not the first course of treatment for cN2, M0 lung cases (Quality Improvement)	LNoSurg	4.5 / 85%	100.00	100.00	100.00	100.00	

Systemic chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months postoperatively, or it is recommended for surgically resected cases with pathologic lymph node-positive (pN1) and (pN2) NSCLC (Quality Improvement)



Surgery is not the first course of treatment for cN2, M0 lung cases (Quality Improvement)



CONCLUSION

Lung cancer patients with stage III can be assured that they will receive care at Blessing Hospital Cancer Center that is consistent with nationally recognized standards.

References:

- 1) <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2017.html>
- 2) <https://www.cancer.net/cancer-types/lung-cancer-non-small-cell/about-clinical-trials>
- 3) http://ascopubs.org/doi/abs/10.1200/jco.2015.33.29_suppl.175
- 4) <http://ascopubs.org/doi/full/10.1200/jco.2016.66.9929>
- 5) <http://investors.merck.com/news/press-release-details/2017/Merck-Provides-Update-on-European-Application-for-KEYTRUDA-pembrolizumab-in-Combination-with-Pemetrexed-and-Carboplatin-for-First-Line-Treatment-of-Nonsquamous-Non-Small-Cell-Lung-Cancer-NSCLC/default.aspx>