



# **NORTH SHORE MEDICAL CENTER**

## ***C. GORDON GRIFFITH CANCER CENTER***



### **2011 Annual Report with statistical data from 2010**



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## Chairman's Report

The Cancer Committee at North Shore Medical Center is pleased to present the 2011 Annual Report for the Cancer program. This report highlights important statistical results, including a comparative analysis with national statistics, accomplishments, events and services that have contributed to the success of the program.

In June 2011, the Cancer Program went through another successful three year accreditation with the American College of Surgeons. The Cancer program has maintained the accreditation by the American College of Surgeons Commission on Cancer (ACoS) as a Community Hospital Cancer Program since 1984.

We continue to benefit from the introduction of our Patient Navigator Program in conjunction with the American Cancer Society. Our Patient Navigator's role is to eliminate barriers to care for patients that have been diagnosed with cancer and to aid in finding resolution through a more timely diagnosis and treatment. This program will help patients access numerous resources, such as transportation, and guide the patients through the health care system, which will improve their quality of care and perhaps help extend or even save their lives.

In 2011 the Cancer Center has continued the monthly prostate screenings, held every 3<sup>rd</sup> Friday of the month. Year to date 83 people have been screened. In observation of "National Breast Cancer Awareness Month", in October the hospital also gave reduced rate screenings for digital mammograms, in the Radiology department. On September 21, 2011 H. Vincenzo Patone, M.D. presented a Prostate Cancer lecture at North Shore Medical Center, which was a forum for the general public. His lecture covered facts about prostate cancer, symptoms, warning signs, treatment options etc. On October 25, 2011 Hakan Charles-Harris M.D. will be presenting a lecture on Breast Cancer covering prevention, early detection, symptoms and treatment and this was advertised to the general public as well. North Shore Medical Center raised a total of \$8,522 for the American Cancer Society's Making Strides for Cancer campaign and had many employees and the Administrative team participate in the walk on October 9<sup>th</sup>.

The Cancer Registry staff continues to collect data on all of the newly diagnosed and treated cancer patients in the hospital and monitors the quality of care, as per the Commission's standards.

We have continued the weekly tumor boards for prospective cases held every Wednesday, at 12:30 pm now in the Boardroom in Administration. This is an opportunity for physicians to discuss newly diagnosed cancer patients in a collegial, consultative setting. A multidisciplinary team of physicians reviews data on surgery, pathology, radiology, and other diagnostic tests. They discuss the case thoroughly and recommend the best therapeutic/management options available. I encourage all the medical staff to participate and attend this valuable education, not only for themselves but also for their patients diagnosed with cancer.

I am extremely thankful of everyone involved in any of the facets of the care of our patients, including the Administration, nurses, therapists, registry and all ancillary personnel. Their commitment and their efforts to continuously improve the quality of care will pay dividends with the increased cure rates in our community.

Jaime Lozano, M.D.  
Cancer Committee Chairman

## *JUNE 2010 TO JUNE 2011 CANCER COMMITTEE MEMBERS*

### PHYSICIAN MEMBERS

**Jaime Lozano, M.D.**

Chairman  
Radiation Oncology

**Humberto Basto, M.D.**

General Surgery

**Gershwin Blyden, M.D.**

Hematology/Oncology

**Daniel Frank, M.D.**

Radiology

**John Kathe, M.D.**

Radiology (until July 2010)

**Afzal Khan, M.D.**

Hematology/Oncology

**H.Vincenzo Patone, M.D.**

Cancer Liaison Physician  
Radiation Oncology

**Jorge Perez, M.D.**

Pathology

**Mark Wickman, M.D.**

Urology

### NON-PHYSICIAN MEMBERS

**Manny Linares**

CEO

**Patricia Sechi**

COO

**Rita Hess**

CNO

**Delana Benn-Cohen, R.N.**

Director Med/Surg

**Carolyn Gilleland**

Director of Cancer Center

**Gary Hershey**

Director of Pharmacy

**Joan Hinkson-Ragoonan**

Director of Case Management

**Cheryl Kamarauskas**

Patient Navigator

**Jacquetta Latimore**

Supervisor, Imaging Services

**Carol Lawrence**

Director of Rehab Services

**Jamie Mass, R.D.**

Dietician

**Barbara Plizga**

Director of Marketing

**Berta Rios**

American Cancer Society

**Celia Zapata**

Certified Tumor Registrar

**Isis Zambrana, R.N.**

Director of CQI

***NORTH SHORE MEDICAL CENTER***

***C. GORDON GRIFFITH CANCER CENTER***

***TUMOR REGISTRY DIVISION***

*JAIME LOZANO, M.D.*  
MEDICAL DIRECTOR

*H. VINCENZO PATONE, M.D.*  
CANCER PROGRAM LIAISON PHYSICIAN

*CAROLYN GILLELAND, MBA/MSN*  
ADMINISTRATIVE DIRECTOR

*CELIA ZAPATA, BSHS*  
CERTIFIED TUMOR REGISTRAR

## **Tumor Registry**

The Tumor Registry has been in existence since January 1982. This department is designated to capture a complete summary of patient history, diagnosis, primary site/morphology, treatment, recurrences and status for every cancer patient admitted in the institution. This information becomes a key to enable doctors, researchers, and public health professionals to best understand cancer treatment and trends.

Data maintained in our registry is electronically reported to the Florida Department of Health through the Florida Cancer Data System (FCDS). These data are held in anonymity and shared with the Surveillance Epidemiology Endpoint Registry (SEER) program of the National Cancer Institute to generate the national cancer database. In addition, the Cancer Registry produced reports throughout the year at the request of physicians, administration and ancillary departments for research and planning purposes.

On staff there is one tumor registrar, who is an active member of the National Cancer Registrars Association. She attends national and state meetings to keep abreast of the latest changes in the registry field. Registry personnel serve as staff to the Cancer Committee and Oncology Conferences/Tumor Boards and coordinate the implementation of the American College of Surgeon's guidelines.

Multidisciplinary Tumor Board meetings were held weekly and 140 cases were presented in 2010 for discussion of current treatment options available and recommendations. A variety of cancer related topics were presented throughout the year with the predominance being prostate cancer and breast cancer. Last year, 90.7% of all the cases were prospective cases.

The primary site table summarizes all cases entered into the NSMC Tumor Registry in 2010 by class, sex, AJCC staging (at the time of diagnosis), and shows all major organ systems as well as sub-sites, within each system. The AJCC stage group only demonstrates analytic cases. **Table I.**

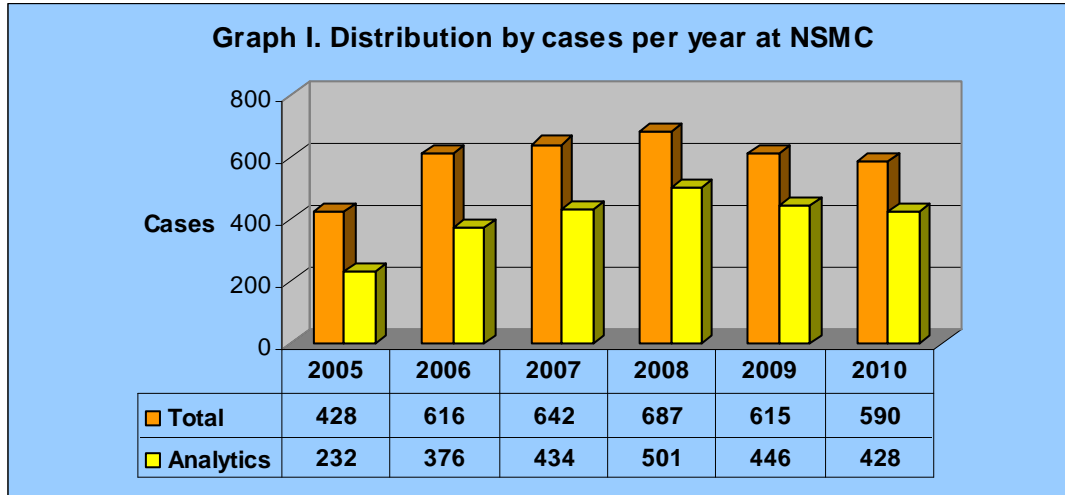
**Table I. Primary Site Tabulation for Total Cases 2010 at NSMC**

	TOTAL	CLASS		SEX		AJCC STAGE GROUP*						
		A	NA	M	F	0	I	II	III	IV	UNK	N/A
<b>ALL SITES</b>	<b>590</b>	<b>428</b>	<b>162</b>	<b>334</b>	<b>256</b>	<b>26</b>	<b>87</b>	<b>152</b>	<b>48</b>	<b>51</b>	<b>19</b>	<b>45</b>
<b>ORAL CAVITY</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>
TONGUE	3	2	1	3	0	0	0	1	0	0	1	0
OROPHARYNX	1	1	0	1	0	0	0	0	0	1	0	0
OTHER	4	2	2	4	0	0	0	0	1	0	1	0
<b>DIGESTIVE SYSTEM</b>	<b>67</b>	<b>49</b>	<b>18</b>	<b>34</b>	<b>33</b>	<b>6</b>	<b>10</b>	<b>9</b>	<b>11</b>	<b>10</b>	<b>2</b>	<b>1</b>
ESOPHAGUS	5	4	1	4	1	1	1	1	1	0	0	0
STOMACH	8	7	1	4	4	2	1	0	2	2	0	0
COLON	26	18	8	12	14	3	5	2	3	4	1	0
RECTUM	14	12	2	8	6	0	3	2	4	3	0	0
ANUS/ANAL CANAL	1	1	0	0	1	0	0	0	1	0	0	0
LIVER	5	2	3	3	2	0	0	1	0	0	0	1
PANCREAS	5	4	1	2	3	0	0	3	0	1	0	0
OTHER	3	1	2	1	2	0	0	0	0	0	1	0
<b>RESPIRATORY SYSTEM</b>	<b>68</b>	<b>49</b>	<b>19</b>	<b>47</b>	<b>21</b>	<b>0</b>	<b>11</b>	<b>3</b>	<b>11</b>	<b>18</b>	<b>6</b>	<b>0</b>
NASAL/SINUS	2	2	0	1	1	0	0	0	2	0	0	0
LARYNX	13	12	1	12	1	0	2	2	3	4	1	0
LUNG/BRONCHUS	53	35	18	34	19	0	9	1	6	14	5	0
<b>BLOOD &amp; BONE MARROW</b>	<b>15</b>	<b>6</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>
LEUKEMIA	4	3	1	2	2	0	0	0	0	0	0	3
MULTIPLE MYELOMA	6	1	5	3	3	0	0	0	0	0	0	1
OTHER	5	2	3	3	2	0	0	0	0	0	0	2
<b>CONNECT/SOFT TISSUE</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SKIN</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
MELANOMA	3	2	1	2	1	0	0	2	0	0	0	0
OTHER	3	3	0	3	0	0	0	0	0	0	0	3
<b>BREAST</b>	<b>116</b>	<b>86</b>	<b>30</b>	<b>4</b>	<b>112</b>	<b>20</b>	<b>36</b>	<b>18</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>
<b>FEMALE GENITAL</b>	<b>32</b>	<b>25</b>	<b>7</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>11</b>	<b>3</b>	<b>6</b>	<b>5</b>	<b>0</b>	<b>0</b>
CERVIX UTERI	10	7	3	0	10	0	2	1	3	1	0	0
CORPUS UTERI	15	13	2	0	15	0	8	1	3	1	0	0
OVARY	6	4	2	0	6	0	1	1	0	2	0	0
VULVA	1	1	0	0	1	0	0	0	0	1	0	0
<b>MALE GENITAL</b>	<b>193</b>	<b>139</b>	<b>54</b>	<b>193</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>110</b>	<b>9</b>	<b>12</b>	<b>3</b>	<b>0</b>
PROSTATE	190	137	53	190	0	0	4	110	9	12	2	0
TESTIS	2	2	0	2	0	0	1	0	0	0	1	0
OTHER	1	0	1	1	0	0	0	0	0	0	0	0
<b>URINARY SYSTEM</b>	<b>23</b>	<b>15</b>	<b>8</b>	<b>12</b>	<b>11</b>	<b>0</b>	<b>8</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>
BLADDER	13	9	4	5	8	0	4	2	2	1	0	0
KIDNEY/RENAL	9	5	4	6	3	0	4	0	1	0	0	0
OTHER	1	1	0	1	0	0	0	1	0	0	0	0
<b>BRAIN &amp; CNS</b>	<b>22</b>	<b>18</b>	<b>4</b>	<b>7</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18</b>
BRAIN (MALIGNANT)	4	4	0	2	2	0	0	0	0	0	0	4
OTHER	18	14	4	5	13	0	0	0	0	0	0	14
<b>ENDOCRINE</b>	<b>10</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>7</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>
THYROID	4	3	1	0	4	0	2	0	0	1	0	0
OTHER	6	4	2	3	3	0	0	0	0	0	0	4
<b>LYMPHATIC SYSTEM</b>	<b>13</b>	<b>10</b>	<b>3</b>	<b>7</b>	<b>6</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>
HODGKIN'S DISEASE	1	0	1	1	0	0	0	0	0	0	0	0
NON-HODGKIN'S	12	10	2	6	6	0	3	3	1	3	0	0
<b>UNKNOWN PRIMARY</b>	<b>14</b>	<b>12</b>	<b>2</b>	<b>5</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>
<b>OTHER/ILL-DEFINED</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

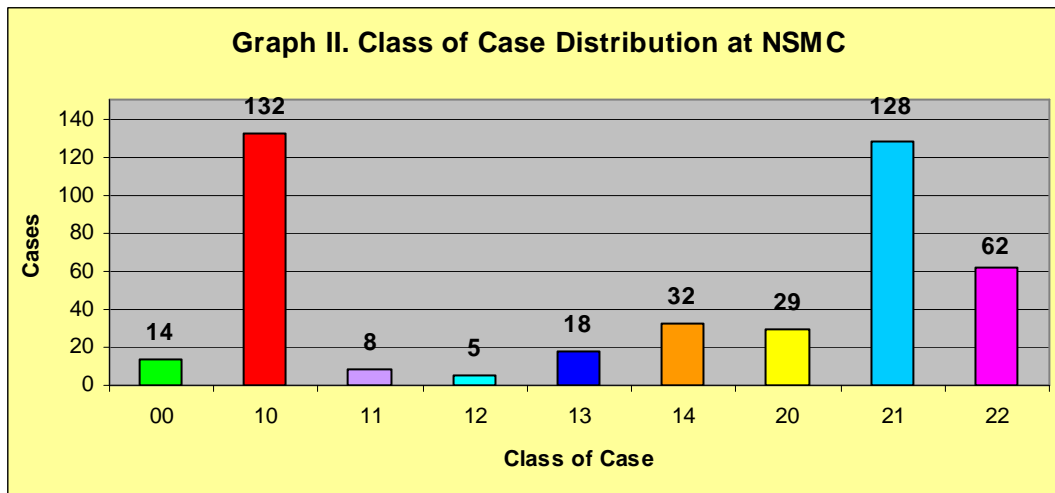
\*AJCC stage group only demonstrates analytic cases

In the year 2010, a total of 590 cases were added to the registry, 428 were analytic. A slight decrease is noticed when compared with 446 analytic cases in 2009.

**Graph I.**

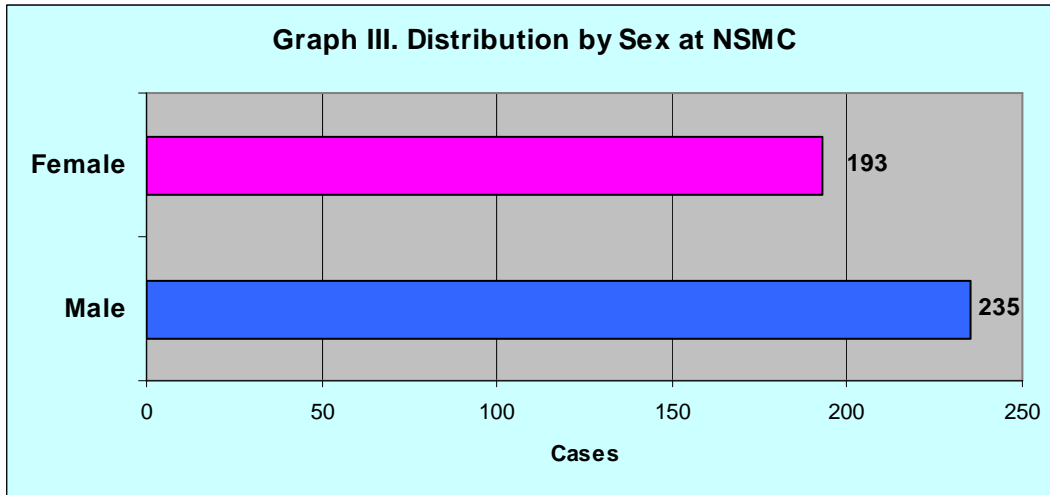


The graph on class of case displays the distribution of analytic cases. Class of case 10 holds the highest amount of cases with 132, followed by class of case 21 with 128 cases. **Graph II.**

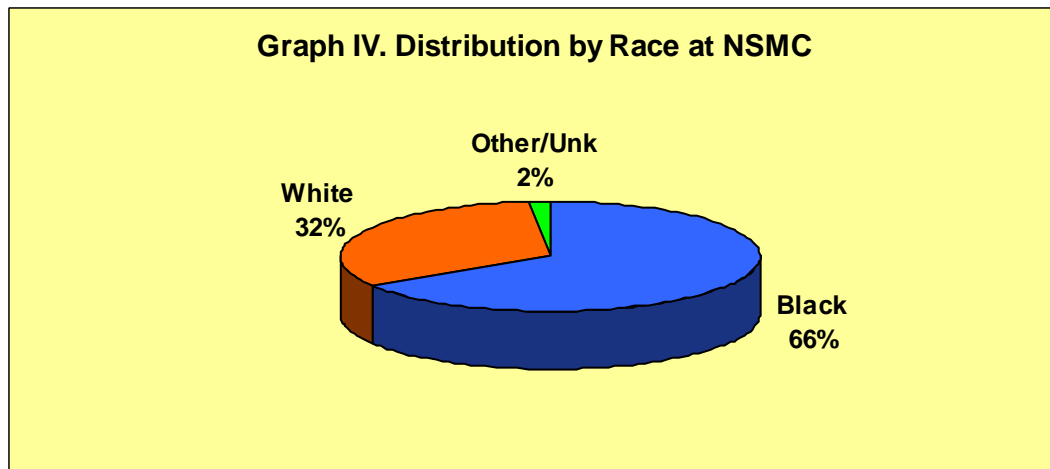


\*Please refer to page 20 for the class of case definitions.

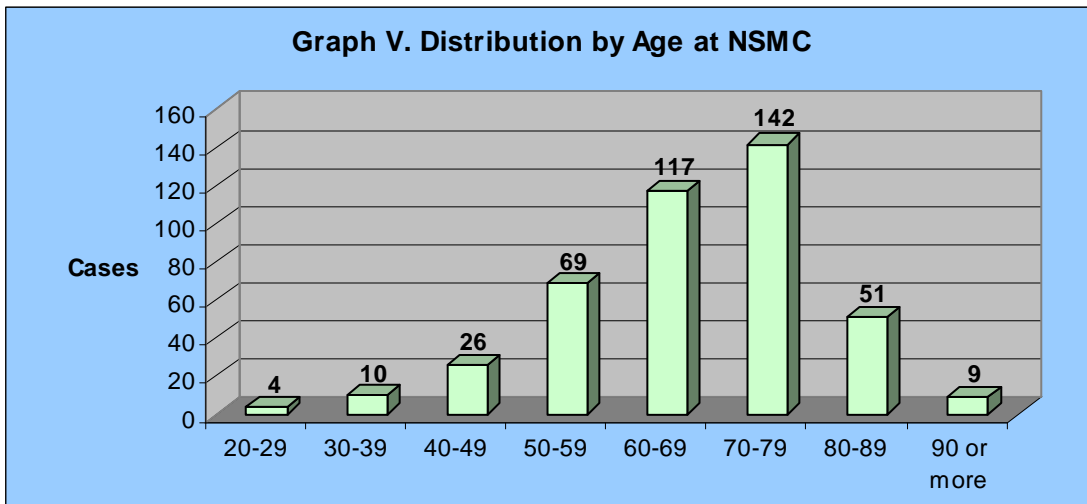
The distribution by sex graph shows there were more males than females diagnosed and/or treated at NSMC. **Graph III.**



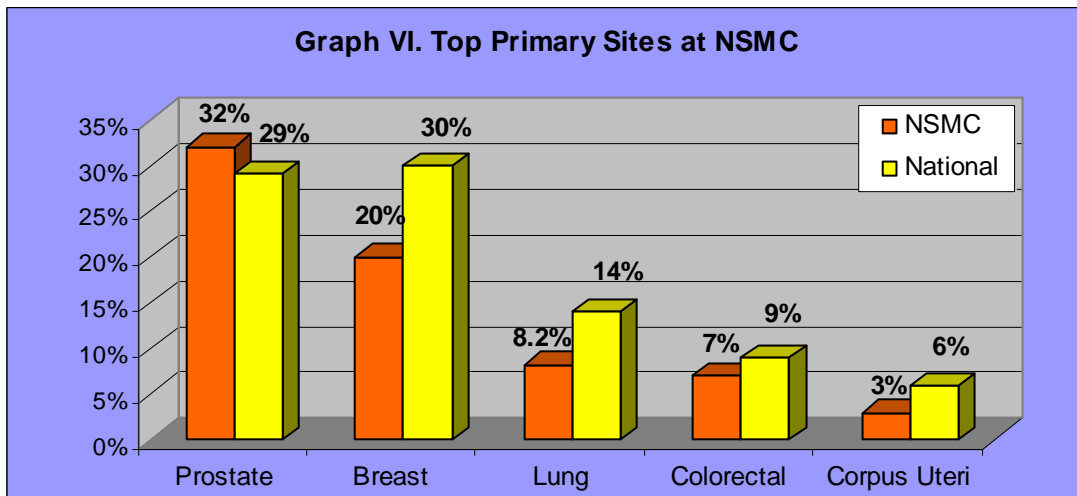
The leading race diagnosed and/or treated at NSMC was the black population with 66% compared to the white population with 32%. **Graph IV.**



The predominant age group at diagnosis was the 70-79 population with 142 cases. The 60-69 years old population trailed closely behind with 117 cases. **Graph V.**



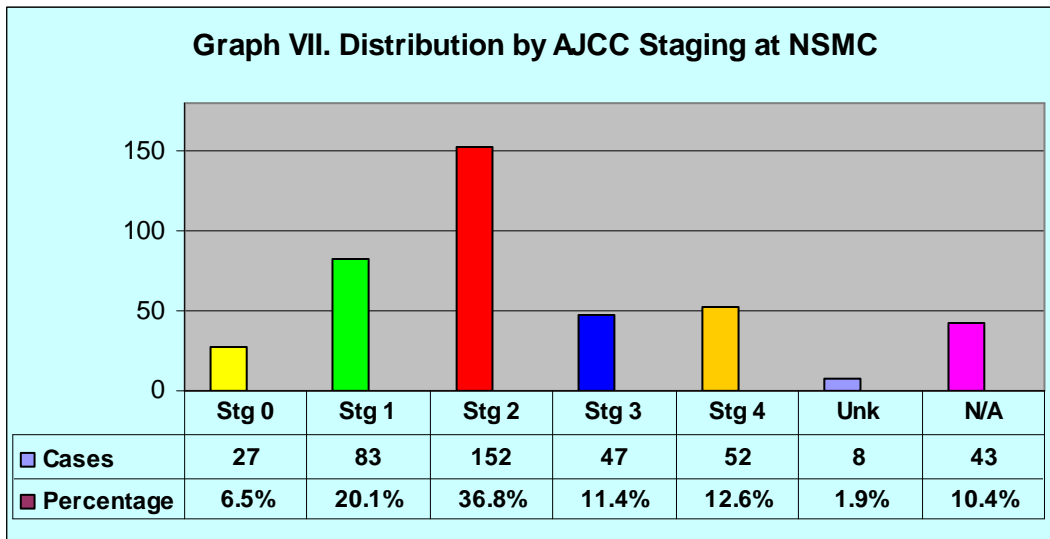
Prostate cancer was the leading cancer diagnosed and/or treated at NSMC in 2010, representing 32%. This graph compares the top five sites with national statistics. **Graph VI.**



\*American Cancer Society (Cancer Facts & Figures 2011)

The American Joint Commission on Cancer (AJCC) TNM Staging System is used for all applicable cancer sites. A TNM staging form is made part of the medical records to ensure compliance and accuracy of staging.

There were 262 analytic cases that were diagnosed at Stages 0, 1, or 2. These are considered to be potentially curable. More advanced stages of cancers, stage 3 or 4, totaled 99 cases. The unknown stage represents cases in which certain criteria did not meet the staging standards, or there was not enough information at the time of diagnosis. There were 43 cases that are not applicable for staging according to the AJCC staging requirements. This graph excludes class of case 00 based on the AJCC guidelines. **Graph VII.**



The majority of cases treated in 2010 were prostate cancer which had the primary treatment combination being concomitant radiation and hormone therapy. Overall radiation therapy and surgery alone were 63 and 49 cases, respectively. Lung cancer has the highest amount of cases in the “non-treated” category due to an advanced stage at diagnosis. The “all others” category indicates any other treatment combination not shown in Table II. This table excludes all benign tumors and class of case 00, which reduces the total of analytic cases from 428 to 398.

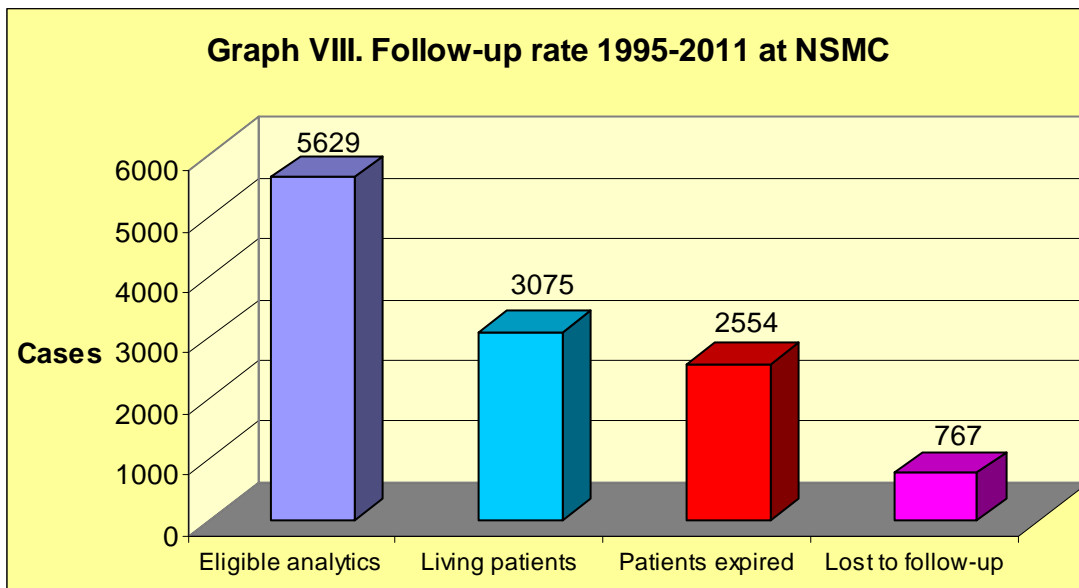
**Table II. Analytic Cases Distribution by First Course Treatment**

SITE NAME	TOTAL CASES	RAD/HORM	RAD	SURG	SURG/RAD	SURG/RAD/HORM	SURG/RAD/CHEM/HORM	NONE	ALL OTHERS
BASE OF TONGUE	2	0	1	0	0	0	0	0	1
PALATE	1	0	0	0	0	0	0	0	1
TONSIL	1	0	0	0	0	0	0	0	1
ESOPHAGUS	3	0	0	0	0	0	0	1	2
STOMACH	8	0	0	1	0	0	0	5	2
SMALL INTESTINE	1	0	0	0	0	0	0	1	0
COLON	18	0	0	12	0	0	0	4	2
RECTOSIGMOID JUNCTION	2	0	0	2	0	0	0	0	0
RECTUM	9	0	0	0	0	0	0	3	6
ANUS & ANAL CANAL	1	0	0	0	0	0	0	0	1
LIVER & BILE DUCTS	2	0	0	0	0	0	0	1	1
PANCREAS	4	0	0	0	0	0	0	1	3
NASAL CAVITY & MIDDLE EAR	1	0	0	0	1	0	0	0	0
ACCESSORY SINUSES	1	0	0	0	0	0	0	0	1
LARYNX	11	0	3	1	0	0	0	2	5
BRONCHUS & LUNG	33	0	3	0	0	0	0	19	11
BLOOD & BONE MARROW	6	0	0	0	0	0	0	4	2
SKIN	6	0	1	3	0	0	0	1	1
CONNECTIVE SUBCUTANEOUS OTHER SOFT TISSUE	1	0	0	0	0	0	0	0	1
BREAST	83	0	1	7	23	28	4	14	6
CERVIX UTERI	7	0	3	0	0	0	0	1	3
CORPUS UTERI	13	0	0	2	6	0	0	1	4
OVARY	4	0	0	1	0	0	0	1	2
PROSTATE GLAND	136	65	45	7	1	0	0	9	9
TESTIS	2	0	0	0	1	0	0	0	1
KIDNEY	5	0	0	2	0	0	0	3	0
URETER	1	0	0	1	0	0	0	0	0
URINARY BLADDER	9	0	0	7	1	0	0	1	0
BRAIN	5	0	2	0	0	0	0	2	1
THYROID GLAND	2	0	0	2	0	0	0	0	0
OTHER ILL DEFINED SITES	1	0	0	0	0	0	0	1	0
LYMPH NODES	7	0	0	1	0	0	0	2	4
UNK PRIMARY	12	0	4	0	0	0	0	8	0
<b>OVERALL TOTALS</b>	<b>398</b>	<b>65</b>	<b>63</b>	<b>49</b>	<b>33</b>	<b>28</b>	<b>4</b>	<b>85</b>	<b>71</b>

\* According to SEER statistics 56% of cases with lung cancer are diagnosed after the cancer has already metastasized (distant stage)

\*\* The nine prostate cases that have not received treatment may be due to watchful waiting conditions.

In accordance with the American College of Surgeons and the Florida Cancer Data System (FCDS), each patient is provided with an annual lifetime follow-up service that is essential to evaluate cancer care outcomes. It also provides an automatic reminder to both physician and patient to schedule regular physician exams. The Cancer Registry follows over 5,600 patients annually throughout Florida and the United States where our patients reside. The registry has kept satisfactory follow up rate since 1995. **Graph VIII.**



## **Breast Cancer at North Shore Medical Center, 2006-2010**

Excluding cancers of the skin, breast cancer is the most common cancer among women, accounting for nearly 1 in 3 cancers diagnosed in US women. Men are generally at low risk for developing breast cancer. According to the American Cancer Society, an estimated 230,480 new cases of invasive breast cancer are expected to occur among women in the US during 2011; about 2,140 new cases are expected in men. The incidence rate for female breast cancer began to decline in 2000 mainly because of the reduction in the use of menopausal hormone therapy (MHT). A study found that the use of combined estrogen plus progestin MHT was associated with an increase risk of breast cancer. In addition to invasive breast cancer, 57,650 new cases of in situ breast cancer are expected to occur among women in 2011. Of these, approximately 85% will be ductal carcinoma in situ (DCIS). Breast cancer ranks second as a cause of cancer death in women (after lung cancer) although mortality rates have steadily decreased since 1990. An estimated 39,520 breast cancer deaths are expected in 2011.

Breast cancer typically produces no symptoms when the tumor is small and most treatable. Therefore, it is very important for women to follow recommended screening guidelines for detection at an early stage. This can be seen as an abnormality detected on a mammogram. When breast cancer has grown to a size that can be felt, the most common physical sign is a painless lump. Less common symptoms include persistent changes to the breast, such as thickening, swelling, distortion, tenderness, skin irritation, redness, or nipple abnormalities, such as ulceration, retraction, or spontaneous discharge.

The most important risk factor for breast cancer, besides being female, is increasing age. Potentially adjustable risk factors include weight gain after age 18, being overweight or obese, use of combined estrogen and progestin hormone therapy, physical inactivity, and consumption of one or more alcohol beverages per day. Reproductive factors that increase risk include a long menstrual history, recent use of oral contraceptives, never having children, and having one's first child after age 30. Risk is also increased by a personal or family history of breast cancer and inherited genetic mutations in the breast cancer susceptibility genes BRCA1 and BRCA2. Women with a strong family history of breast and/or ovarian cancer should be offered counseling to determine if genetic testing is appropriate.

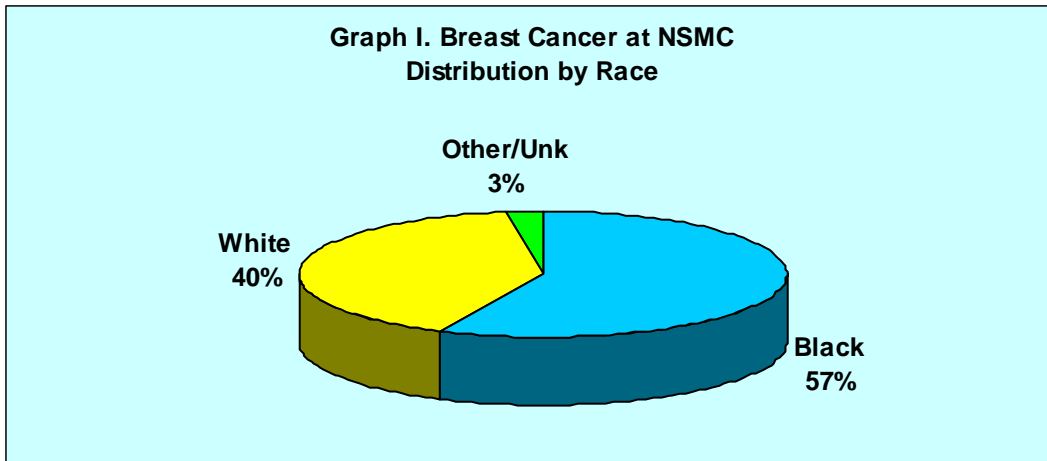
Numerous studies have shown that early detection saves lives and increases treatment options. A good screening test to find breast cancer at an early stage is a mammogram. On average, mammography will detect about 80-90% of breast cancers in women without symptoms. All suspicious abnormalities should be biopsied for a definitive diagnosis.

Taking into account tumor size, extent of spread, and other characteristics, as well as patient preference, treatment usually involves lumpectomy (surgical removal of the tumor with clear margins) or mastectomy (surgical removal of the breast). For women whose cancer has not spread to the skin, chest wall, or distant organs, numerous studies have shown that long-term survival rates after lumpectomy plus radiation therapy are similar to survival rates after mastectomy. Removal of some of the underarm lymph nodes during surgery is usually recommended to determine whether the tumor has spread beyond the breast. Treatment may also involve radiation therapy, chemotherapy (before or after surgery), hormone therapy or targeted therapy.

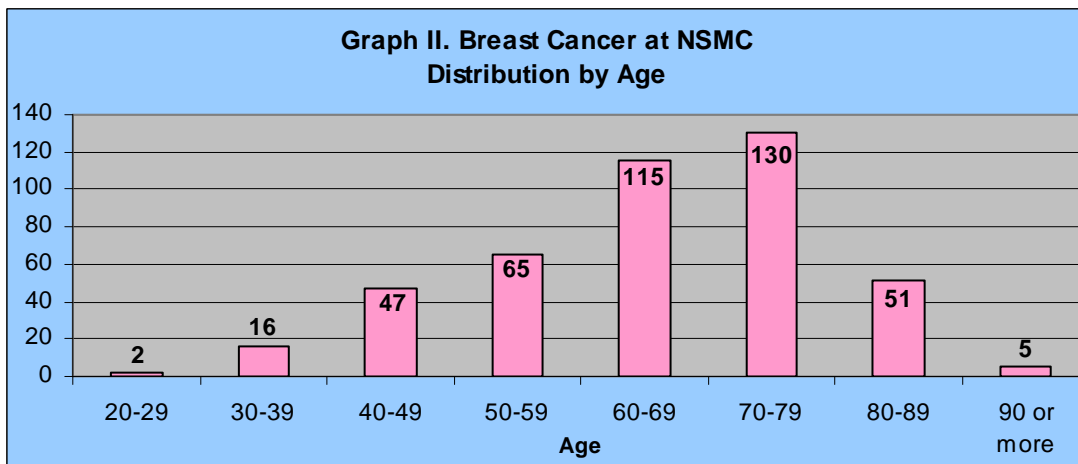
For the past ten years breast cancer has been one of the top primary sites diagnosed and/or treated at North Shore Medical Center. From 2006-2010, a total of 431 analytic breast cancer cases were seen at this institution. According to the American Cancer Society the 5-year relative survival rate for female breast cancer patients has improved from 63% in the early 1960s to 90% today. For North Shore Medical Center, the 5-year relative survival rate is 86.2% from 2001-2007 (Graph V).

<b>Table I. Breast Cancer Distribution by Histology</b>	<b>Number of Cases</b>
<b>Invasive (80%)</b>	
Adenocarcinoma nos	3
Carcinoma nos	4
Infiltrating ductal carcinoma	284
Lobular carcinoma nos	20
Infilt duct and lobular carcinoma	14
Mucinous adenocarcinoma	8
Inflammatory carcinoma	3
Other invasive	10
<b>In Situ (20%)</b>	
Ductal carcinoma in situ	49
Lobular carcinoma in situ	5
Intraductal ca & lobular ca in situ	3
Comedocarcinoma noninfiltrating	11
Cibriform carcinoma in situ	7
Other in situ	10
<b>Total</b>	<b>431</b>

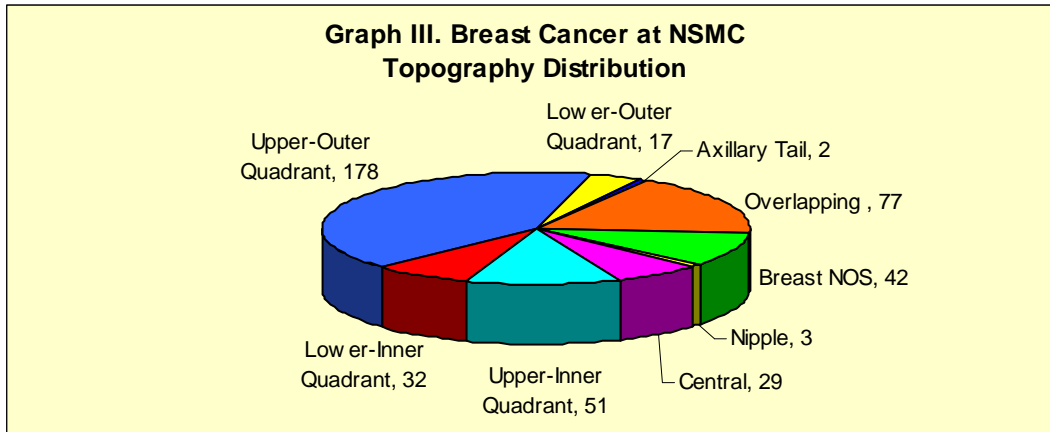
The majority of breast cancer cases diagnosed and/or treated at North Shore Medical Center were among the black population with 57%, compared to the white population with 40%. **Graph I.**



The leading age group at diagnosis for breast cancer was 70-79 years old with 130 cases. This was followed by 60-69 years old with 115 cases. **Graph II.**



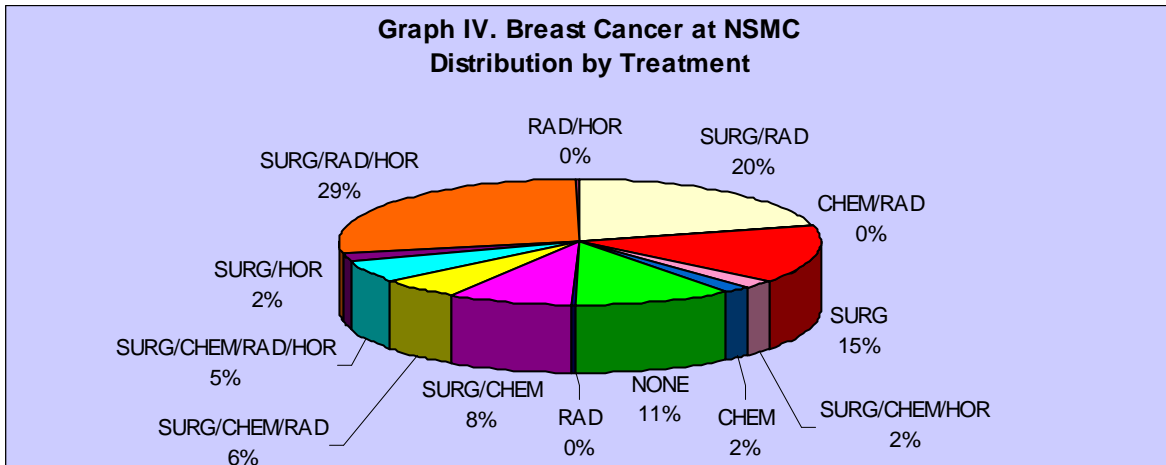
The predominant breast topography was in the upper-outer quadrant with 178 cases. **Graph III.**



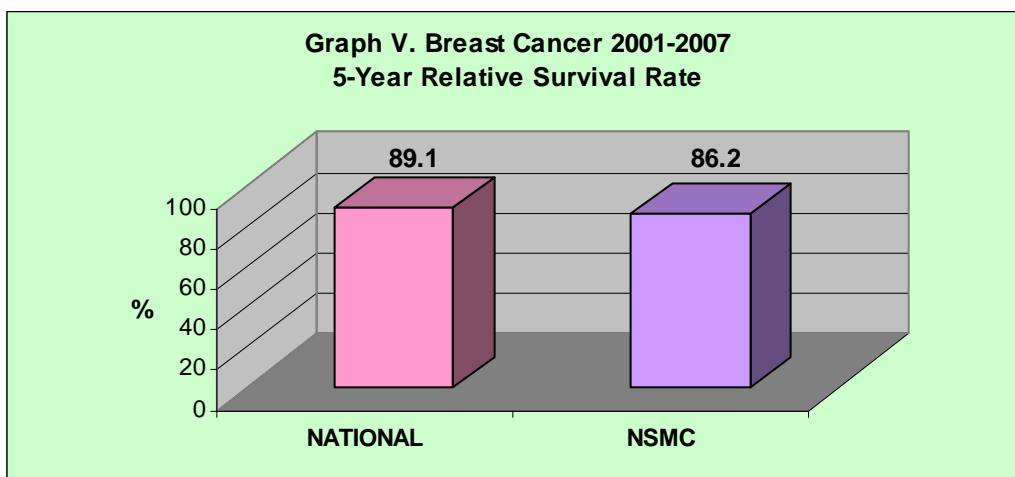
Overall, 20% of breast cancer cases had in situ stage disease. There were 236 patients (54.7%) with local stage, 92 patients (21.2%) with regional stage, and 17 patients (3.9%) with distant stage. **Chart I.**

Stage	N0.	%
In Situ	85	20
Local	236	54.7
Regional	92	21.2
Distant	17	3.9
Unknown	1	0.2

Treatment distribution shows that surgery combined with radiation and hormone therapy was the most frequently utilized option with 29%. Followed by, surgery combined with radiation alone (20%). **Graph IV.**

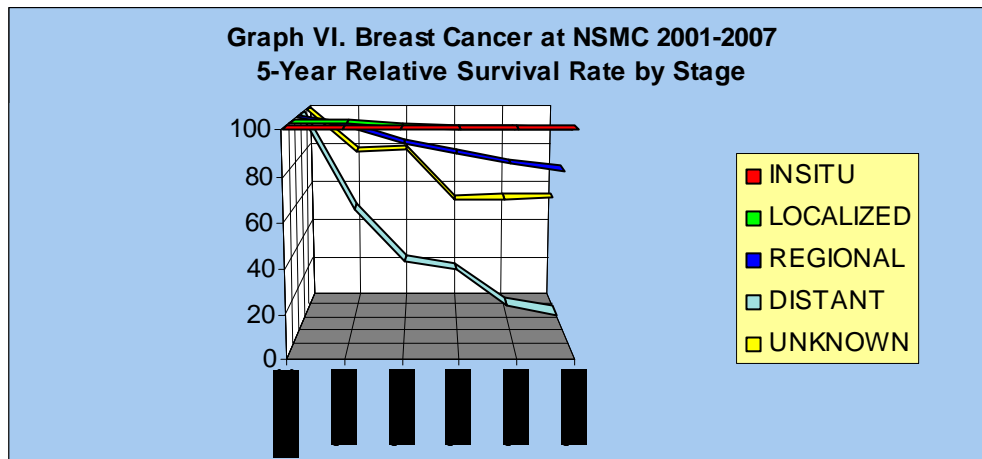


North Shore Medical Center's overall five-year relative survival rate, diagnosed from 2001-2007 was 86.2%. This number is very similar to the nationwide statistics of 89.1% according to SEER (Surveillance Epidemiology and End Results). **Graph V.**



\*Source: Surveillance Epidemiology and End Results.

The five-year relative survival rate by stage revealed that in situ and localized stages remained stable with 100% and 97%, respectively. For distant stage there is drop to 53.1% in the first year. **Graph VI.**



## **Definitions**

**Analytic:** A case that was either initially diagnosed or received all or part of the first course of treatment at the reporting institution.

**Class 00:** First diagnosed at NSMC, all treatment (or decision not to treat) elsewhere

**Class 10:** First diagnosed at NSMC and part or all of first course treatment (or decision not to treat) at NSMC, NOS

**Class 11:** First diagnosed by staff physician and part of first course treatment at NSMC

**Class 12:** First diagnosed by staff physician and first course (or a decision not to treat) at NSMC

**Class 13:** First diagnosed and part of first course treatment at NSMC

**Class 14:** First diagnosed and all first course treatment (or a decision not to treat) at NSMC

**Class 20:** First diagnosed elsewhere and all or part of first course treatment at NSMC, NOS

**Class 21:** First diagnosed elsewhere and part of treatment at NSMC

**Class 22:** First diagnosed elsewhere and all treatment at NSMC

**Non-analytic (includes Class 32):** Patient diagnosed and received all first course of treatment at another institution, patients diagnosed at autopsy, and patients diagnosed and treated at the reporting facility before the registry's reference day.

**Stage:** The Tumor Registry collects the staging by using the Tumor, Nodes and Metastasis (TNM) system from the American Joint Committee on Cancer, and Local, Regional or Distant from (SEER) Surveillance, Epidemiology and End Results Program. **Stage 0** = In-situ, **Stage 1** = Local, **Stage 2** = Regional/Direct Extension, **Stage 3** = Regional/Nodes Only, **Stage 4** = Regional/Direct Extension & Nodes.

**First course of treatment:** Includes all methods of treatments recorded in the treatment plan and administered to the patient before disease progression or recurrence.

**Survival:** Survival is calculated from the date of best confirmation of diagnosis to the date of last contact for analytic cases.

**Successful follow up:** Is the percent of dead and living patients that were contacted by the Tumor Registry in the last 12 months. It is required to use registry data for survival analysis.

**Lost to follow up:** Is the percent of patients that have not been contacted by the Tumor Registry in the last 15 months. They are also known as "delinquent cases".

## **References:**

- American Cancer Society Cancer Facts & Figures 2011
- Breast Cancer Facts & Figures 2011-2012
- Website information:
  - <http://seer.cancer.gov/statfacts/html/breast.html#survival>
  - <http://www.cancer.org/Research/CancerFactsFigures/CancerFactsFigures/cancer-facts-figures-2011>