# SFMC Breast Cancer Site Study: 2011

#### Introduction

Breast cancer is the most frequently diagnosed cancer among American women, except for skin cancers. It is the second leading cause of cancer death in women, exceeded only by lung cancer. It is estimated that 226,870 women will be diagnosed with and 39,510 women will die of invasive breast cancer in 2012. About 63,300 new cases of carcinoma in situ or non invasive breast cancer will be diagnosed in 2012.

Breast cancer incidence rates began decreasing in 2000, with the largest decrease 2002 to 2003. This large decrease is thought to be due to the decrease use of hormone replacement therapy after menopause that occurred after the results of the Women's Health Initiative were published in 2002. This study linked the use of hormone therapy to an increased risk of breast cancer and heart diseases. Incidence rates of breast cancer have been stable since 2004.

On January 1, 2009, in the United States there were approximately 2,747,459 women alive who had a history of breast cancer. This includes any person alive on January 1, 2009 who had been diagnosed with cancer of the breast at any point prior to January 1, 2009 and includes persons with active disease and those who are cured of their disease.

## The Bon Secours Cancer Institute at St. Francis Experience

The following sections highlight Bon Secours Cancer Institute at St. Francis' experience in breast cancer.

#### By age

Age is a critical factor in determining local and systemic treatment for breast cancer patient. The ages of patients diagnosed at Bon Secours Cancer Institute at St. Francis is shown in Figure 1.

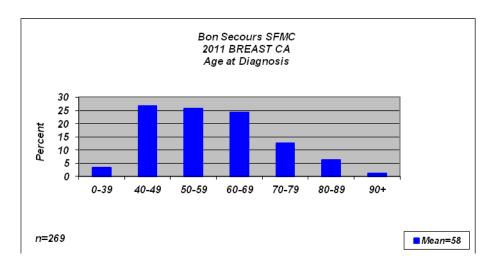


Fig. 1

#### By race

African American women are three times more likely to be diagnosed with triple negative breast cancer, a particularly aggressive form of breast cancer that is estrogen receptor negative, progesterone receptor negative and HER2 negative. The higher prevalence of triple negative tumors in black women likely contributes to black women's unfavorable breast cancer prognosis.

Triple-negative breast cancers are usually more aggressive, harder to treat, and more likely to come back (recur) than cancers that are hormone receptor positive or HER2-positive. Triple negative breast cancers don't usually respond to hormonal therapy medicines or the targeted therapies Herceptin and Tykerb.

The race of patients diagnosed at Bon Secours Cancer Institute at St. Francis is shown in Figure 2.

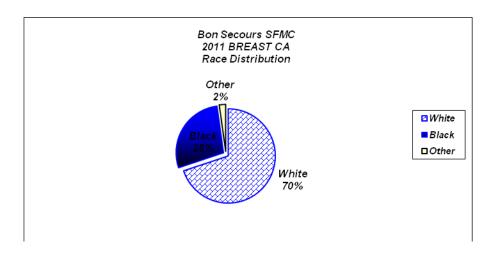


Fig. 2

## By histology

There are two main types of breast cancers: ductal carcinoma and lobular carcinoma.

Newer molecular testing is further subdividing breast cancers into subtypes that are leading to more personalized cancer treatment options. Figure 3 shows the percentages of each type of breast cancer diagnosed at Bon Secours Cancer Institute at St. Francis.

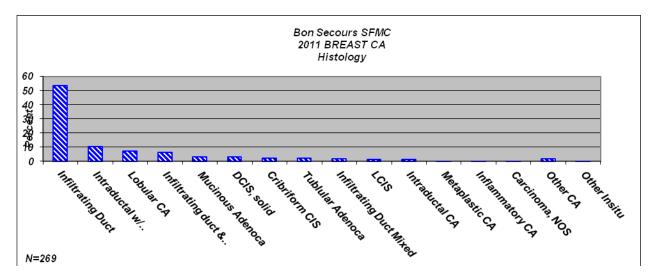


Fig. 3

### **By Stage**

When clinicians discuss treatment options and prognosis for breast cancer patients, stage of disease is a vital part of the decision making process. Stage (or extent) of disease determines how much the disease has spread locally, regionally or distantly including lymph nodes and other organs. Each stage of disease may have different treatment options. Listed in Figure 4 is the percentage of breast cancer cases by stage from Bon Secours Cancer Institute at St. Francis.

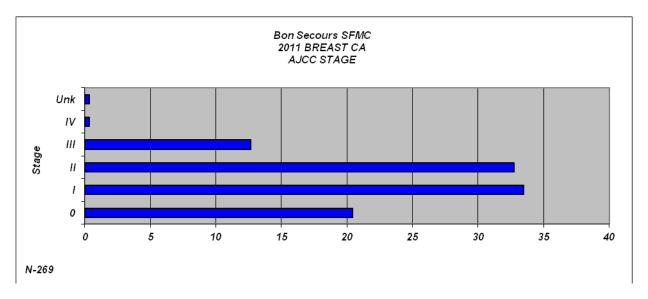


Fig. 4

#### By treatment

In Figure 5, you will see the different treatment combinations for Bon Secours Cancer Institute at St. Francis.

Treatment is based upon the histology, molecular findings, patient's age and stage of disease. In general, National Comprehensive Cancer Network (NCCN) guidelines recommendations were followed for treating patients at Bon Secours Cancer Institute at St. Francis (taking into account patients' preferences).

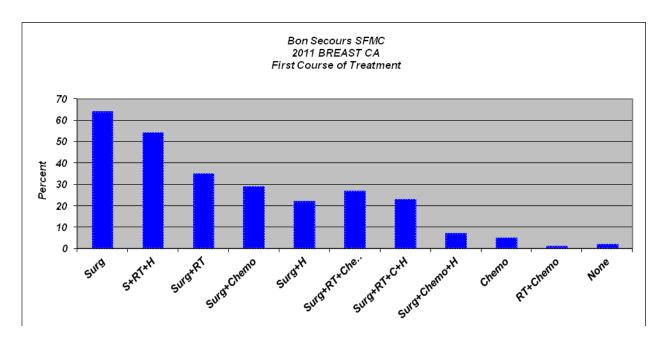
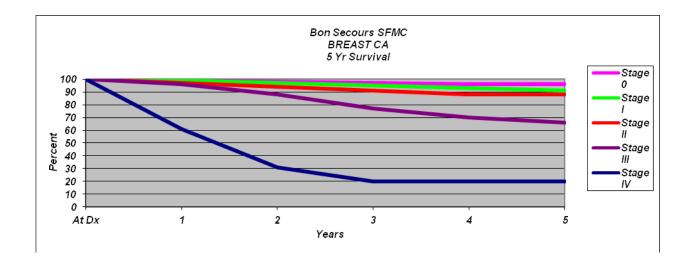
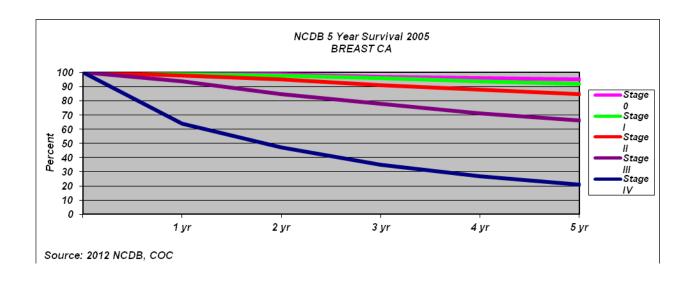


Fig. 5

# **5 year Survival rates**

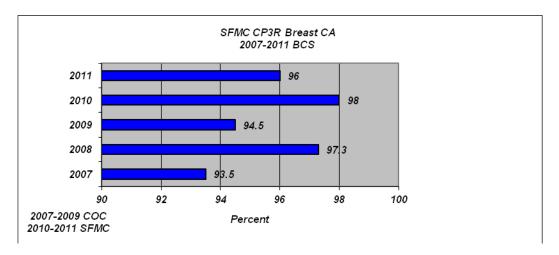
5 year survival data for Bon Secours Cancer Institute at St. Francis compares favorably with the data from the National Cancer Data Base (NCDB) as seen in the graphs below.





## Post-lumpectomy breast radiation

The NCCN guidelines specify that radiation therapy to the breast is administered (within 1 year of diagnosis) for women under 70 receiving breast conserving surgery for breast cancer. Below is the 2007-2011 rates of breast radiation following breast conserving surgery at Bon Secours Cancer Institute at St. Francis. The majority of women who did not receive breast radiation after lumpectomy were offered radiation but refused it.



- 1) NCI SEER date
- 2) American cancer society