2001-2002 Cancer Program

Annual Report

Including 2001 Cancer Registry Statistical Review

Cancer Committee

Saint Francis/Mount Sinai Regional Cancer Center

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CANCER COMMITTEE – 2001/2002 MEMBERSHIP

Peter Tutschka, M.D.	Chairman/Medical Oncology
Robert Babkowski, M.D.	Pathology
Steven Brown, M.D.	Colorectal Surgery/Cancer Liaison
Bruce Chozick, M.D.	Neurosurgery
Faye Davis, M.M., C.C.S.	Medical Records
Lynn Davis, M.D.	Medical Oncology
Judy Feret, R.N., M.S.	Medical Oncology
James Flaherty, M.D.	Surgery, General
Susan Gonsalves, R.H.I.T., C.T.R.	Cancer Registry
Bruce Kaplan, M.D.	Radiation Oncology
Allan Mayer, D.O.	Gynecologic Oncology
Reverend Marcus McKinney	Pastoral Care
Thomas Miller, M.D.	Rehabilitation Medicine
Joan Moore, A.P.R.N.	Clinical Nurse Specialist
Carolyn Reid, R.N., M.S.	Home Care Services
Zia Rahman, M.D.	Medical Oncology
Steve Rosen, R.N.	Administration
Frank Setter, M.D.	Anesthesiology
George Wislo, M.D.	Radiology

CONSULTANTS:	**CONSULTANTS:**
George Barrows, M.D.	Pathology
Patricia Daigneault	Cancer Registry
Sandra Gulla, RHIA, C.T.R.	Cancer Registry
Sandra Watcke, R.N.	Nurse Manager, Inpatient
Bonnie Zebrowski, R.N.	Nurse Manager, Outpatient

The Cancer Committee meets a minimum of four times a year, as required by the Commission on Cancer. The meetings are held on Friday mornings at 7:30 a.m. in Conference Room B, 3rd floor, in the Patient Care Tower.

Message From The Cancer Committee Chairman

It is my privilege to write this report as I end my first year as Cancer Committee Chairman, and Chief of the Cancer Clinical Program. I would like to thank each of the committee members for their significant input and participation at each quarterly meeting. With the input and recommendations of the committee, the hospital is performing a critical review of the establishment of a number of new clinical programs in Cancer, notably a Bone Marrow Transplant Program at our institution. Such a comprehensive program would not be considered without the active participation of the committee members, and the hospital's strong support for providing our community with contemporary cancer care. By the end of this year, we will have completed the renovation at our Inpatient Cancer Unit, which will provide our patients, families and staff with a pleasant environment for healing and comfort. We are also finalizing plans to create additional treatment and exam space in our Cancer Center, while also completing plans to significantly enlarge the Center in the near future.

The Cancer Committee approved the annual Prevention/Screening and Quality Improvement Plans. We accomplished to meet the stated goals of each plan as highlighted below.

Prevention/Screening and Educational Accomplishments:

- Active Involvement in the Connecticut Breast and Cervical Early Detection Program providing mammography and cervical cancer screening to underinsured women in our community.

- On Oct. 3, 2002 a community lecture on Breast Cancer was held with a focus on younger women. There were more than 100 persons in attendance. During this year we were also very active in our community outreach speaking program to civic groups on the warning signs of breast cancer and the importance of early detection.

- During the month of September, our Prostate Support Group distributed information to the community on Prostate Cancer and early detection.

- Providing our community with numerous support groups including Breast Cancer, Prostate Cancer, Leukemia and General Support Groups.

- Sixth Annual Cancer Survivors Day Celebration. We have changed the name of "Cancer Survivors Day" to "Celebration of Life Day". This emphasizes the change in the perception of Cancer as a fatal infliction with few survivors, to cancer as a treatable and frequently curable disease.

- Thirteenth Annual Hematology-Oncology Symposium. This two day symposium was well attended (more than 87 attendees, 74 of whom were physicians) and highly praised as an important educational activity.

Quality Assessment/Improvement Accomplishments:

- A Master's Prepared RN was hired as the Cancer Clinical Services Coordinator, to assist in collecting and analyzing the Cancer Clinical Programs Quality and Outcome activities.

- Quarterly quality and outcome reports were submitted for the Cancer Committee's review and feedback.

- A Chemotherapy Safety Committee was established to review chemotherapy practices at Saint Francis. This committee instituted new programs to provide for the safe administration of chemotherapy.

- A Homecare study was conducted and demonstrated an improvement in the documentation of pain as an important first step to optimize pain control.

- We participated in the Best Practice to Improve End of Life Care Project coordinated by Qualidigm. This important project addresses end of life and pain management issues.

- Monitoring of the Press-Ganey Patient Satisfaction on the Inpatient Oncology Unit and internal surveys in our outpatient settings continued throughout the year. Our program strives to provide superior services to our patients and families, and to date the Press-Ganey Patient Satisfaction Scores on the inpatient unit have been excellent.

Cancer Committee Accomplishments

- Based on the recommendations of the Committee, plans for the renovations of the inpatient and outpatient cancer units were finalized during this year. Renovation of the inpatient unit will begin on November 4, 2002 with renovation of the outpatient units to commence early in 2003.

- The Committee endorsed a formal proposal to develop a Bone Marrow Transplant Program. This proposal is currently under review by the hospital administration.

- The Committee has endorsed the concept of creating a Holistic Care Center that responds to the needs of female cancer patients. This Care Center will include a "Boutique" where patients can acquire products, appliances, and apparel designed for the female cancer patient. A formal business plan has been developed.

I would like to thank all the committee members for their work on the committee and for their significant contributions to the cancer efforts.

Peter J. Tutschka, M.D., PhD.
Cancer Committee Chairman

TUMOR REGISTRY

The Cancer Registry has accessioned 1,654 cancer cases diagnosed and/or treated at Saint Francis Hospital in 2001. Cases in the Registry are classified as analytical and non-analytical. Analytical cases are cases where the primary diagnosis and/or first course of treatment are performed at Saint Francis Hospital. Of the 1,654 cases accessioned, 1,580 were analytical (96%). Female cancer cases comprised 51.7% of the total analytical cases and male cancer cases comprised 47.8%. The five major sites of cancer are breast, prostate, colon/rectum, lung and skin (melanoma). These major sites account for 61% of all analytical cases accessioned in 2001. When compared to the year 2000, the five major sites accounted for 62% of all analytical cases accessioned. Our follow-up rate has exceeded the 90 percent follow-up rate through letters to physicians, extended care facilities, hospitals and personal contact. Other sources of follow-up are daily review of obituaries, Medicare list, motor vehicle list and death certificates sent to us by the Central Registry.

Our registry staff presents formal reports at each quarterly meeting of our Cancer Committee and incorporates suggestions, and generates special reports as requested. The registry was utilized to generate data for a proposal to develop new initiatives for our Cancer Program including a Bone Marrow Transplant Program and Renovations of our Cancer Center and Inpatient Unit. The staff of the registry continues to evaluate new software to replace our current Cancer Registry. During this year, we had to terminate a new contract from a vendor who was unable to convert our present files onto their platform. Upgrading our Cancer Registry to a new platform that will allow us to more easily query our data for outcome studies is a high priority for this coming year.

A total of 28,219 cases have been accessioned into the Registry since our reference date of January 1, 1984. The Registry staffed includes a Manager, Certified Tumor Registry Coordinator, Certified Tumor Registrar, one full and one part-time technician. The Cancer Registry is located in the Medical Record Department, 3rd floor in the Patient Care Tower. The phone number is (860)714-4371.

Registry activities for the past year include:

- Attending quarterly education meetings of the Tumor Registrar's Association of Connecticut, SEER Abstractor and Coder Workshop, Cyber Day Workshop, and the Annual National Cancer Registrar's Association meeting in Nashville, Tennessee.

- Participation in Patient Care Evaluation Studies for Lung and Stomach. Data are submitted to National Cancer Data Base.

- Use of the AJCC TNM staging system, General Summary Staging and SEER extent of disease staging system.

- Attending combined Medical/Surgical and GYN Tumor Board and Cancer Committee meetings.

- Providing cancer data on diagnosis and treatment for studies as requested by staff physicians and hospital personnel.

- Ongoing submission of data to Cancer Prevention Research Unit for Connecticut at Yale University. (Yale Cancer Center-Rapid Case Ascertainment Shared Resource)

- Study of unknown stage of disease on the 5 major sites. Reviewed and staged cases according to AJCC TNM staging system resulting in the percentage of unknown stage of disease to fall under 10% in each major site as required by the ACoS.

- Successful effort between Cancer Registry, Medical Records and Pathology Department ensuring that staging forms are included in the medical record for staging by the physician.

Respectfully Submitted,
Peter Tutschka, M.D., Cancer Committee Chairman

Susan Gonsalves, Cancer Registry

TUMOR BOARD

The Tumor Board is a multidisciplinary meeting with emphasis on prospective management and therapeutic strategy of complex cases. The meeting takes place every Tuesday at noon in the Chawla Auditorium where on average five cases are presented for discussion by the group. Hospital based physicians as well as private attendings participate in the development of a recommended treatment strategy for the patient's management. The Gynecologic Tumor Board meets every Thursday in the Obstetrics Gynecologic Conference Room.

DATA - TUMOR REGISTRY - 2001 SITES – ANALYTICAL

	SITES	CASES
CNS	Brain/CNS	26
ORAL	Pharynx	8
	Mouth	17
	Tongue	4
	Lip	2
RESPIRATORY	Lung	188
	Larynx	14
	Other Respiratory	2
DIGESTIVE	Colon	131
	Rectum	61
	Pancreas	25
	Stomach	31
	Esophagus	22
	Liver/Biliary	22
	Other Digestive	7
	Small Intestine	4
GENITO-URINARY	Prostate	242
	Bladder	48
	Corpus Uteri	54
	Kidney/Other	35
	Other female	26
	Ovary	25
	Cervix Uteri	15
	Testis	8
	Other male	3
OTHER SITES	Breast	278
	Skin/Melanoma	69
	Thyroid	18
	Connective Tissue	11
	Eye	0
HEMATOLOGIC	Non-Hodgkin Lymphoma	60
	Leukemia	43
	Myeloma	8
	Hodgkin Lymphoma	16
MISC	All Other	47
	TOTAL	1,580

Breast Cancer Report

Breast cancer continues to be the most common malignancy in females in US. An estimated 203,500 new cases of invasive and 54,300 new cases of in-situ breast cancer will be diagnosed in US in 2002. Similarly at Saint Francis Hospital and Medical Center, breast cancer is the most common malignancy and in year 2001 there were 278 women diagnosed with it.

Known Risk Factors for Breast Cancer

A number of factors consistently associated with increased risk of breast cancer (**age, family history, age at first birth, early menarche, late menopause**) are not modifiable. Other factors (**alcohol consumption, use of postmenopausal hormones, and obesity after menopause**) are modifiable. Some factors directly increase lifetime exposure of breast tissue to circulating sex hormones (early menarche, late menopause), and some are only correlates (higher socioeconomic status). Risk assessment tools are available to determine one's risk for developing breast cancer at the National Cancer Institute's web site (http://bcra.nci.nih.gov/brc/).

The most significant risk factor known is mutations in **BRCA 1 & 2** genes. The women who have mutations in these genes have extremely high risk of developing breast cancer (50-80%) and ovarian cancer (25-40%). The testing for these genes is available at Saint Francis Hospital and Medical Center.

Strategies for Breast Cancer Prevention

At this time, there is no known strategy to eliminate all risk of breast cancer. A woman's best strategy, besides early detection through mammography, is to reduce her known risk factors whenever possible by increasing physical activity, minimizing alcohol intake, and avoiding obesity. All available evidence supports a small inverse (protective) association between physical activity and breast cancer. Two or more drinks a day may increase breast cancer risk by approximately 25%; this increased risk is dose-dependent, and exists regardless of the type of alcoholic beverage consumed. Obesity, especially after menopause appears to increase risk of breast cancer.

Also, recent clinical research has shown that women at relatively high risk of breast cancer can reduce their risk by using tamoxifen. A similar drug, Raloxifene, which has been FDA approved for prevention of osteoporosis was also noted to reduce the risk of breast cancer. Currently Saint Francis Hospital and Medical Center is participating in a national **S**tudy of **T**amoxifen **A**nd **R**aloxifene (**STAR**) in the prevention of breast cancer in post menopausal women.

Several studies in patients with very high risk of cancer due to BRCA 1 and 2 mutation or very strong family history have shown that prophylactic surgery can drastically reduce the risk of cancer. Prophylactic oophorectomy reduces risk of ovarian cancer by ~90% and breast cancer by ~50% whereas prophylactic mastectomy can reduce risk of breast cancer by more than 90%.

Early Detection of Breast Cancer

Early detection of breast cancer greatly improves the survival, the chances for successful treatment, and treatment options. American Cancer Society guidelines for the early detection of breast cancer are listed in Table 1. A small percentage of cancers may be missed by mammography; it is very important that women also perform monthly self examination and have an annual breast exam by a trained professional.

The most important physical symptom of breast cancer is a painless mass. Less common symptoms include persistent changes to the breast, such as thickening, swelling, skin irritation or distortion, and nipple symptoms, including spontaneous discharge, erosion, inversion, or tenderness. Early breast cancer, when it is most treatable, typically does not produce any symptoms. It is, therefore, very important for women to follow recommendations for mammography.

Diagnosis and Treatment

The diagnosis of breast cancer is established by examining a piece of tissue or cells under microscope by a pathologist. Currently there are wide array of options available to obtain the tissue or cells for pathological examination. Whenever possible least invasive option is preferable e.g., needle aspiration, stereotactic or ultrasound guided core biopsy.

Once diagnosis is established the tumor can be removed by lumpectomy or mastectomy. All patients undergoing lumpectomy and some undergoing mastectomy will later on require radiation therapy. A significant number of patients will also require chemotherapy and/or hormonal therapy. In patients with locally advanced tumor it is preferable to give chemotherapy before surgery to decrease the tumor in size. Similarly, women interested in lumpectomy may benefit from chemotherapy prior to surgery to decrease the size of tumor.

Hence, the treatment of breast cancer involves several different specialists. Saint Francis Hospital and Medical Center has established a Comprehensive Breast Center, where all different specialists i.e., radiologist, pathologist and surgeon are present under one roof and can diagnose breast abnormalities in a very short time, usually in one visit. If a breast cancer is diagnosed then a Multidisciplinary Conference and Consultation involving multiple surgeons, radiation therapists and medical oncologists, all with special expertise in the treatment of breast cancer, are available at the same time to coordinate the care.

Survival of Patients

The survival of patients directly relates to the stage of the breast cancer at the diagnosis. Figure 1 shows the survival of patients treated at Saint Francis Hospital and Medical Center for the last 18 years by the stage at diagnosis. National Cancer Institutes Surveillance, Epidemiology and End Results (SEER) program follows about 14% of US population and is considered the most reliable benchmark. We compared the 5 and 10 year overall survival of patients with breast cancer treated at Saint Francis Hospital & Medical Center with the SEER's data for US and state of Connecticut (Figures 2 and 3).

Incidence and Mortality Trends

Incidence rates of invasive breast cancer continues to increase although not as fast as during the 1980s when mammography screening increased detection of early breast cancer (Figure 4). With early detection, the rate of smaller tumors (<2.0 cm) more than doubled, while rates of larger tumors (>3.0 cm) decreased by 27%. Similarly, incidence rates of *in situ* breast cancer have increased considerably over the past 25 years.

Until the 1980s, overall breast cancer mortality was relatively stable but between 1989 and 1995, death rates decreased by 1.6 % annually. And between 1995 and 1998, the decrease accelerated to 3.4% annually (Figure 4). Similar trends in the incidence and mortality of breast cancer are seen at the Saint Francis Hospital and Medical Center.

Table 1. American Cancer Society Guidelines for the Early Detection of Breast Cancer

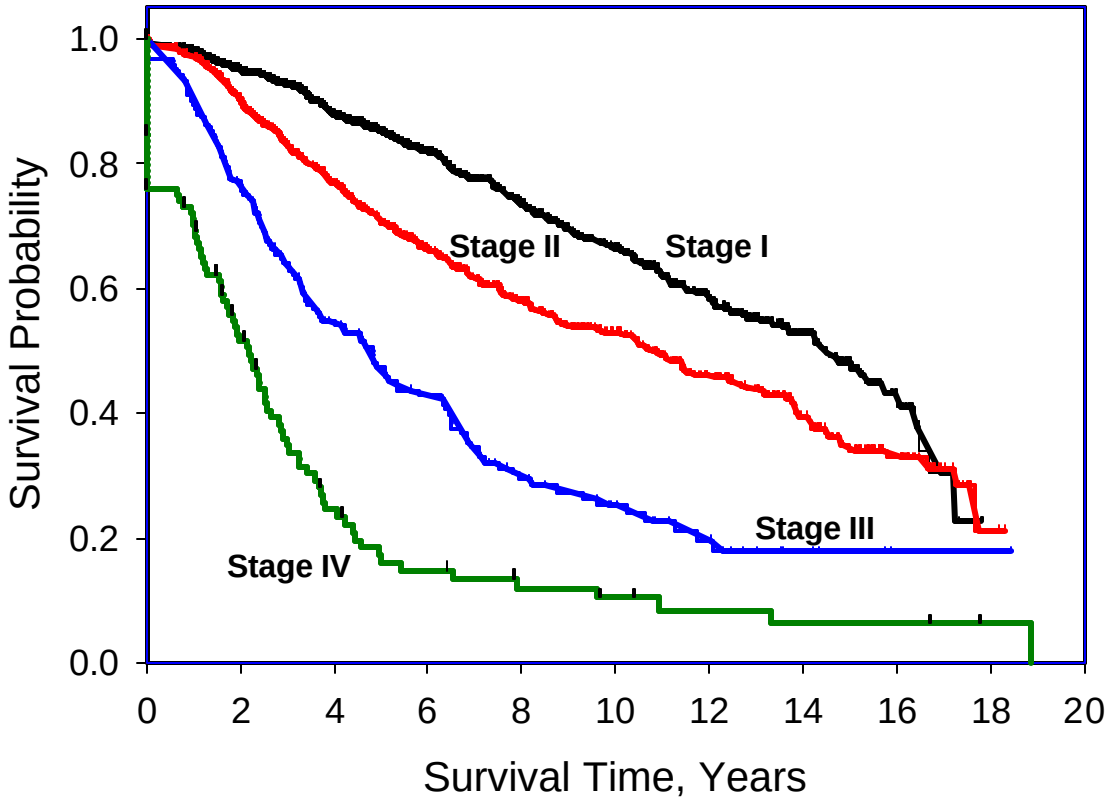
Age 40 and over

✓	✓	Annual mammogram
✓	✓	Annual clinical breast examination
✓	✓	Monthly breast self-examination

Age 20-39

✓	✓	Clinical breast examination every 3 years
✓	✓	Monthly breast self-examination

Figure 1; Kaplan Meier Curves of Overall Survival of Patients with Breast Cancer Treated at Saint Francis Hospital and Medical Cente



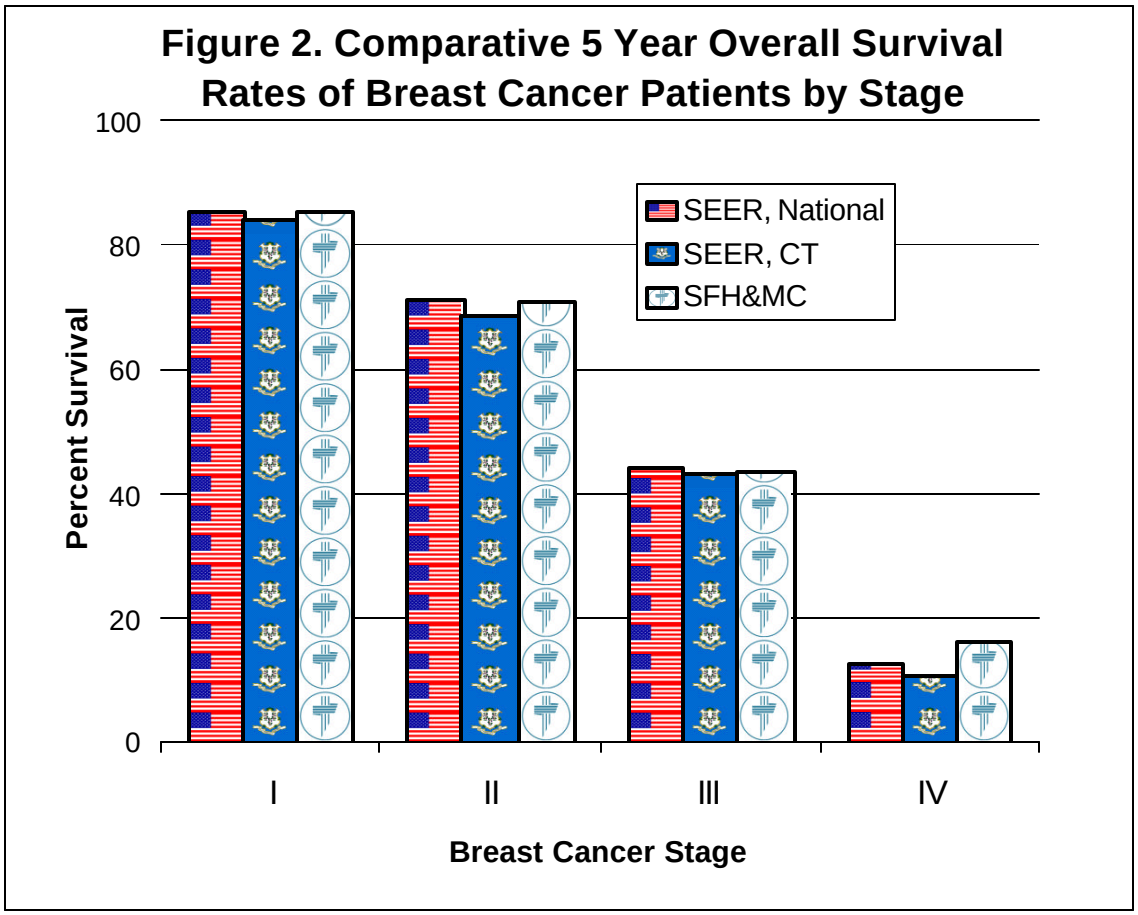


Figure 2. Comparative 5 Year Overall Survival Rates of Breast Cancer Patients by Stage
100
80
60
40
20
0
Percent Survival
SEER, National
SEER, CT
SFH&MC
I
II
III
IV
Breast Cancer Stage

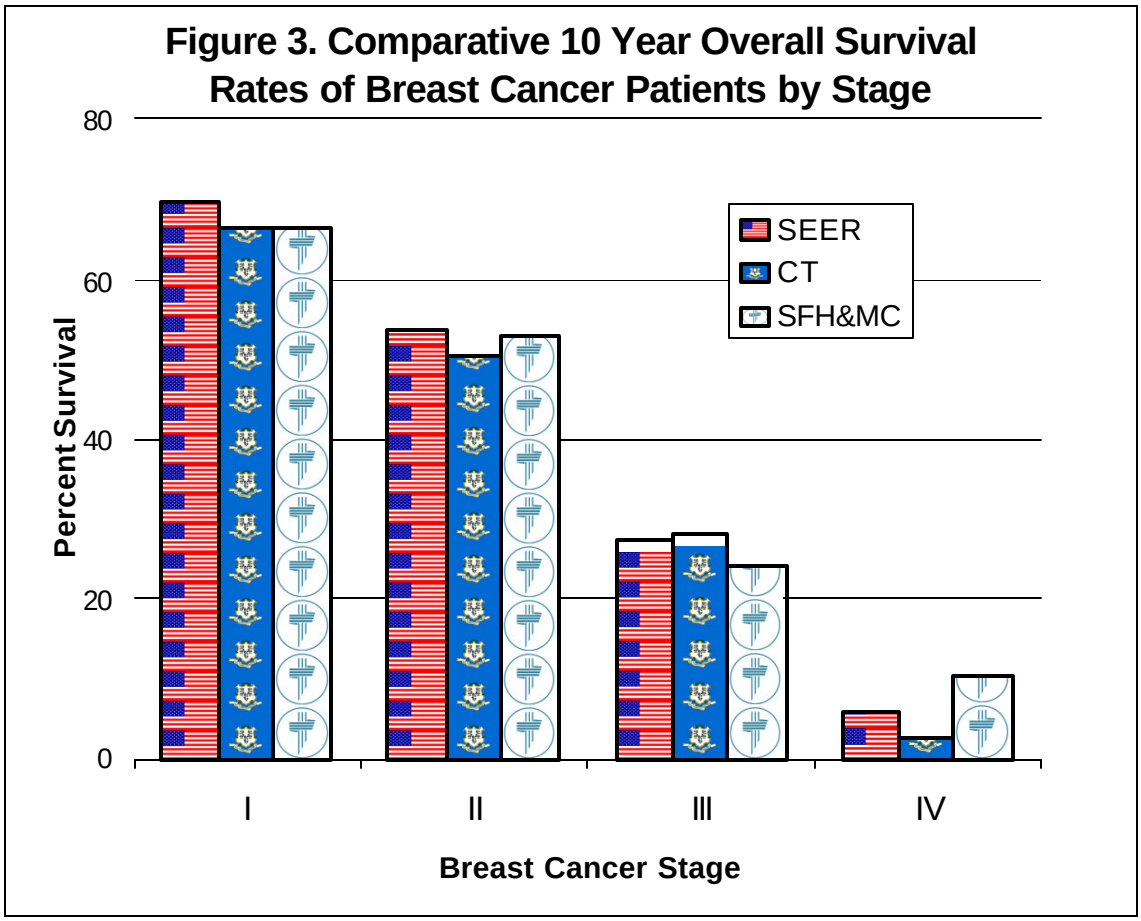
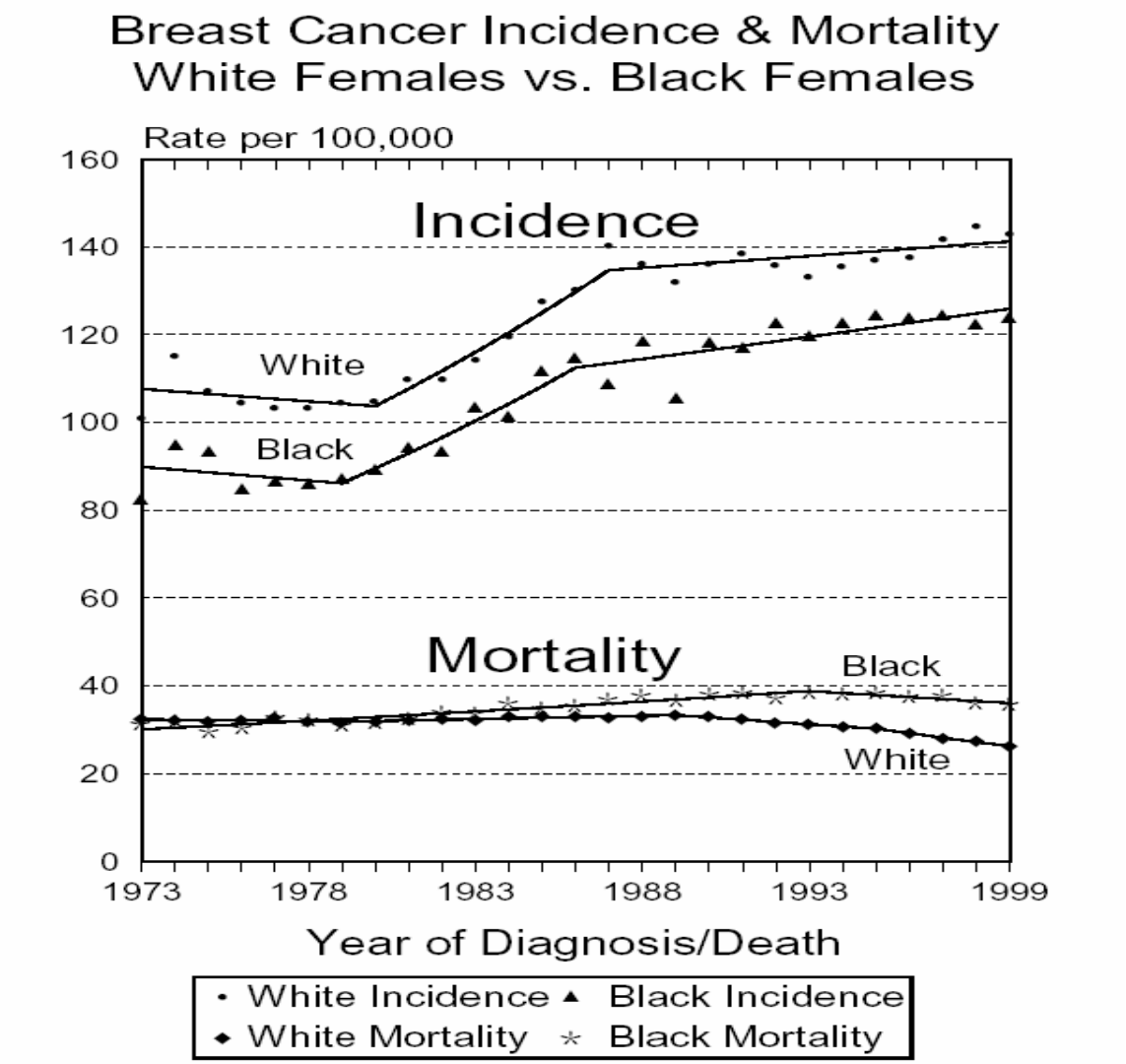


Figure 3. Comparative 10 Year Overall Survival Rates of Breast Cancer Patients by Stage
80
60
40
20
0
Percent Survival
SEER
CT
SFH&MC
I
II
III
IV
Breast Cancer Stage


Breast Cancer Incidence & Mortality
White Females vs. Black Females
Rate per 100,000
160
140
120
100
80
60
40
20
0
Incidence
White
Black
Mortality
Black
White
1973
1978
1983
1988
1993
1999
Year of Diagnosis/Death
White Incidence
Black Incidence
White Mortality
Black Mortality