



Baptist Hospital

We're here for life.

2008

A MESSAGE FROM OUR SERVICE LINE EXECUTIVE

Eliminating cancer is at the heart of all we do.

Each day, every day, the Saint Thomas Health Service Cancer Program utilizes innovative cancer treatments, integrated therapies and comprehensive education and prevention in the battle against cancer. Through this advanced, patient-centered approach, we're giving hope to thousands across middle Tennessee and winning the war against cancer—one patient at a time.

A critical part of cancer care is the support that is provided by patients' families and friends. That is why Saint Thomas Health Services has three American College of Surgeons' Accredited Community Cancer Programs. The Dan Rudy Cancer Program at Saint Thomas Hospital, Baptist Hospital's Cancer Center and Middle Tennessee Medical Center's Cancer Center have each been recognized and certified as premier community cancer programs. Together with our 70 physician cancer specialists, our three cancer programs treated more than 4000 people in 2007 with comprehensive cancer services, state-of-the-art technology and premier cancer specialists.

We are committed to erasing cancer. In 2007 our system became the only healthcare system in Middle Tennessee to provide all digital mammography, providing the best screening and diagnostic breast services to over 48,000 women a year who put their faith in us to screen for breast cancer. In November 2007 we launched the Saint Thomas Lung Clinic to provide multidisciplinary intervention for all lung and chest tumors. The Saint Thomas Brain Tumor Group remained one of the largest regional referral centers with advanced radio-surgery for the removal of brain tumors. With our specialized colorectal surgeons, our three cancer programs diagnosed and treated more patients with colon cancer than any other program in Middle Tennessee.

Saint Thomas Health Services three cancer programs and its experienced and dedicated associates provide our community with the assurance that advanced, and compassionate cancer care is available close to home. During this time of hope and change we will continue to hold our program to the highest standards, always looking for opportunities to grow and to meet the cancer care needs of our community.

Elizabeth Pace
Cancer Service Line Executive



SAINT THOMAS HEALTH SERVICES

“The premier, comprehensive and integrated system providing compassionate, patient centric cancer prevention, detection, treatment and support to the 3 million residents in Middle Tennessee.”

OUR EXPERIENCE:

MOST FREQUENTLY SEEN CANCERS AT STHS IN 2007

Breast	835
Digestive system	739
Respiratory system	692
Female genital system	347
Male genital system	343
Urinary system	238
Brain and CNS	232
All others	665
Total	4091

We're dedicated to offering the best in cancer care. In fact, all 3 of our cancer programs have been recognized by the Commission on Cancer of the American College of Surgeons as offering the very best in cancer care. Each of our cancer programs has been awarded Commendation Level of Accreditation and Saint Thomas Hospital was the first Community Hospital Comprehensive Cancer Program in Tennessee to receive the Outstanding Achievement Award at its last survey. This is recognition of the quality of our comprehensive, multidisciplinary patient care. We're proud to offer the very best in today's cancer treatment close to home.

For more information about the accreditation and what it means for you, visit:
www.facs.org/cancer/publicapproval.html



BAPTIST HOSPITAL—2008 CANCER COMMITTEE

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Medical Oncology, Chair

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Internal Medicine

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Urology

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Kimberly Parham, RN
STHS Breast Centers Nurse Manager

Sharon Tibbits, PT
STHS Cancer Center Program Coordinator

Chrystie Turner, RD
Nutrition Specialist

Baptist Hospital—2007 Accessioned Cases

Primary Site	Total	Class		Sex	
		Analytic	Non-Analytic	M	F
ALL SITES	1636	1526	110	536	1100
ORAL CAVITY	12	11	1	7	5
LIP	0	0	0	0	0
TONGUE	4	4	0	2	2
OROPHARYNX	0	0	0	0	0
HYPOPHARYNX	0	0	0	0	0
OTHER	8	7	1	5	3
DIGESTIVE SYSTEM	245	228	17	136	109
ESOPHAGUS	13	9	4	12	1
STOMACH	12	12	0	9	3
COLON	98	94	4	52	46
RECTUM	54	49	5	27	27
ANUS/ANAL CANAL	4	3	1	2	2
LIVER	11	10	1	9	2
PANCREAS	43	42	1	21	22
OTHER	10	9	1	4	6
RESPIRATORY SYSTEM	185	171	14	99	86
LARYNX	6	6	0	4	2
LUNG/BRONCHUS	179	165	14	95	84
BLOOD & BONE MARROW	37	31	6	23	14
LEUKEMIA	17	12	5	11	6
MULTIPLE MYELOMA	12	11	1	7	5
OTHER	8	8	0	5	3
BONE	0	0	0	0	0
CONNECT/SOFT TISSUE	9	6	3	4	5
SKIN	26	23	3	14	12
MELANOMA	21	19	2	11	10
OTHER	5	4	1	3	2
BREAST	452	435	17	3	449
FEMALE GENITAL	231	223	8	0	231
CERVIX UTERI	36	35	1	0	36
CORPUS UTERI	121	121	0	0	121
OVARY	47	44	3	0	47
VULVA	17	13	4	0	17
OTHER	10	10	0	0	10
MALE GENITAL	112	98	14	112	0
PROSTATE	110	96	14	110	0
TESTIS	2	2	0	2	0

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Annual Report 2008

continued from previous page

Primary Site	Total	Class		Sex	
		Analytic	Non-Analytic	M	F
URINARY SYSTEM	120	111	9	72	48
BLADDER	54	49	5	33	21
KIDNEY/RENAL	64	60	4	38	26
OTHER	2	2	0	1	1
BRAIN & CNS	72	67	5	26	46
BRAIN (BENIGN)	1	1	0	0	1
BRAIN (MALIGNANT)	15	11	4	9	6
OTHER	56	55	1	17	39
ENDOCRINE	60	56	4	11	49
THYROID	60	56	4	11	49
LYMPHATIC SYSTEM	34	27	7	16	18
HODGKIN'S DISEASE	6	4	2	1	5
NON-HODGKIN'S	28	23	5	15	13
UNKNOWN PRIMARY	32	30	2	13	19
OTHER/ILL-DEFINED	9	9	0	0	9

BREAST CANCER—SITE SPECIFIC STUDY

Nancy Peacock, MD

The American Cancer Society predicted there would be 180,510 (178,480 women and 2030 men) new cases of breast cancer for 2007 and 40,910 deaths (40,460 women and 450 men). Breast cancer remains the leading cancer diagnosed in women (26% of all female cancer cases) and the second leading cause of cancer deaths (15% of deaths) in women in the United States. Two large studies published in 2007 report a link between the recent reduction in invasive breast cancer and a decline in the use of hormone replacement therapy. The declines in breast cancer were noted in women aged 50 years and older and were more significant in breast cancers that were estrogen-receptor positive.^{1,2}

Screening initiatives make it possible to diagnose breast cancer at an earlier clinical stage and allow clinicians more options for treating and potentially curing breast cancer with minimum morbidity. Breast MRI is a newer technology allowing cancers to be detected at an earlier stage and also offering the potential to find more than one breast cancer. In 2007 the ACS released guidelines recommending routine MRI screening for women with a 20% or greater risk of developing breast cancer over their lifetime.³ Breast surgeons in the Nashville area are fortunate to have excellent MRI technology for breast imaging and have incorporated its use into their routine care of women in screening programs who are at high risk of developing breast cancer and also for decision planning for breast cancer patients when appropriate.

2007 Data from Baptist Hospital

AJCC Stage diagnosis: As can be seen in Figure 1 the majority of breast cancer cases at our hospital in 2007 were Stage I (invasive tumors up to 2 cm in diameter without lymph node involvement). These statistics compare favorably to the previous five years where we saw fewer patients diagnosed with Stage IV disease.

Figure 1: 2007 Analytic Breast Cases at Baptist Hospital

AJCC Stage	# of Cases	Percent
0	94	21.76%
I	185	42.82%
II	104	24.07%
III	25	5.79%
IV	2	.46%
Unknown	22	5.09%
Total cases	432	100

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Figure 2: 2000-2005 Analytic Breast Cancer Cases at Baptist Hospital compared to state and national data

AJCC Stage	# cases Baptist Hospital	% Baptist Hospital	# cases TN	% TN	# cases US	% US
0	479	21.25	3695	15.98	194,495	18.21
I	853	37.84	8882	38.41	408,013	38.21
II	489	21.69	6936	29.99	297,422	27.85
III	102	4.53	1861	8.05	84,296	7.89
IV	44	1.95	779	3.37	34,930	3.27
Unknown	287	12.73	971	4.2	48,654	4.56
Total	2254	100	23,124	100	1,067,810	100

Figure 2 confirms the diagnosis of more early stage breast cancer cases than comparable peer groups in the NCDB data base.¹ We attribute this largely to the quality of our imaging and the commitment of community physicians to aggressive screening efforts.

The diagnosis of breast cancer at any age is traumatic but prominently affects young women in our community. The fact remains, however that breast cancer is more common in women after menopause and this is demonstrated by the number of women diagnosed after the age of 50. (See figure 3). As our population ages we will see an increased number of women over the age of 70 affected with breast cancer, and many of our adjuvant systemic therapies will need to be tailored for this group of patients. Systemic therapy options can be expensive and toxic. Current research initiatives are underway at the national level to help determine which elderly patients are appropriate for systemic chemotherapy.

Figure 3: 2007 Breast Cancer Cases

sorted by age and sex at Diagnosis—Baptist Hospital

Age	Men	Women
20-29	0	1
30-39	0	26
40-49	1	84
50-59	0	137
60-69	1	92
70-79	1	59
80-89	0	27
90-99	0	2
100-109	0	1
Totals	3	429

There is evidence of increasing use of mastectomy or bilateral prophylactic mastectomy for younger women diagnosed with breast cancer. Recent national trends suggest that young women (defined here as under the age of 50) may be choosing mastectomy over lumpectomy. Breast surgeons at Baptist Hospital and in the Nashville community have been committed to breast conservation in appropriate patients for over a decade. National data from the NCDB over the past 5 years show

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the mastectomy rate for young women is nearly flat at 40% each year for the period 2000-2005. Data from Baptist Hospital demonstrates that the mastectomy rate in young women has been about 50% for the years 2000-2005 and nearly 60% for the past 2 years. Additionally, a report published in 2007 showed that the use of contra lateral prophylactic mastectomy has more than doubled in the 6 year period from 1998-2003.² We believe this number is increasing because many younger women have little tolerance for careful annual follow up. In addition the perception of risk of a second primary breast cancer may be higher than in past years. It will be interesting to see if this trend continues.

Figure 4: Surgical choices in younger women (16 to 49 yrs) with breast cancer

Year	% Lumpectomy		% Mastectomy	
	Baptist	U.S.	Baptist	U.S.
2000	48	53	49	42
2001	59	53	41	42
2002	42	53	55	40
2003	49	55	45	40
2004	40	55	55	40
2005	42	54	47	40
2006	38	*	61	*
2007	37	*	59	*

* 2006-2007 NCDB Data not available

Radiation oncology options are expanding with the introduction of Mammosite partial breast irradiation for certain women treated with lumpectomy. The first patient treated at Baptist hospital with this technology was in 2005. Criteria for Mammosite treatment in 2007 included women over the age of 45 with invasive tumors measuring < 3 cm, negative microscopic margins and without lymph node involvement. Four hundred of 432 patients diagnosed with breast cancer were treated with surgical procedures. 207 (52%) were treated with mastectomy and 193 (48%) treated with lumpectomy. Out of the 193 lumpectomies 82 (42%) were treated with Mammosite radiation (69 at the Baptist radiation facility) and 91 (47%) were treated with external beam radiation.

Six patients also participated in the joint NSABP B39/RTOG 413 protocol which randomizes patients undergoing lumpectomy to whole breast irradiation vs Mammosite technology. This protocol allows women over the age of 18 with both invasive adenocarcinoma and lobular carcinoma or DCIS and women with as many as 3 positive lymph nodes at the time of diagnosis. This study is ongoing and the long term results will obviously influence criteria for performing this procedure in the future.

Physicians make all treatment choices with the ultimate goal of long-term or lifetime survival. Accumulated survival data for cases diagnosed in 1998-2000 vs. US data accumulated through the NCDB help us compare outcomes. This information shows us that our short and long term survival of all stages of breast cancer is comparable to that throughout the country.⁴

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Figure 5: Observed survival (%) years 1-5 for all patients with breast cancer diagnosed 1998-2000

AJCC Stage	1 yr		2 yr		3yr		4yr		5yr	
	Baptist	US	Baptist	US	Baptist	US	Baptist	US	Baptist	US
0	99.5	99.4	99.5	98.6	98.3	97.5	98.3	96.3	98.3	94.9
I	98.1	98.9	96.8	97.2	93.8	95.3	91.5	93	89.1	90.7
II	98.9	97.9	95.9	93.9	92	89.6	88.1	85.5	83.8	81.8
III	93.5	92.4	84.8	80.5	69.6	70.4	58.7	62.3	56.3	56.1
IV	**	62.2	**	43.8	**	31.6	**	23.6	**	18.4

***Insufficient cases to display survival information*

Breast cancer treatment must be individualized for every unique patient situation. Advances in diagnostic imaging have been enormously helpful, although costly, and new technologies continue to surface. The Breast Center at Baptist has been updated with all digital mammography units. Breast MRI and ultrasound have been incorporated into routine use by radiologists who specialize in breast care at our hospital. Technical expertise provided by our radiologists and breast surgeons has enabled patients with a new breast problem to have a diagnostic procedure completed in a timely and professional manner.

Surgical choices abound due to the proficiency of our breast and reconstructive surgeons. All care providers continue to update their skills and incorporate new techniques regularly. Our radiation oncologists have updated choices for patients with the introduction of partial breast irradiation in the form of Mammosite technology.

Obviously improvement in long term survival depends on all physicians' ability to incorporate new research discoveries into their practices. Prevention, early detection and understanding of breast cancer at the molecular and genetic level continue to remain areas of high interest. Recent decreases in funding to the National Cancer Institute have hampered ongoing research efforts at the basic science level and also impaired efforts to run clinical trials to improve our practices for best therapy choices. This is a national crisis and those of us who advocate for the care of all cancer patients realize that this problem must be reversed. As we wait for this tide to change it is imperative that we continue to ask our patients to enroll in applicable and currently available clinical trials. Again, the physicians who care for cancer patients at Baptist Hospital have a wide array of clinical trials available to them and a goal of the cancer committee is to increase patient participation in these studies.

¹ Glass, Ag, et al. Breast Cancer Incidence, 1980-2006: Combined roles of menopausal hormone therapy, screening mammography, and estrogen receptor status. J Natl Cancer Inst. 2007; 99(15):1152-1161.

² Ravdin, PM, et al. The decrease in breast-cancer incidence in 2003 in the United States. N Engl J Med. 2007; 356(16):1670-4.

³ Saslow D, et al. American Cancer Society guidelines for breast screening with MRI as an adjunct to mammography. CA Cancer J Clin. 2007; 57:75-89.

⁴ ©Commission on Cancer; American College of Surgeons. NCDB Benchmark Reports, v1.1. Chicago, IL, 2002. The content reproduced from the applications remains the full and exclusive copyrighted property of the American College of Surgeons. The American College of Surgeons is not responsible for any ancillary or derivative works based on the original Text, Tables, or Figures.

⁵ Tuttle, et al, JCO 25:5203-5209.