



2013 STATISTICAL DATA

QUALITY AND STANDARDS: WORKING TO MEET AND EXCEED NATIONWIDE QUALITY STANDARDS



cancer.stonybrookmedicine.edu



Stony Brook University Cancer Center
Stony Brook, NY 11794

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The mission of Stony Brook University Cancer Center is to reduce the suffering from cancer by providing world-class multidisciplinary care close to home, conducting innovative research, educating patients and healthcare professionals, and partnering with our community to reach the underserved populations.

**QUALITY AND STANDARDS:
WORKING TO MEET AND EXCEED NATIONWIDE QUALITY STANDARDS**

The Cancer Center's departments, tumor boards and committees that consistently ascertain, measure and document the wealth of cancer data and patient information allow our clinicians and healthcare staff to evaluate and plan strategies for improved patient outcomes.



The Cancer Registry Department

Data provides information that drives research, education, administrative decisions and quality studies in clinical outcomes measurement. At Stony Brook University Cancer Center, the database is managed by the Cancer Registry Department. They regularly provide the data to the entire Stony Brook Medicine community — most recently for grant writing, the Surgical Quality Data Use Group and scorecard metrics.

The Cancer Registry Department maintains a computerized database of cancer patient information on all tumor types. Case ascertainment includes search and analysis of all inpatient, same-day stays, emergency room admissions, and ambulatory and clinic encounters, as well as physician practice visits for cancer care. Since its inception in 1984, the Cancer Registry has amassed information on all patients with cancer diagnosed and/or treated at Stony Brook.

Quality control is performed by applying national standards and utilizing editing software. After undergoing rigorous quality checks and assessments, Cancer Registry data is regularly submitted to the New York State Cancer Registry, the National Cancer Data Base and the National Accreditation Program for Breast Centers, which plays an integral role in meeting regulatory standards for on-site surveys.

The Cancer Registry is a recognized component of the Cancer Program, and Cancer Registry staff participate in multiple hospital-wide committees and Tumor Boards.

In accordance with both New York State law and the Commission on Cancer, all of Stony Brook Medicine's cancer registrars are certified and must participate in continuing medical education seminars, thus offering substantive input at all cancer conferences and committee meetings. They are active in professional association activities and continue to retain membership in both the National Cancer Registrars Association and Long Island Cancer Registrars Association.

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Tumor Board Schedule 2014		
Bone and Soft Tissue Sarcoma CME	Wednesdays 7 am	Week 4
Breast CME	Fridays 7:30 am	Weekly
Colorectal CME	Mondays 7 am	Weeks 1 and 3
Gynecologic Oncology CME	Wednesdays 7 am	Weeks 1 and 3
Head and Neck, and Thyroid	Tuesdays 7:30 am	Weeks 1 and 3
Leukemia/Lymphoma CME	Fridays 9:30 am	Weeks 1, 3 and 4
Lung CME	Tuesdays 4 pm	Weekly
Melanoma CME	Fridays 7:30 am	Week 4
Neurologic Oncology	Tuesdays 5 pm	Week 3
Pediatric	Mondays 4 pm	Weeks 2 and 4
Upper GI and Liver	Tuesdays 7:30 am	Weeks 1 and 3
Urology CME	Tuesdays 7:30 am	Weeks 2 and 4

Meetings are held in the Pathology Conference Room 766, Hospital Level 2. Exceptions are Melanoma, held in the Surgical Conference Room, Health Sciences, T19-020; Urology (fourth Tuesday) in the Urology Conference Room, Health Sciences, Level 9; Head and Neck (third Tuesday) and Upper GI and Liver (first Tuesday) in the Radiation Oncology Conference Room; and Bone and Soft Tissue Sarcoma in Lecture Hall 6, Health Sciences, Level 3. Clinical faculty, Health Sciences students and clinical staff are invited to attend.

Tumor Board Conferences

Tumor Board conferences are a key component of the Cancer Program and integral to patient management at Stony Brook Medicine. They provide a valued forum for education, consultation and collaboration. Disease Management Teams present cases for diagnostic assessment, while referencing national treatment guidelines, clinical research protocols and other relevant literature for treatment planning, to obtain the best clinical outcome for our patients. In 2014, nine of 13 Tumor Boards offered AMA Category 1 CME credits to eligible attendees.

Quality Management

Stony Brook Cancer Center leadership works to ensure the delivery of safe, effective, efficient and accessible patient care through focused care programs and targeted quality management tools, which encourage the creation, assessment, re-evaluation and redesign of processes and systems. Using input from site-focused Disease Management Teams, data collected on selected indicators are compared on Cancer Services balanced scorecards. Additionally, selected site-focused outcome studies utilizing National Comprehensive Cancer Network® Clinical Practice Guidelines in Oncology and Commission on Cancer Program Standards are reviewed and published annually. The program's effort to monitor quality and improve care is a progressive movement toward a high-reliability organization, error-free over time.

Cancer Liaison Physician

The Cancer Liaison Physician is a liaison between Stony Brook Medicine and the community, between the national standards organizations and the hospital, and between the Cancer Committee and various departments at Stony Brook Medicine, and represents the Cancer Center on the Cancer Committee.

The liaison works with Disease Management Teams to develop best practices, evaluate compliance with adopted guidelines, expand participation in clinical trials and improve quality of care. The liaison works with local agencies and the American Cancer Society on outreach and education priorities, as well as providing direction in accordance with the Commission on Cancer guidelines.

At Stony Brook Cancer Center, Philip Bao, MD, serves as the Cancer Liaison Physician. His focus is on quality initiatives and the goal of providing patients with advanced treatment options.

The Cancer Committee

The Cancer Committee is the designated multidisciplinary body for the administrative oversight, development and review of the cancer program at Stony Brook Medicine. The Committee communicates directly with Stony Brook's Medical Board, and its activities and recommendations directly impact programs and activities.

Involved with the care of patients with cancer, the committee includes representatives from medical, surgical, diagnostic and clinical areas along with supportive services. Members include clinicians from Medical Oncology, Pediatric Oncology, Surgery, Genetics, Radiation Oncology, Pathology, Diagnostic Radiology and Survivorship. Hospital Administration, Nursing, Palliative Care, Social Work, Cancer Registry, Pharmacy, Quality Assurance, Nutrition, Physical Rehabilitation, Healthcare Teleservices, Clinical Trials, Patient Advocacy and Community Outreach, and the Chaplaincy augment the Committee's designation as multidisciplinary.

Charged with providing leadership, the Cancer Committee must plan, initiate, stimulate and assess the institution's cancer-related activities in accordance with the Commission on Cancer requirements for cancer program accreditation. Stony Brook Medicine earned recognition as a Teaching Hospital-Approved Cancer Program with full commendation on all standards during the last survey, as well as the distinction of Outstanding Achievement Award.

2014 Cancer Committee

Physician Members

Theodore G. Gabig, MD, Hematology/Oncology,
Committee Chair

Philip Bao, MD, Surgery, *Cancer Liaison Physician*

James Davis, MD, Pathology

Frederick Gutman, MD, Neurosurgery

Lynn Hallarman, MD, Palliative Care

Melissa Henretta, MD, MPH, Gynecologic Oncology

Seth Mankes, MD, Diagnostic Radiology

Berrin Monteleone, MD, Genetics

Robert I. Parker, MD, Pediatric Hematology/Oncology,
Cancer Conference Coordinator

Tamara Weiss, MD, MS, Radiation Oncology,
Data Quality Coordinator

Non-Physician Members

Teresa Beutel, MS, Healthcare Teleservices

Linda Bily, MA, Patient Advocacy, *Community Relations and Community Outreach Coordinator*

Jennifer Fitzgibbon, MS, RD, Oncology Nutrition

Jeannie Gaspard, RN, MSN, OCN, NEA-BC, Hospital Administration

Jennifer Hofecker, MSA, Clinical Trials, *Clinical Trials Research Coordinator*

Mohini Jose, MSW, Social Work, *Psychosocial Services Coordinator*

Christine Northam-Schuhmacher, RN, BSN, MS, Quality Management,
Quality Improvement Coordinator

Anielka Perez, RN, BSN, OCN, Oncology Nursing

Candiano Rienzie, DPT, Physical Rehabilitation

Grace Swensson, MS, CCS, CTR, Cancer Registry, *Committee Coordinator*

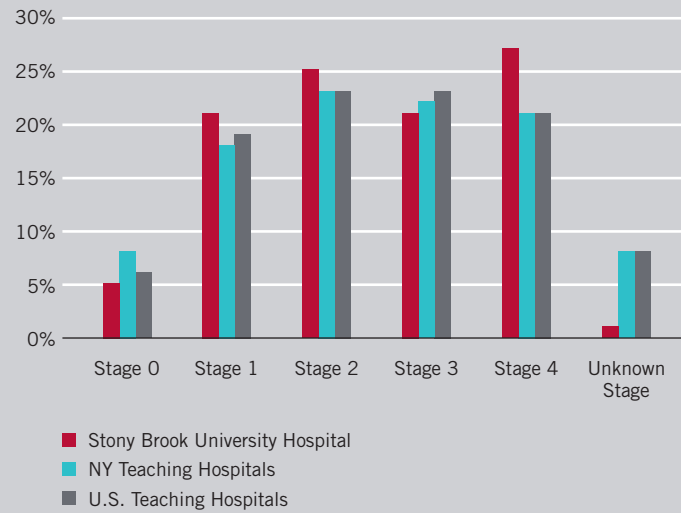
Lori Tischler, RN, Cancer Helpline

Dawn Tropeano, American Cancer Society

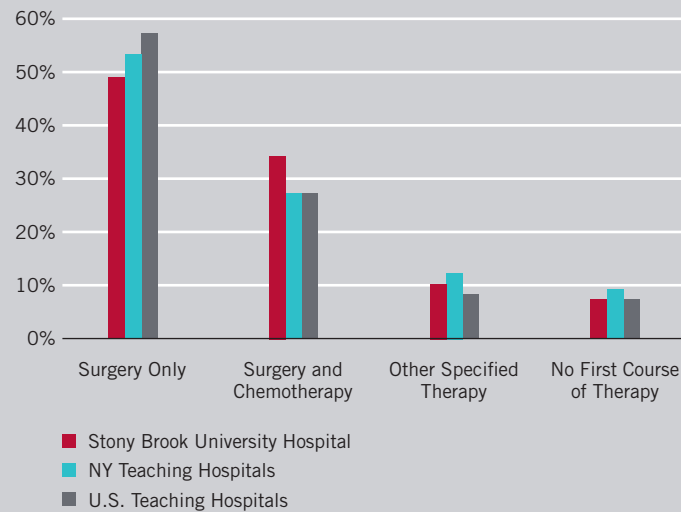
Stephen Unger, Chaplaincy

Scot Weber, RPh, Pharmacy

TNM Stage at Diagnosis 2000-2011



Treatment Modalities 2000-2011



Colon Cancer Site Survey

When combined, colon cancer and rectal cancer cases account for the third most common cancer for both newly diagnosed cases and estimated deaths of patients with cancer in the U.S. For the purpose of this study, the focus will be on colon cancer and its subsites. This includes the cecum, appendix, hepatic and splenic flexures, ascending, transverse, descending and sigmoid colon.

Collaborative screening efforts were undertaken nationally more than five years ago and the success is noticeable. While colon cancer rates have been decreasing due to improvements in treatment as well as the increased use of early detection methods, the focus of those efforts has been directed to people age 50 and over. In correlation, the survival rate for those over 50 has continued to improve, but the rates for persons under the age of 50 have increased slightly, according to the American Cancer Society. Currently, colorectal cancer deaths account for 9 percent of all cancer deaths, but in Suffolk County a falling rate of 3.7 percent was noted between 2006 and 2010.

Symptoms of colon cancer range from rectal bleeding to fatigue. Changes in bowel habits, weight loss and a decreased appetite are additional symptoms that should be monitored by a physician. As in the case of most cancers, there is increased risk with age. Consuming red or processed meat, smoking and obesity should also be considered as contributing factors. Hereditary factors such as a family history of colon cancer or polyps, or chronic inflammatory bowel disease will also increase the risk. Recent research efforts have focused on the effect of maintaining proper calcium and vitamin D levels, with ongoing research projects assessing the benefit of regular consumption of NSAIDS and aspirin.

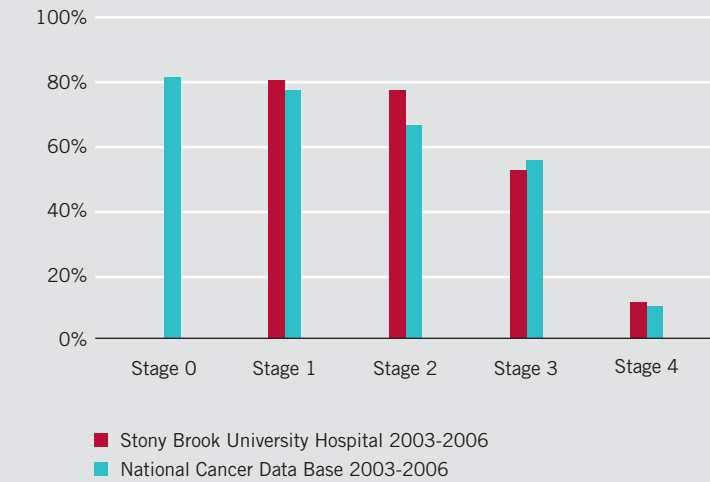
In the first graph, patients treated at Stony Brook who are staged at diagnosis are compared to patients at other academic medical centers in New York State and across the U.S. The greatest disparity of 6 percent is shown in patients who are diagnosed at stage 4, and 7 percent for patients whose stage is unknown. Stony Brook Cancer Center physicians stage the patient's disease by following National Comprehensive Cancer Network guidelines.

Patients frequently dread the preparations needed for an endoscopy and/or colonoscopy, while others choose not to endure one at all. The medical community can help dispel the myths around the preparations for these diagnostic tests through education and encourage their patients to undergo one of the best methods for cancer detection that exists today.

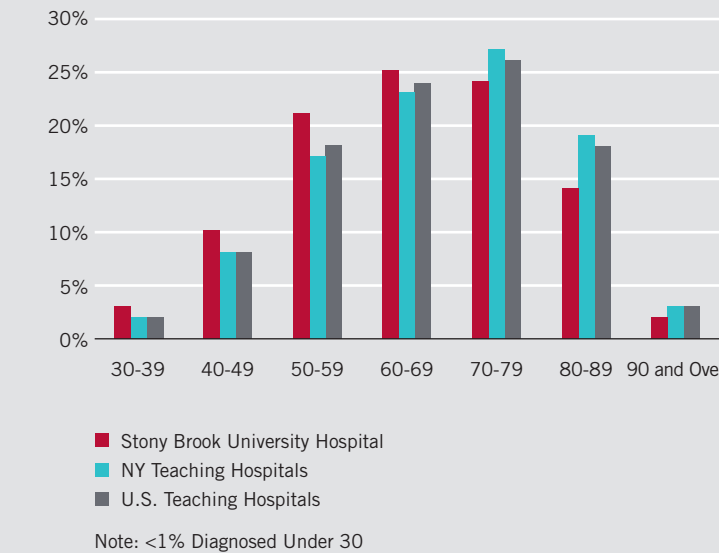
As shown in the "Treatment Modalities" graph, there is only an 8 percent difference between patients at Stony Brook University Hospital and U.S. academic medical centers in regard to surgical treatment alone. But there is a 7 percent increase in the number of patients treated at Stony Brook with dual modalities of surgery and chemotherapy. Accredited by the American College of Surgeons/Commission on Cancer, Stony Brook refers to national guidelines in the care and treatment of its patients with colon cancer.

The third graph compares five-year survival statistics from the National Cancer Data Base (NCDB) and Stony Brook University Hospital, and illustrates the problems dealing with small numbers and the potential for skewed statistics. Since there were insufficient numbers to compare Stony Brook's in situ or Stage 0 colon cancers to NCDB numbers, Stony Brook's cases were not included. However, in the other staging categories, all Stony Brook patients are close to or exceed the five-year survival outcomes nationally.

Five-Year Survival Outcomes



Age at Diagnosis 2000-2011



References for Site Survey

Colon Cancer:
 American College Of Surgeons: Cancer Programs: National Cancer Data Base (NCDB) (n.d). NCDB Survival Reports. (n.d.) Retrieved September 14, 2014, from www.facs.org/cancer/ncdb/survival.html (secure access only)

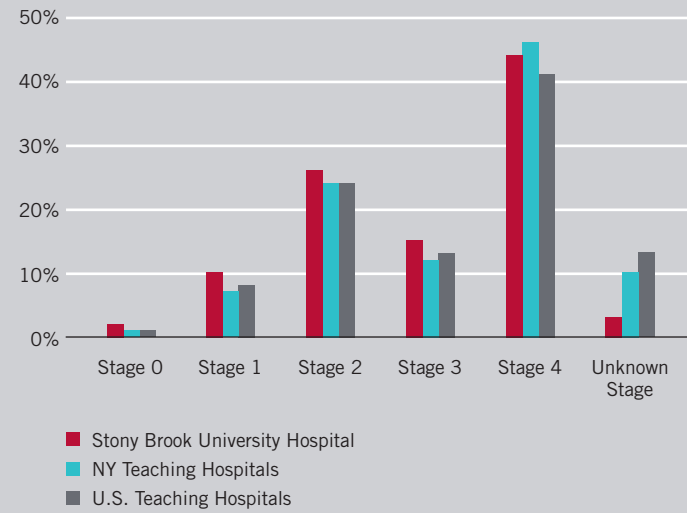
AJCC cancer staging manual (7th ed.) (2010) New York, NY: Springer

American Cancer Society (n.d.) Cancer Facts and Figures 2013. Retrieved September 5, 2014, from www.cancer.org/research/cancerfactsstatistics/cancerfactsfigures2013/index

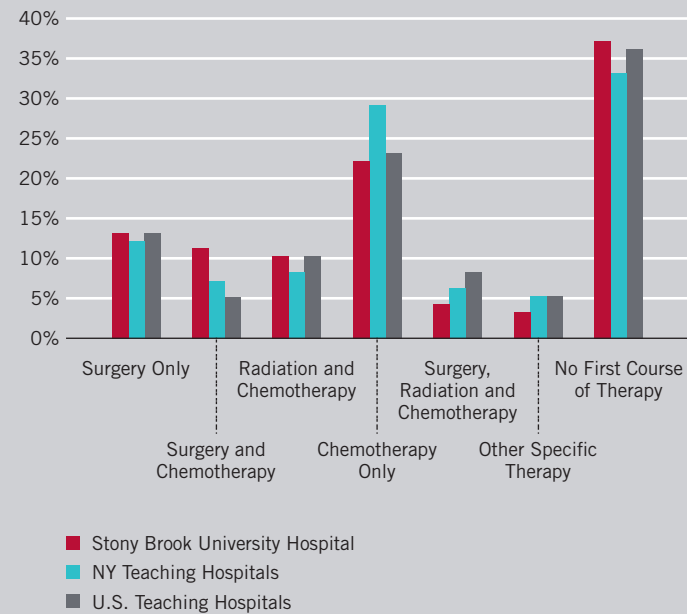
National Cancer Institute (n.d.). General Information About Colon Cancer (Patient Version). Retrieved September 14, 2014 from www.cancer.gov/cancertopics/pdq/treatment/colon/patient

National Cancer Institute (n.d.). General Information About Colon Cancer (Health Professional Version). Retrieved September 14, 2014 from www.cancer.gov/cancertopics/pdq/treatment/colon/HealthProfessional

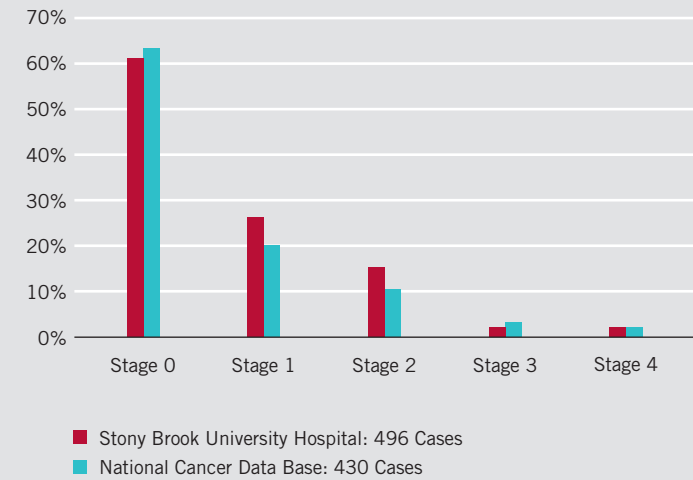
TNM Stage at Diagnosis 2000-2011



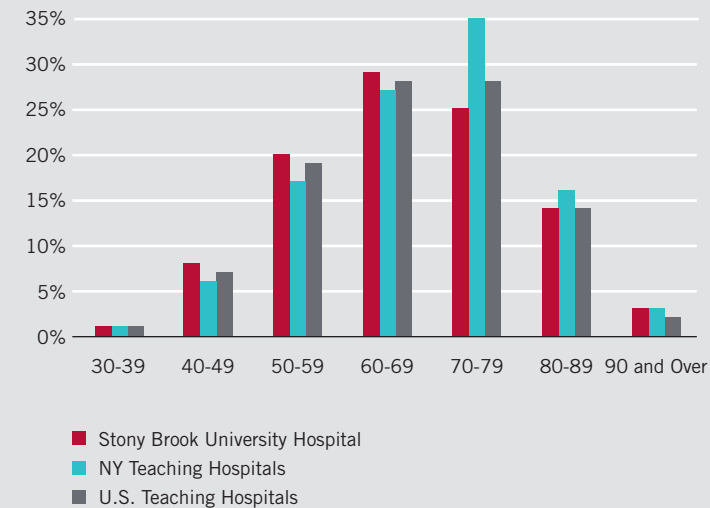
Treatment Modalities 2000-2011



Five-Year Survival Outcomes



Age at Diagnosis 2000-2011



Pancreatic Cancer Site Survey

Cancer of the pancreas is difficult to diagnose in its early stages and usually has no noticeable symptoms until it has spread to other tissues. More than 45,000 people were expected to be diagnosed in 2013. Pancreatic cancer ranked fourth as the cause of cancer deaths in the U.S. in 2013. From 2006 to 2010, New York State tables averages 196 deaths in Suffolk County attributable to pancreatic cancer. According to the American Cancer Society and to Stony Brook's own database, the average age for those diagnosed is approximately 70 years of age. Incidence rates are found to be higher in men than in women, and for African-Americans when compared to other races at every age. Differentiation is generally made between endocrine and exocrine tumors, and for the purposes of this study, the focus is predominantly about exocrine tumors since they represent better than 90 percent of pancreatic cancers.

Screening methods are very limited. Physicians focus on what are considered to be high-risk factors, which include tobacco and alcohol use, obesity, family history and other medical conditions, such as chronic pancreatitis. Gene mutations like those seen in hereditary pancreatitis can increase a person's risk as much as 70 percent. Lynch, von Hippel-Lindau and Peutz-Jeghers syndromes are all considered risk factors. People with hepatitis B or C and helicobacter pylori may also find themselves at greater risk.

Many patients remain unaware of their advanced state of disease until symptoms force them into an emergent situation, and by then the disease has become a rapidly progressive condition. For example, jaundice is a common symptom. Blood tests, followed by endoscopic ultrasound with CT scanning, are often used in disease diagnosis. Tumor staging dictates treatment with the hope that curable resection is available. Multimodality therapy, including systemic agents and radiation therapy, may also prolong survival.

As shown in the first graph, the vast majority of patients are diagnosed in late stage. The majority of patients at Stony Brook are staged so that care can be rendered in conjunction with National Comprehensive Cancer Network (NCCN) guidelines. Treatment modalities during the first course of treatment range from surgery, radiation and chemotherapy to no treatment at all. When Stony Brook is compared to other New York State academic medical centers, the largest deviation, 6 percent, occurs when patients choose chemotherapy only. But, Stony Brook is consistent with other U.S. academic medical centers in that category. Whether curative resection at an early stage or palliative surgery at a late stage, Stony Brook can provide both, treating the disease and improving the patient's severe symptoms.

Unfortunately, the later the stage, the more advanced the disease. This is illustrated in the graph, Five-Year Survival Outcomes. The survival in both stage 3 or 4 at the five-year mark is only 2 percent. Survival outcomes at Stony Brook University Hospital, when compared to the National Cancer Data Base, are consistent with national outcomes.

References for Site Survey

Pancreatic Cancer:
 American College of Surgeons: Cancer Programs: National Cancer Data Base (NCDB) (n.d.). NCDB Survival Reports. Retrieved September 14, 2014, from www.facs.org/cancer/ncdb/survival.html (secure access only)

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National Cancer Institute (n.d.). General Information About Pancreatic Cancer (Patient Version). Retrieved September 14, 2014 from www.cancer.gov/cancertopics/pdq/treatment/pancreatic/patient

National Cancer Institute (n.d.). General Information About Pancreatic Cancer (Health Professional Version). Retrieved September 14, 2014 from www.cancer.gov/cancertopics/pdq/treatment/pancreatic/HealthProfessional

2013 Cancer Site Distribution

Primary Site	Patient Types			Gender		AJCC In situ	TNM Stage Group*					
	Total	New	Re-tx	Males	Females		Stage I	Stage II	Stage III	Stage IV	Unknown	N/A
All sites	2771	2256	515	1208	1563	219	785	395	321	386	318	347
Oral Cavity	47	36	11	35	12	0	7	3	4	24	8	1
Lip	0	0	0	0	0	0	0	0	0	0	0	0
Tongue	12	10	2	11	1	0	2	1	0	8	1	0
Oropharynx	2	2	0	2	0	0	0	0	0	2	0	0
Hypopharynx	1	1	0	1	0	0	0	0	0	1	0	0
Other	32	23	9	21	11	0	5	2	4	13	7	1
Digestive System	429	336	93	259	170	7	61	73	86	105	86	11
Esophagus	42	30	12	33	9	2	4	5	14	11	6	0
Stomach	56	44	12	37	19	0	13	7	13	9	14	0
Colon	101	81	20	62	39	2	13	12	25	32	17	0
Rectum	44	38	6	29	15	1	11	12	9	6	5	0
Anus/Anal Canal	5	3	2	2	3	0	1	0	2	0	2	0
Liver	30	19	11	21	9	0	4	1	3	9	7	6
Pancreas	98	82	16	53	45	2	10	28	10	25	23	0
Other	53	39	14	22	31	0	5	8	10	13	12	5
Respiratory System	316	256	60	162	154	3	83	26	50	117	34	3
Nasal/Sinus	3	3	0	2	1	1	0	0	0	0	1	1
Larynx	17	14	3	14	3	1	8	1	1	5	1	0
Lung/Bronchus	292	236	56	143	149	1	75	24	49	110	31	2
Other	4	3	1	3	1	0	0	1	0	2	1	0
Blood and Bone Marrow	150	101	49	79	71	0	1	0	2	0	1	146
Leukemia	91	72	19	47	44	0	1	0	2	0	1	87
Multiple Myeloma	42	25	17	23	19	0	0	0	0	0	0	42
Other	17	4	13	9	8	0	0	0	0	0	0	17
Bone	11	10	1	4	7	0	3	2	0	1	4	1
Connective/Soft Tissue	25	20	5	14	11	0	10	3	4	2	6	0
Skin	197	176	21	118	79	54	72	34	14	6	15	2
Melanoma	188	167	21	112	76	54	69	31	14	6	14	0
Other	9	9	0	6	3	0	3	3	0	0	1	2
Breast	515	443	72	5	510	112	188	104	35	33	43	0
Female Genital	201	168	33	0	201	4	96	16	38	13	28	6
Cervix Uteri	27	22	5	0	27	0	8	6	8	1	3	1
Corpus Uteri	106	94	12	0	106	0	71	3	11	5	16	0
Ovary	40	28	12	0	40	0	9	3	15	5	8	0
Vulva	13	11	2	0	13	3	7	1	1	1	0	0
Other	15	13	2	0	15	1	1	3	3	1	1	5
Male Genital	194	145	49	194	0	0	52	89	10	16	26	1
Prostate	172	127	45	172	0	0	39	86	8	15	24	0
Testis	16	13	3	16	0	0	13	2	1	0	0	0
Other	6	5	1	6	0	0	0	1	1	1	2	1
Urinary System	192	147	45	143	49	39	66	18	20	17	29	3
Bladder	80	51	29	61	19	30	15	11	2	7	15	0
Kidney/Renal	100	84	16	71	29	3	49	6	18	10	14	0
Other	12	12	0	11	1	6	2	1	0	0	0	3
Brain and CNS	93	82	11	43	50	0	0	0	0	0	0	93
Brain (Benign)	7	7	0	3	4	0	0	0	0	0	0	7
Brain (Malignant)	42	35	7	29	13	0	0	0	0	0	0	42
Other	44	40	4	11	33	0	0	0	0	0	0	44
Endocrine	233	206	27	69	164	0	125	14	42	15	11	26
Thyroid	206	184	22	55	151	0	125	14	42	15	10	0
Other	27	22	5	14	13	0	0	0	0	0	1	26
Lymphatic System	113	86	27	58	55	0	21	13	15	36	26	2
Hodgkin's Lymphoma	12	9	3	7	5	0	0	4	4	1	3	0
Non-Hodgkin's Lymphoma	101	77	24	51	50	0	21	9	11	35	23	2
Unknown Primary	48	38	10	21	27	0	0	0	0	0	1	47
Other/ill-defined	7	6	1	4	3	0	0	0	1	1	0	5

Number of cases excluded: 109

This report EXCLUDES CA in-situ cervix cases, squamous and basal cell skin cases, and intraepithelial neoplasia cases

Cancer Center Phone Numbers

Phone numbers are in the 631 area code unless otherwise stated.

Cancer Center	638-1000
Cancer Helpline	(800) 862-2215
Cancer Registry	444-9844
Cancer Survivorship Program	638-1000
Carol M. Baldwin Breast Care Center	638-1000
Chaplaincy	444-7775
Child Life Program	444-3840
Clinical Trials	638-0839
Colorectal Surgery	444-1825
Dermatology.....	444-4200
Diagnostic Radiology	638-2121
Gynecologic Oncology	638-1000
Head and Neck Oncology	444-8410
HealthConnect	444-4000
Hematology/Oncology	638-1000
Leukemia/Lymphoma/Transplant	638-1000
Lung Cancer Evaluation Center	444-2981
Neurosurgical Oncology	444-1210
Nursing Administration	444-2780
Nutrition	638-1000
Pain Management Services	638-0800
Palliative Care	444-2052
Pathology	444-2222
Patient Education Services	638-1000
Pediatric Hematology/Oncology	444-7720
Physical and Lymphedema Therapy	444-4240
Preventive Medicine	444-2190
Radiation Oncology	444-2200
Social Work Services	444-2552
Support Groups	444-4000
Surgical Oncology	638-1000
Upper Gastrointestinal Oncology	444-8052
Urologic Oncology	444-1948

The 2014 Cancer Center Quality and Standards Report was developed by Stony Brook Medicine's Cancer Committee and published by the Office of Communications, Stony Brook, NY, November 2014.

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Lynn Hallarman, MD, with patient Judith Pacifico Larkin



Charles Mazzaresse, MPS, RT(R)(CT)(CV), Associate Director, Outpatient Imaging Services, prepares a patient for a CT scan as part of the lung cancer screening program



Brittany Carroll