2006 Annual Cancer Report





2005 Cancer Committee

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The Bay Medical Regional Cancer Center staff



Bay Medical Invests in Cancer Care

In early 2006, Bay Medical unveiled a multimillion dollar investment in state-of-the-art cancer treatment technology. An advanced facility for treating cancer with a new radiotherapy system capable of delivering Intensity Modulated Radiation Therapy (IMRT), the most precise and sophisticated treatment in the world, was installed and ready for use in February. Clinicians at Bay Medical now use the new SmartBeam® IMRT system from Varian Medical System to treat patients with prostate, breast, head and neck, lung, pancreatic, and other cancers where precisely placed beams can be focused to carefully target tumor cells without harming surrounding healthy tissue. In order to offer IMRT, Bay Medical also purchased a complete new treatment planning system along with a new linear accelerator and other equipment.

"We have invested 2.6 million in new cancer treatment technology so that we are able to offer patients with cancer the best available care right



Bay Medical's Cancer Center offers state-of-the-art cancer treatment technology with a radiotherapy system capable of delivering Intensity Modulated Radiation Therapy.

here in their home town," says Steve Johnson, Bay Medical President and CEO. "This investment in technology will also enable us to participate in national research that will keep our treatment methods on the leading edge."

John Varner, Radiation Physicist at Bay Medical's Cancer Center, says, "Our center is equipped with state-of-the-art capabilities that have laser-like precision which our medical staff will use for treating cancer. We now have the potential to substantially improve both patient comfort and cure rates by protecting healthy tissue while delivering more powerful doses to the tumor."

Enhancing the dose concentrations to the tumor gives clinicians a much greater chance of completely eradicating the tumor, rather than simply causing a temporary regression. Cancer cells are fast replicating by nature, so any damage to the genetic structure of these cells by radiation is incredibly powerful. In addition, increased optimization enables clinicians to use radiation to treat areas that would have been considered too risky just a few years ago.

The new IMRT technique has already contributed to substantially improved clinical outcomes in prostate cancer, according to studies in the *Journal of Radiotherapy and Oncology* and the *International Journal of Radiotherapy and Oncology*.

Chairman's Report



Known as a 100 Top Hospital and ranked among the top 5 percent in the nation for clinical quality, Bay Medical continuously strives to be known as the "Primary Cancer Care Facility" that provides improved cancer treatments for individuals who live in and around this community.

In May 2005 the Bay Medical Cancer Program was surveyed by the Commission on Cancer. The program received a three-year (3) approval with five (5) other areas receiving Commendation Ratings: Outcomes Analysis; Quality of NCDB Data Submission; AJCC Staging; Prevention & Early

Detection; and Cancer Registry Staff Education.

Overseeing the success of the Cancer Program, the Cancer Committee is comprised of multiple physician specialties: surgeons, radiation oncologist(s), medical oncologist(s), diagnostic radiology, pathology, cancer program coordinator as well as others. The chairman (a physician) is appointed each year, and the physician liaison is appointed every two (2) years, and both serve as members of the Cancer Committee.

It is the responsibility of the Cancer Committee to set into motion the requirements needed in order to have successful Cancer Committee and Cancer Conferences meetings, to develop annual goals and objectives for each of the four areas of the cancer program, select topics for all quality improvement/enhancement studies, select sites for site specific studies, assist with the ACOS survey preparation, complete pathology and abstract reviews annually, assist with the annual cancer report and other task as needed.

The registry is electronically maintained by the Cancer Program Coordinator by using IMPAC Cancer Registry Software. Required data elements are collected in order for Bay Medical to maintain compliance as an approved cancer program. Compiled and analyzed annually, this information helps to determine the effectiveness of current treatment modalities and aids in determining the overall survival status of cancer patients treated at Bay Medical.

Bay Medical strives to provide the necessary cancer awareness and education needed in order for the residents of Bay County and the surrounding areas to be able to understand the importance of early detection and the impact it has in determining the future of the patients.

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Jefferson Trupp, M.D. Chairman, 2005 Cancer Committee Radiation Oncology

2005 Cancer Registry Report

The Cancer Program at Bay Medical was established on January 1, 1995. In 2005, the Cancer Committee requested permission from the Commission on Cancer to change the reference date to January 1, 1999. This change was approved by the Commission on Cancer. The Cancer Registry data is maintained by using the IMPAC Cancer Registry Software Program designed for collecting, following, managing, and analyzing cancer data.

The Cancer Registry Coordinator analyzes data based on the patient's medical record and enters it into the IMPAC software. All reportable cancers are to be abstracted within six (6) months of the diagnosis date and/or the first date of contact with the patient. Accession numbers are assigned to patients based on the year in which they are diagnosed and/or the year of the first date of contact with the patient.

In 2005 there were 725 new cancer cases accessioned into the cancer registry. This gives the registry a total of 4,073 cases entered since the reference date of January 1, 1999.

2005 Cancer Conferences

Bay Medical and Gulf Coast Medical Center have monthly Shared Cancer Conferences. Bay Medical Cancer Conferences are held on the first and third Wednesday of each month. A variety of cases, including sites most often reported by Bay Medical (lung, breast, colon, prostate, bladder, etc.), are presented by managing and treating physicians.

Physicians representing surgery, pathology, radiology, medical oncology, and radiation oncology attend the monthly conferences to discuss the cases and possible treatments in detail. In 2005, 116 cases were presented with 96 percent of those cases presented prospectively.

2005 Cancer Program Activities

April 2005Relay for Life of Panama City, Tommy Oliver StadiumOctober 2005Breast Cancer Education Seminar, Bay MedicalOctober 2005Prostate Cancer Education Seminar, Bay Medical

2005 Support Programs & Services

Through the American Cancer Society and the continuously dedicated volunteers, many of whom are also cancer survivors, support groups are available to cancer patients and their families. Support groups include:

- I Can Cope
- Reach to Recovery Look Good...Feel
- Better
- Man to Man
- Tender Loving Care
- Road to Recovery

More information can be found on current support groups/meetings within the community by contacting the American Cancer Society at (850) 785-9205.

At Bay Medical, the social services and discharge planning team is always available to assist patients with referrals and recommendations regarding their physical and emotional needs when they have a newly diagnosed cancer. These services may range from home health, physical therapy, chemotherapy, radiation therapy and in the event that it is recommended by the physician, hospice care.

2005 Bay Medical Cancer Statistics

Figure 1: Frequency of Cancer

The *Frequency of Cancer* chart (Figure 1) represents the most most common (analytic cases only) primary cancer sites diagnosed and/or treated at Bay Medical during 2005.



Figure 2: Histology Frequency

The *Histology Frequency* chart (Figure 2) gives specific detail to the most frequently diagnosed histologies during 2005.



Table 3: Primary Site Table

The *Primary Site Table* (Table 3) is a statistical analysis detailing each anatomical site for which cancer was reported by Bay Medical in 2005.

Primary Site	Total	Percent	М	F	Α	N-A	Alive	Expired	0	1	2	3	4	99	88
Oral Cavity / Tongue	7	1.0	6	1	6	1	5	2	0	0	0	2	4	0	0
Salivary Glands	6	0.8	5	1	5	1	5	1	0	0	1	2	2	0	0
Gum & Other Mouth	4	0.6	4	0	3	1	2	2	0	0	1	1	1	0	0
Tonsil	7	1.0	6	1	7	0	7	0	0	1	0	4	2	0	0
Hypopharynx	3	0.4	2	1	3	0	1	2	0	0	0	1	1	1	0
Other Oral Cavity / Pharynx	2	0.3	2	0	2	0	2	0	0	0	0	0	0	0	2
Digestive / Esophagus	10	1.4	8	2	6	4	7	3	0	1	0	2	2	1	0
Stomach	13	1.8	9	4	9	4	8	5	0	2	3	2	1	0	1
Colon	55	7.6	34	21	46	9	41	14	0	7	14	14	10	1	0
Rectum & Rectosiamoid	15	2.1	9	6	14	1	14	1	0	7	3	2	0	2	0
Anus and Anal Canal	1	0.1	0	1	1	0	1	0	0	0	1	0	0	0	0
Liver	3	0.4	2	1	2	1	0	3	0	0	0	0	1	1	0
Gallbladder	1	0.1	0	1	1	0	1	0	0	1	0	0	0	0	0
Other Biliary	1	0.1	1	0	1	0	1	0	0	0	0	1	0	0	0
Pancreas	17	2.3	10	7	10	7	5	12	0	0	3	0	6	1	0
Retroperitoneum	1	0.1	1	0	1	0	0	1	0	1	0	0	0	0	0
Other Digestive Organs	1	0.1	1	0	1	0	1	0	0	0	0	0	0	0	1
Respiratory / Nasal Cavity	1	0.1	1	0	1	0	1	0	0	0	0	0	1	0	0
Larvnx	11	1.5	7	4	10	1	9	2	0	2	1	3	2	0	2
Lung & Bronchus	154	21.2	94	60	142	12	48	106	0	24	9	38	55	16	0
Soft Tissue - Incl Heart	3	0.4	1	2	3	0	3	0	0	0	0	0	1	2	0
Skin / Melanomas	22	3	15	7	14	8	18	4	0	7	2	2	1	1	1
Female Sites / Breast	127	17.5	1	126	99	28	116	11	19	36	25	15	1	3	0
Cervix Uteri	9	1.2	0	9	7	2	8	1	0	1	2	2	2	0	0
Corpus Uteri	10	1.4	0	10	8	2	8	2	0	5	0	1	0	2	0
Uterus, NOS	1	0.1	0	1	0	1	1	0	0	0	0	0	0	0	0
Ovary	7	1	0	7	5	2	5	2	0	0	0	3	2	0	0
Vulva	2	0.3	0	2	1	1	2	0	1	0	0	0	0	0	0
Male Sites / Prostate	80	11	80	0	55	25	69	11	0	0	43	7	5	0	0
Testis	4	0.6	4	0	3	1	3	1	0	3	0	0	0	0	0
Urinary Systems / Bladder	27	3.7	25	2	13	14	20	7	5	4	2	0	2	0	0
Kidney & Renal Pelvis	17	2.3	12	5	13	4	13	4	1	7	0	1	4	0	0
Ureter	2	0.3	0	2	1	1	1	1	0	0	1	0	0	0	0
Eve and Orbit	1	0.1	1	0	0	1	1	0	0	0	0	0	0	0	0
CNS / Brain	15	2.1	12	3	14	1	9	6	0	0	0	0	0	0	13
Cranial Nerves	1	0.1	0	1	1	0	1	0	0	0	0	0	0	0	1
Endocrine / Thyroid	6	0.8	4	2	3	3	6	0	0	2	0	1	0	0	0
Other Including Thymus	2	0.3	0	2	2	0	1	1	0	0	0	0	0	0	1
All Other III-Defined Sites			-									1			<u> </u>
Hodgkin's Disease	2	0.3	0	2	2	0	2	0	0	0	0	2	0	0	0
Non-Hodgkin's Lymphoma	24	3.3	10	14	16	8	18	6	0	4	5	1	4	2	0
Mveloma	5	0.7	3	2	2	3	2	3	0	0	0	0	0	0	2
Leukemia	15	21	10	5	8	7	5	10	0	0	0	0	0	0	8
Mesothelioma	3	0.4	2	1	3	0	1	2	0	0	1	0	1	1	0
Kaposi Sarcoma	1	0.1	1	0	0	1	0	1	0	0	0	0	0	0	0
Unknown Primary Site	26	3.6	17	9	22	4	6	20	0	0	0	0	0	0	22
Total	725	100%	400	325	566	159	478	247	26	115	117	107	111	34	54

Figure 4: Age at Diagnosis By Gender





Figure 5: AJCC Stage Frequency

The *AJCC Stage Frequency* chart (Figure 5) gives a breakdown of the total number of each AJCC Stage for all analytical cases.



2001 to 2005 Small Cell Lung Carcinoma Study

Lung cancer is the leading cause of cancer death both in men and women in the United States. It is estimated that 172,570 new cases and 163,510 deaths occurred in 2005. Of all patients with lung cancer, approximately 14 percent will have Small Cell Lung Cancer (SCLC). SCLC is strongly associated with tobacco smoke. SCLC is commonly staged as limited stage or extensive stage. Limited stage disease is confined to a single hemithorax that can be encompassed within one radiation port. Patients with malignant pleural or pericardial effusion or disease beyond what is described in limited stage disease are considered as having extensive stage disease.

Because of its marked sensitivity to chemotherapy, this is the main modality of treatment of SCLC. In limited stage disease, thoracic radiation therapy is also administered. Patients with limited stage disease, who go into complete remission, also receive prophylactic cranial radiation to reduce the risk of relapse in the brain. Extensive stage patients are usually treated with chemotherapy alone. Treatment of SCLC patients results in palliation of symptoms as well as prolongation of survival; however only a small number of patients are cured with modern day treatment. The five (5) year survival of limited stage patients is 20 percent. The five (5) year survival rate for extensive stage disease is less than 5 percent.

During the time frame from 2001 to 2005 there were a total of eighty-eight (88) patients diagnosed with Small Cell Lung Carcinoma. There were forty-seven (47) males and forty-one (41) females whose ages ranged from forty (40) to eighty-nine (89).



Diagnosis by Gender and Age

Stage at Diagnosis



As seen in the *Treatment Summary* table below, sixty-five (65) patients received treatment which included at least chemotherapy and/or radiation therapy. Of the eighty-eight (88) patients diagnosed with Small Cell Lung Carcinoma during 2001 to 2005 there are currently ten (10) patients surviving. Five (5) patients are noted to be disease free at this time while the other five (5) patients show evidence of active disease.

	2001	2002	2003	2004	2005	Total
Chemotherapy Only	4	4	5	9	4	26
Chemotherapy/ Radiation	9	7	8	8	6	38
Surgery / Chemotherapy	0	0	1	0	0	1
Not Recommended	1	2	2	1	4	10
Recommended/ Patient Expired before able to begin therapy	0	0	0	0	3	3
Refused all Therapy	2	0	3	0	5	10
Total	16	13	19	18	22	88

Treatment Summary

The next two survival graphs are a comparison of the patients diagnosed at Bay Medical and the total number of patients diagnosed in the United States during 2001 to 2005.

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2001 to 2005 Small Cell Lung Carcinoma Study

2001 to 2005 CIRF Data National Survival Comparison by Summary Stage



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