Oncology Program
annual report 2004
advanced healing...caring hearts

Gwinnett Medical Center
The hospital Gwinnett deserves.
Gwinnett Hospital System is a not-for-profit hospital system providing a wide array of high quality services and facilities to Gwinnett and surrounding counties. With roots that go back over 60 years with the founding of Joan Glancy Memorial Hospital in 1944, Gwinnett Hospital System now includes three hospitals plus supporting facilities. We have over 3,900 associates and over 700 credentialed medical staff. In fiscal year 2004, Gwinnett Hospital System provided care to 386,327 patients.

Our Vision: To be the health system of choice in our community by enhancing the health of our patients and other customers.

Our Mission: We exist to provide quality health services to our community.

Our Values guide our success:

- The wellbeing of our patients and customers comes first—always.
- Respect for the individual is a priority.
- The relentless pursuit of excellence and the promotion of positive change will be evident in all we do.
- Service to the community is an integral component of our business philosophy.
The Cancer Committee of Gwinnett Hospital System continues to oversee an active and expanding Cancer Care Program. With multidisciplinary input from a variety of medical specialties as well as representatives from nursing, nutrition services, pharmacy and others, the Committee is structured to address the impact of cancer on patients, their families and the community at large.

The past year has seen an increase in participation in clinical trials through the Atlanta Regional Community Clinical Oncology Program (ARCCOP). Efforts at community outreach have also intensified, not only in the area of cancer support groups, but also in activities such as health screening, cancer prevention and nutrition guidelines.

An important responsibility of the Cancer Committee is the Tumor Conference, which has increased in frequency to a weekly occurrence. At this conference, physicians from the departments of pathology, radiology, surgery, medical oncology and radiation oncology present and discuss individual cases representing the wide spectrum of malignancies found in Tumor Registry. In this educational forum, specific issues are discussed regarding current diagnosis and management of different types of cancer.

In short, the multidisciplinary approach to the patient provided by the Cancer Care Program and reflected in the operations of the Cancer Committee, serves as a model for dealing with complex diseases, of which cancer is only one example.

I want to thank the members of the Cancer Committee for their participation and contributions over the past year. I am also grateful to Franklin M. Rinker, President and CEO, and his administrative staff for their continued support of the Cancer Care Program. Finally, thanks are due to all of the physicians, nurses, and allied health professionals at Gwinnett Hospital System for their tireless efforts in caring for patients with cancer.

Robert J. Siegel, M.D.
Chair, Cancer Committee
2004 Cancer Committee Goals

Goal:
To offer a full range of preventive, diagnostic, treatment and rehabilitative services to cancer patients in a wholistic manner. To deliver innovative services of superior quality at the best value by fostering continuous improvements in cancer care.

2004 Tumor Conference Meetings

The primary goal and objective of Tumor Conference at Gwinnett Hospital System is:

- To educate healthcare professionals in the diagnosis, pathologic features, and management options of cancer patients.
- To improve the quality of life for these patients.

Tumor Conference attendance includes physicians from medical, surgical, radiation oncology, hematology, pathology, diagnostic radiology and other specialties.

Allied health professionals including nursing services, lab, pharmacy, social services, pain management, case management, nutrition, rehab services and others also participated. A total of 35 Tumor Conferences, including six didactics, were offered in 2004. A total of 137 site cases were presented. Conferences are approved for one Continuing Medical Education credit.
The Cancer Committee is a multidisciplinary standing committee comprised of physicians representing all major disciplines, allied health professionals and administrative staff. Its responsibilities include planning, coordinating, initiating and evaluating all aspects of care for oncology patients at Gwinnett Hospital System. The Committee is tasked with supervising the Oncology Data Center and sponsoring a weekly opportunity for physicians to present topics of interest. It also includes case presentations of analytic and nonanalytic patients. The Oncology Program continues to be an NCI-SEER affiliate and remains approved as a designated Community Hospital Cancer Program by the American College of Surgeons.

**Physician Members:**
- James Freeman, MD . . . . . . . . . . . . .Gynecology
- Gordon Goldstein, MD . . . . . . . . . . . . .Radiology
- Chris Hagenstad, MD . . . . . . . . . . . . .Hematology/Oncology
- Kimberly Hutcherson, MD . . . . . . . . . . .Radiology
- Carla Jorgensen, MD . . . . . . . . . . . . . .Hematology/Oncology
- Richard Lloyd, DO . . . . . . . . . . . . . . .Hematology/Oncology
- Miles Mason, III, MD . . . . . . . . . . . . .General Surgeon
- Douglas Nyhoff, MD . . . . . . . . . . . . . .Urology
- Mark Quinn, MD . . . . . . . . . . . . . . . .Radiation Oncology
- Cynthia Robinson, MD . . . . . . . . . . . . .Radiology
- Alexander Saker, Jr., MD . . . . . . . . . . . . .Hematology/Oncology
- Stephen Salmieri, DO . . . . . . . . . . . . .Gynecology/Oncology
- Philip Shrake, MD . . . . . . . . . . . . . . . .Radiation Oncology
- Robert Siegel, MD, Chair . . . . . . . . . . . .Pathology
- Michael Stechison, MD . . . . . . . . . . . . .Neurology
- Stephen Szabo, MD . . . . . . . . . . . . . . .Hematology/Oncology
- James York, MD . . . . . . . . . . . . . . . .Radiology

**Associate Members:**
- Patti Jo Carruth . . . . . . . . . . . . . . . .Outpatient Treatment Center
- Elizabeth Clarke . . . . . . . . . . . . . . . . .Rehabilitation Services
- Chuck Christie . . . . . . . . . . . . . . . . .Chaplain Services
- Ron Corder . . . . . . . . . . . . . . . . . . . . .Administration
- John Cummings . . . . . . . . . . . . . . . . .Oncology Data Center
- Debra Fortier . . . . . . . . . . . . . . . . . . .Oncology Data Center
- Gwen Gustavson . . . . . . . . . . . . . . . . .Women’s Services
- Norma Jarmsuch . . . . . . . . . . . . . . . . .Nursing Administration
- Tracie Johnson . . . . . . . . . . . . . . . . .Nutrition Services
- Jeff Lusco . . . . . . . . . . . . . . . . . . . . . .Social Services
- Paula Martin . . . . . . . . . . . . . . . . . . . .Marketing & Community Relations
- Michael Naughton . . . . . . . . . . . . . . . .Pharmacy
- Debra Nichols . . . . . . . . . . . . . . . . . . .SummitRidge
- Ify Nwadiogbu . . . . . . . . . . . . . . . . . . .Oncology Data Center
- Cindie Lou Roger . . . . . . . . . . . . . . . . .Pain Management
- Laura Shafer . . . . . . . . . . . . . . . . . . . . .Wound Treatment Center
- Cindy Snyder . . . . . . . . . . . . . . . . . . . . .Breast Health Services
- Carrie Swift . . . . . . . . . . . . . . . . . . . . .Nutrition and Lifestyle
- Dotty Updegraff . . . . . . . . . . . . . . . . .Medical Staff Office/Quality Assurance
- Betsy Wallace . . . . . . . . . . . . . . . . . . . .Integrative Medicine
- Stacy Zehnder . . . . . . . . . . . . . . . . . . .Health Education & Wellness Services
- Beverly Zirkle . . . . . . . . . . . . . . . . . . .Nursing Administration
The ability to see cancer inside a patient's body is crucial for accurate diagnosis and treatment. Our dedicated radiologists provide diagnostic services that are at the forefront of new advances in diagnostic imaging and interventional radiology treatment options. The Department of Radiology provides a full range of contemporary diagnostic imaging and therapeutic services including ultrasound, nuclear medicine, CT, MRI, mammography, and PET/CT fusion imaging. For cancer patients, it means the most accurate diagnosis and treatment anywhere, increasing the chances for success.

The Interventional Radiology team at Gwinnett Hospital System is comprised of dedicated physicians, nurses, and technologists who are committed to providing innovative image-guided therapies for benign and malignant oncologic disease processes. State-of-the-art imaging techniques including fluoroscopy, ultrasound, CT and MRI are utilized to guide placement of tiny needles, tubes or catheters to target sites deep in the body through small skin entry sites the size of the tip of a pencil. These procedures are typically performed without the need for general anesthesia, allowing the interventional radiologist to treat cancer-weakened bones, deliver chemotherapy drugs directly to tumors and to treat some cancers without open surgery.

The Department of Radiology added a new weapon in the fight against breast cancer in 2004, thanks to the contributions to the Gwinnett Hospital System Foundation's TIME MATTERS in the fight against Breast Cancer campaign. The ImageChecker system, a computer-aided detection (CAD) product digitizes a mammogram and analyzes it using special processing software to enhance the early detection of breast cancer. After radiologists view a patient's original mammogram, they then turn to a video monitor to see the mammogram after the ImageChecker has scanned and pinpointed possible trouble spots. "The CAD system will greatly improve our mammography imaging, and we are excited to offer the additional technology to the community," said Kimberly Hutcherson, MD, GHS women's imaging radiologist. "This system promises to be a powerful ally in the fight against breast cancer." From standard radiology to advanced techniques that can view inside the body to the sub-millimeter level, our radiologists take diagnosis, tumor staging, and treatment planning to the highest levels available in medicine today.
Pain Management

Pain is one of the most prevalent symptoms faced by patients with cancer. It can also be one of the most distressing and feared for both patients and their families. Unrelieved pain has the potential to not only affect the patient’s physical condition, but also the emotional and spiritual well-being, social functioning and quality of life.

Pain management is a priority at Gwinnett Hospital System. Following standards issued by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and recommendations from organization such as the American Pain Society and leading cancer organizations, the GHS Pain Management Committee has established policies and processes to assist in achieving optimal pain management for all patients. This multidisciplinary committee works in conjunctions with the Cancer Committee to address the special needs of patients with cancer-related pain.

Effective pain management requires a team approach involving patients, families and healthcare providers. An advanced practice nurse with special training in pain management is available to assist in developing a pain management plan. A balanced approach using different medications for different types of pain and also incorporating non-pharmacologic measures is encouraged. Various healthcare disciplines such as rehabilitation services, behavioral health and chaplaincy are included when appropriate.

Patients are involved in decisions related to relieving their pain and are encouraged to take an active role. GHS works to provide a continuing plan for managing pain. Information is provided on pain and symptom management at the time of discharge, and arrangements for home healthcare or hospice services are made when such needs are identified.

Physicians who specialize in pain management from the GHS Pain Management Center may be consulted. With a physician’s referral, the staff at the Pain Management Center will evaluate and develop a pain management plan. Treatment ranges from medication management, rehabilitation services and behavioral interventions to interventional therapies that include nerve blocks and steroid injections. Non-pharmacologic measures such as exercise, massage and classes on self-help measures are also utilized.

While cancer pain cannot always be entirely eliminated, appropriate use of available therapies and resources can effectively relieve pain the majority of patients. GHS is committed to providing this relief to all patients.
Breast Health Services
One in eight women will develop breast cancer at some point in her lifetime. At Gwinnett Hospital System, our goal is to bring our resources together to offer the best possible continuum of care.

Breast health is an increasingly important issue in women's lives. Women make many decisions regarding breast health, including breast cancer prevention, early detection, diagnosis and treatment options. These major decisions have lifelong effects and are difficult to make. The necessary ingredient in this decision-making is the provision of easily accessible, understandable information.

Our Breast Health Education & Resource Center provides an array of information in various formats to educate women about breast health and breast cancer. Director of Breast Health Services, Cindy Snyder, RN, MSN, FNP-C, provides an essential link between Gwinnett Hospital System and other services for the cancer patient in the hospital and community.

The numbers tell the story. In 2004, Breast Health Services made 2,218 breast cancer patient contacts; 133 breast cancer support group contacts; and provided 10 educational outreach sessions that were open to the public.

The Women’s Pavilion Boutique opened in October 2003. Located in Gwinnett Women’s Pavilion, this boutique offers products and services that are for the particular and distinctive healthcare needs of women. Among the products carried are breast pumps, breast forms, nursing and mastectomy bras, wigs, hats, aromatherapy products, books and gifts.

Care-a-Van
Screening mammography can save lives by detecting breast cancer early, when the chances are best for effective treatment and cure. Our mobile mammography service brings early detection right to community and work sites – a convenience for community members and employees and a cost-containment strategy for businesses.

A ribbon-cutting ceremony for the new Care-a-Van was held on April 28, 2004. On-site tours were provided at the Gwinnett Hospital System Foundation Ball and at Sugarloaf Country Club’s Volley For A Cure tennis tournament.

In 2004, the Care-a-Van provided mammography at 85 sites, serving a total of 1,004 patients. This number is 72 percent of the total patients served in fiscal year 2003, even though we were operational less than 36 weeks of the year.
Coordinated Care/Oncology Social Work
When patients are admitted, Coordinated Care and Social Work staff members follow them through their hospitalizations, serve as patient liaisons and provide needed education, support and resource information to them and their family members.

Nursing Services
Nursing staff provide acute care oncology services to both inpatients and outpatients. Among their care services are chemotherapy administration, care of patients receiving radiation therapy and management of patients’ symptoms and pain. Nurses also offer support, information and education to patients and their families.

Community Outreach Services and Events
A primary goal at Gwinnett Hospital System is providing quality health education information and preventive and diagnostic services to our community. We are committed to being an active and supportive member/partner of our community. GHS is a proud member of the American Cancer Society’s At Work program, which includes participation in the Relay for Life and Partners in Information, as well as sponsorship of the Crusaders’ Ball. The following are highlights of our community outreach efforts:
• GHS is represented on the Smoke-free Gwinnett Coalition.
• GHS participates in the annual Great American Smokeout campaign sponsored by the American Cancer Society.
• An annual prostate cancer screening event conducted by the PrimeTime Health program in September 2004 attracted 94 men ranging in age from 39 to 83. Results included 86 normal PSAs, eight abnormal PSAs, 29 normal DREs, 59 identifications of benign prostatic hypertrophy and three abnormal DREs.
• GHS was a corporate sponsor for the 2004 American Cancer Society’s Gwinnett Relay for Life. With a number of fundraising efforts complementing the team sponsorships, the grand total raised in the Relay for Life was $6,232.
• Because GHS facilities are smoke-free inside and out, on-going efforts are made to educate our community that because smoking is unhealthy, it is prohibited on all of our campuses.
Pathology/Oncology
In 2004, over 20,000 surgical specimens and more than 1,700 cytology specimens were analyzed by Pathology and Oncology staff. Our pathologists examine this material by a variety of methods to arrive at an accurate classification of a patient’s malignancy, upon which appropriate cancer treatment is based. Important staging information tabulated in pathology reports includes the histologic type of tumor, grade, size, depth of invasion status of surgical margins, and presence of lymph node metastases. Pathologists actively participate in the weekly Tumor Conferences, where they demonstrate and discuss microscopic and other pathologic features of the case presented. Discussion of the pathologic findings significantly enhances the multidisciplinary approach to cancer management provided by these conferences.

Pharmacy
Pharmacy staff members prepare chemotherapeutic agents and medications, use a computerized safety dosage system and dispense investigational medications for treatment and preventive study trials. The pharmacy ensures the safety of each dose with the use of computer technology and a system of multiple checks. Chemotherapeutic agents including biologic modifying agents and chemoprotectant agents are prepared under strict aseptic and safety conditions.

Nutrition Services
Registered dietitians complete inpatient and outpatient needs assessments, develop total parenteral nutrition support regimens and educate patients and their families on nutrition intervention.

Outpatient Treatment Center
Our staff is trained in the care of cancer patients. Services at Gwinnett Medical Center include administration of chemotherapy and monoclonal antibodies, administration of blood products, immunoglobulin, intravenous antibiotics, Remicade®, Solumedrol® and other intravenous therapies. The nurses assist in procedures such as bone marrow biopsies, thoracentesis, and kidney and liver biopsies. Injections are provided for patients requiring colony stimulating agents for support of patients undergoing chemotherapy. At Joan Glancy Memorial Hospital services are provided to assist physicians with various procedures.
Integrative Medicine
Our cancer patients are encouraged to take an active role in their healthcare choices, which gives them a measure of control and may even improve their overall health and well-being. Our beneficial programs include expressive arts, guided imagery, yoga, healing music, health psychology and massage therapy.

Rehabilitation
Our services provide patients and their families an opportunity to regain functions lost due to the effects of disease and the side effects of cancer treatment. Rehab services also help maximize the quality of remaining life in terminal diseases. If intensive patient rehabilitation is required, Glancy Rehabilitation Center (GRC) offers a comprehensive Commission on Accreditation of Rehabilitation Facilities (CARF)-accredited program. For patients needing outpatient services, GRC offers:

- Speech - language pathologists who assist with voice restoration.
- Occupational therapists who work to restore function in daily living.
- Physical therapists that assist with functional mobility.
- Complete Decongestive Therapy for lymphedema patients.

Chaplaincy
The GHS spiritual team provides spiritual and emotional care to patients, their families and the healthcare team, and work to foster patients’ faith, values and religious or cultural practices.

Wound Treatment Center
The Center offers comprehensive patient and family education and conducts a monthly support group for Ostomy, Crohn’s and Colitis patients. Acute and rehabilitation care for inpatients and outpatients with select disorders of the gastrointestinal, genitourinary and integumentary systems are also available. Direct patient care is provided to individuals with:

- Abdominal stomas
- Wounds
- Fistulas
- Drains
- Impaired skin integrity

Medical Library
Our extensive collection includes traditional medical resources such as books, journals, audiotapes and CDs, as well as virtual resources like user-friendly databases providing links to full-text journals and books. The library provides its services to GHS physicians, healthcare professionals, associates and community members.
Clinical Trials

Gwinnett Hospital System has a strong commitment to research and the belief that clinical trials offer patients access to potentially beneficial new therapies. Participating physicians, including medical, radiation, gynecologic and surgical oncologists and hematologists, are able to offer patients innovative treatments for most cancer disease sites. Oncology nursing and data management support are part of the clinical trials program. The protocol nurse provides education and information to patients and staff regarding protocol treatments and new available therapies. The hospital, physicians and staff all play an important and pivotal role in the clinical trials process. However, the courage of the cancer survivor is the driving force behind the clinical trials program at Gwinnett Hospital System.

In 2004, 34 patients were referred for participation in clinical trials. Ten patients were registered on treatment and prevention studies. There are 40 ongoing studies available for patient participation.

Gwinnett Hospital System is a member of the Atlanta Regional Community Clinical Oncology Program (ARCCOP). This is a National Cancer Institute-funded program offering clinical research studies to the community cancer patient. Gwinnett Hospital System is one of eight metro Atlanta participating hospitals.

The research protocols are provided through:
- Southwest Oncology Group (SWOG)
- National Surgical Adjuvant Breast and Bowel Project (NSABP)
- Radiation Oncology Group (RTOG)
- M.D. Anderson Cancer Center
- Cancer Trials Support Unit (CTSU)

Cancer Prevention Clinical Trial

The NSABP STAR trial for women at high risk for breast cancer met its accrual in 2004. Gwinnett Hospital System registered three women on this study.

The SWOG SELECT trial for prostate cancer prevention met its accrual in 2004. Gwinnett Hospital System registered seven men on this study.

Oncology Data Center

The Oncology Data Center is an information system designed for the collection, management and analysis of data on persons with the diagnosis of a malignant or neoplastic disease (cancer). The information maintained in the registry includes:
- demographic information (age, gender, occupation, race/ethnicity, birthplace and residence)
- medical history (physical findings, screening information and any previous history)
- diagnostic findings (types, dates and results of procedures used to diagnose cancer)
- cancer information (primary site, cell type and extent of disease)
- cancer therapy (surgery, radiation therapy, chemotherapy, hormone or immunotherapy)
- follow-up (annual information concerning treatment, recurrence, and patient status). The information is updated to maintain accurate surveillance information.

This data is used in many different areas, including the following:
- To evaluate patient outcome, quality of life, satisfaction issues and to implement procedures for improvement.
- To provide follow-up information for cancer surveillance.
- To calculate survival rates by various data items.
- To provide information for cancer program activities.
- To analyze referral patterns.
- To allocate resources to the healthcare providers, patients and the community.
- To report cancer incidence as required under state law.
- To evaluate efficacy of treatment modalities.

The information in the Oncology Data Center is kept confidential. Aggregate data are analyzed and published without patient identifiers.
**Figure A** is the 2004 Estimated Incidence of new cancer. This graph shows the comparison of GHS with Georgia and nationwide estimated new cases.

**Figure B** shows the Male and Female analytical 2003 cases comparison. For 2003, Breast was the number one cancer for women seen at GHS with 234 new cases. Gynecologic were second with 73 new cases, Lung came in third with 67 new cases, and Colorectal was fourth with 58 cases. For 2003 males, prostate continued to be the number one cancer at 125 new cases. Colorectal and lung came in as a tie at 73 each. The fourth leading new cancer at GHS for males was kidney, ureter, and bladder at 47 new cases. In comparing the males and females, the females had 81 more analytic cases in 2003.

**Figure C** shows the Incidence by site for the years 1999 through 2003. The number of cases in this 5-year period increased by 156 cases. Since the start of the registry in 1989, there has been an increase of 683 cases with an increase from 354 cases to 1037 cases in 2003. The largest increase in cases from 2002 to 2003 was the breast with 50 more analytic cases seen. Digestive cases increased by 19 analytic cases in the last year.
Gwinnett Hospital System continues to care for an increasing number of patients diagnosed with breast cancer. In 2003, we diagnosed 235 new cases: a 22 percent increase from the previous year. This is to be expected given the rapid growth of Gwinnett County as well as to the natural aging of its population. The median age of diagnosis of breast cancer is 55 years. The distribution of cases has remained constant with over 70 percent of cases caught at an early stage. This is a tribute to the aggressive screening program initiated at the Women's Diagnostic Center.

We continue to provide state-of-the-art surgical, radiologic and oncologic care to our patients’ disease. Positron Emission Tomography (PET scanning) has gained wide acceptance and is used to more accurately stage our patients. New medications continue to be introduced. In particular the aromatase inhibitors have replaced Tamoxifen as the standard hormonal therapy in post menopausal women in the adjuvant setting after a landmark study showed a significant improvement in disease-free survival.

Our understanding of the natural history of breast cancer continues to increase. A new test that is clinically available can look at the molecular signature of the tumor and help the clinician determine what kind of treatment is most appropriate for the patient.

Gwinnett Hospital System continues to strive to be a center of excellence in the treatment of breast cancer for our community.

Stephen Szabo, MD
Hematology/Oncology

The highest number of cases diagnosed in 2003 was the 50-59 age group with 71 patients. In 1998, the highest number was also in the 50-59 age group with 47. This is shown in Graph A. Graph B shows the distribution by general summary stage. The stage for both 2003 and 1998 were highest at Local with 109 and 75 respectively. Graph C shows the distribution by AJCC stage. The highest number of patients in both 1998 and 2003 was Stage I. The second highest stage for both years is Stage II. Graph D shows the initial therapy broken down by type and combined modality. In 1998, the highest type of initial therapy was surgery alone. In 2003, the highest type of initial therapy was surgery, radiation, and chemotherapy combined. The second highest therapy in 1998 was surgery combined with chemotherapy. In 2003, the second highest type of therapy was hormone, surgery and radiation. Graph E and F show the relative survival by AJCC stage for the past 5 years.
Colorectal Cancer

Cancers of the colon and rectum account for nearly ten percent of all cancers diagnosed in the United States in 2003, and are currently the second leading cause of cancer deaths. Nearly 150,000 patients will be diagnosed this year. The strongest risk factor is genetic susceptibility. A first-degree relative (such as a sibling or parent) with colon cancer increases one’s risk five-fold. Certain diseases, such as colitis, also increase one’s risk. Other factors, such as obesity, cigarette, and alcohol abuse also have been shown to increase the risk of colorectal cancer. Research is on-going to determine if medicines such as aspirin or cholesterol-lowering agents provide protection against the development of colorectal cancer.

Through regular screening, colorectal cancer can often be a preventable disease. Colon cancers often start as small polyps and take years to develop into cancer. The American Cancer Society currently recommends screening every 5-10 years for all Americans over the age of 50. Additionally, some persons, such as those with a positive family history, should have earlier or more frequent screening. There are numerous methods to screen for colorectal cancer. The most common method uses a colonoscope, which allows the physician to see and biopsy abnormalities within the colon. One of the more exciting new methods of colorectal cancer screening being researched is virtual colonoscopy. This method, using CT scanning and advanced computer software, often avoids the use of a colonoscope unless an abnormality is seen.

When colorectal cancer is detected in its early stages, surgery is performed and is often curative. At Gwinnett Hospital System, a multidisciplinary approach is used for the treatment of advanced colorectal cancers. In the last two years, two major improvements in the treatment of advanced colorectal cancer have been developed. The most exciting area of research is the use of monoclonal antibodies. These molecules are not chemotherapy; rather they are designed to attack the specific ways colorectal cancer grows. Bevacizumab (Avastin) attacks the Endothelial Growth Factor receptor which inhibits the growth of tumor cells. Erbituximab (Erbitux) attacks the VEGF-receptor which is thought to impair the growth of new blood vessels into the tumor. The third advance is the use of oxaliplatin (Eloxatin), which when added to traditional chemotherapy yields superior outcomes.

Christopher Hagenstad, MD
Hematology/Oncology

Graph A shows the distribution by age at diagnosis for 1998 and 2003. For 2003 the highest age range was 60-69 with 34 patients, but for 1998 the highest age range was 50-59 year olds. Graph B shows the distribution by General Summary Stage for 2003 and 1998. The highest stage for 2003 was regional and local stage was the highest for 1998. Graph C shows the distribution by AJCC stage. The highest stage for both 1998 and 2003 is at Stage II. The second highest for 2003 was Stage III, but for 1998 the highest stage was Stage I. Graph D shows the initial therapy for 2003 and 1998. Both years show surgery alone as the most used initial therapy. Graph E and F show the relative survival by AJCC stage.
Cancer Patient Referral Pattern

Of the 1037 analytic cancer patients diagnosed and/or treated at Gwinnett Hospital System during 2003, 746 were from Gwinnett County. This is 71.9% of the total as seen in Figure D. The trans-county migration of patients was most evident from the following counties: Walton County with 51 cases (4.9%), Barrow County with 50 cases (4.9%), Hall County with 44 cases (4.8%), DeKalb County with 33 cases (4.2%), and Jackson County with 25 cases (2.4%). Figures D, E, and F show where the analytic patients lived when they were diagnosed and/or treated at Gwinnett Hospital System.

Figure E shows that 23 analytic patients came to Gwinnett Hospital System from out of state including one from out of the country. Florida had the most patients with six, and Michigan and North Carolina come in with three patients each.

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<td>South Carolina</td>
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<td>Out of Country</td>
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First Course of Treatment: all therapy directed at treatment of the tumor and planned as initial course of treatment, usually initiated within four (4) months of diagnosis.

Stage: a method of classifying tumors according to progression of the cancer.

TNM: (T=Tumor, N=Nodes, M=Metastases); a system of tumor classification.

Class of Care
Analytical: (1) diagnosed at Gwinnett Hospital System since the reference date (January 1, 1989), and all of the first course of the treatment received here; or (2) diagnosed elsewhere and received all or part of first course of therapy within the System.

Non-Analytical: (1) diagnosed elsewhere and received all of the first course of treatment elsewhere; or (2) diagnosed and treated at Gwinnett Hospital System prior to the reference date (January 1, 1989), or (3) diagnosed at autopsy.

Survival Rates
Observed Survival Rate: accounts for all deaths, regardless of cause; a true reflection of total mortality in the patient group under study.

Relative Survival Rate: ratio of the observed survival rate to the expected survival rate for a group of people in the general population similar to the patient group under study, with respect to race, sex, age and calendar period of observation.

Tumor Classifications
In Situ: a non-invasive neoplasm; a tumor that has not penetrated the basement membrane of the epithelial tissue involved.

Localized: an invasive neoplasm confined entirely to the organ of origin.

Regional or Direct Extension: a neoplasm that has extended beyond the limits of the organ of origin directly into surrounding organs or tissues.

Nodal Metastasis: a neoplasm that has spread into the regional lymph nodes via the lymphatic system.

Distant Metastasis: a neoplasm that has spread to parts of the body that are remote from the primary tumor.

Unknown: the extent of the disease cannot be determined from information contained in the medical record.


Medical Registry Services, Inc. (MRS), Hackensack, NJ.
How To Reach Us

Gwinnett Medical Center Campus, Lawrenceville
Gwinnett Medical Center 678-442-4321
Coordinated Care Department 678-442-4436
Gwinnett DaySurgery 678-442-4160
Gwinnett Women’s Pavilion 678-442-3600
Breast Health Education & Resource Center 678-442-4010
Women’s Pavilion Boutique 678-442-4001
Clinical Trial Nurse 678-442-2666
Oncology Data Center 678-442-1940
Gwinnett SportsRehab 678-442-2803
Wound Treatment Center 678-442-2600
Medical Library 678-442-4337

Marion Allison Webb Center for Screening Mammography 678-442-4070
Laboratory Services 678-442-4500
Outpatient Treatment Center 678-442-2025

Joan Glancy Memorial Hospital, Duluth 678-584-6800
Glancy Rehabilitation Center 678-584-6789

Howell Station Campus, Duluth
Glancy Outpatient Center 678-584-7000
Nutrition & Lifestyle Center 678-584-7660
Gwinnett SportsRehab 678-584-2803

www.gwinnettmedicalcenter.org