## Contents

**Medical Director’s Letter:**
- *This Old House* ........................................... 1

**New Cancer Center Update:**
- *Unlocking the Door to the Future* ............ 2

**2010 Programs of Focus** ......................... 4
- Prostate Cancer: Vaccine
- Head and Neck Cancer: Database
- Breast Imaging: Imaging Center Recognition, Expansion, and New Technology

**Patient Support** ........................................ 7
- Patient Navigation Program
- A Physician’s Perspective: Dr. Webster
- Patient Spotlight: Laura Granado

**Cancer Survivorship Celebrations**
- Community Prevention Events and Cancer Screenings
- Staff Spotlight: Jennifer Williams
- Patient Spotlight: Paul Miller
- In Memoriam: Ernestine “Ernie” Wayne

**Cancer Registry** ....................................... 14
- Department Update
- Summary of 2009 Cancer Registry Data

**Patient Care Evaluation Study** ............. 18
- Inflammatory Breast Cancer
- Sensitivity and Specificity of Sentinel Lymph Node Biopsy for Breast Cancer

**Education** ............................................. 27
- Medical Oncology Fellowship Program
- Hematopathology Fellowship Program
- Lectureships
- Surgical Breast Oncology Fellowship
- Breast Imaging Fellowship
- Lectureships
- 21st Annual City-Wide Head and Neck Conference

**Research** .................................................. 30
- External Research Grants Project
- New Screening Tool for Colorectal Cancer
- Breast Tomosynthesis Mammography
- New Clinical Oncology Research Coordination Office and Online Listings
- International Leader in Cancer Drug Development to Advise Cancer Center Progress of Select Research Projects
- ASCO Accomplishments

**2010 Oncology Publications** ................. 36

**Philanthropy** .......................................... 36
- Collins Family Foundations Gift for Bridge of Hope
- Gifts Help Fund Advanced conference Center
- Foster-Skiles Gift to Fund Healing Garden
- Fund for Blood and Marrow Transplant Patients
- Celebrating Women Event for Breast Cancer

**Contact Information** ................................. 42

**Campus Map** .......................................... 43

**Area Map** .................................................. 44

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Cancer research studies on the campus of Baylor University Medical Center at Dallas are conducted through Baylor Research Institute, Mary Crowley Medical Research Center, Texas Oncology, and US Oncology. Each reviews, approves, and conducts clinical trials independently. Their clinical trials are listed together, in this publication, for the convenience of patients and physicians.

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Reverse side of the fly sheet
Excellence
Leadership
Research
Healing
Community
Timelessness
Hope
Commitment
Education
**Medical Director’s Letter**

**This Old House**

The coming year has been greatly anticipated. In March we will open the doors to the new Baylor Charles A. Sammons Cancer Center. We delight in the multiple amenities of our new home, including innovative clinical, research, and education components. The new enhancements for patients and staff include a restaurant, coffee bar, spacious rehabilitation gym, a new and expanded Ernie’s Appearance Center, a dental clinic, the Integrative Medicine program, a demonstration kitchen, and much more. The conference center on the 10th floor will offer an auditorium, events lobby, and conference rooms for events of different sizes, not to mention breathtaking views of downtown Dallas and Fair Park.

As we celebrate our great new center we also must pay tribute to our “old home.” The current Baylor Charles A. Sammons Cancer Center building opened its doors in 1976. With Marvin Stone at the helm for 36 years, it was a glorious place for cancer care education and research. Packed into its 51,440 square feet was space for clinics, research labs, and education. Among the objectives that the cancer center was designed to meet in 1976 was “to organize, consolidate, and coordinate the facilities, personnel and scientific resources at Baylor University Medical Center at Dallas into a cancer complex to provide quality patient care on an individualized basis.” Those prophetic words ring true today as we move across Worth Street. As we tip our cap to the first home of Baylor Sammons Cancer Center, we prepare to transform it into a dedicated cancer hospital. The new hospital will be part of Baylor Dallas and include in excess of 120 beds. An enlarged Bone Marrow Transplant Unit, an outpatient infusion area, interventional radiology, and a 24/7 cancer patient evaluation center will all be part of the extreme makeover. Now we can watch as this next phase of our growth unfolds with its anticipated completion in early 2013.

Alan M. Miller, MD, PhD  
Medical Director, Baylor Sammons Cancer Center  
Chief of Oncology, Baylor Dallas and Medical Director of Oncology, Baylor Health Care System
Baylor University Medical Center at Dallas announced that it is developing North Texas’ first dedicated cancer hospital along with a new outpatient cancer center that will be the largest in North Texas. The new 467,000-square-foot cancer center will open in March 2011.

Record-breaking gifts exceeding $20 million to benefit the new outpatient cancer center donated by Sammons Enterprises, Inc., and the estate founder Charles A. Sammons. Construction was under way on Baylor Dallas campus.

The new cancer center will feature family-friendly amenities such as a coffee bar, café, healing garden and chapel.
The construction of the new outpatient cancer center reached a major milestone. MEDCO construction hosted a “topping off” celebration and ceremonial placement of the final beam to complete the main structure. Workers and other supporters were invited to sign the final beam.

Cancer center and skybridge show substantial completion.
Prostate Cancer: Vaccine

Patients at Baylor Charles A. Sammons Cancer Center at Dallas now have access to Provenge®, a new prostate cancer vaccine. Approved by the US Food and Drug Administration (FDA) in May 2010, it is heralded as a landmark treatment in the fight against cancer.

The FDA approved the use of Provenge for the treatment of advanced stages of prostate cancer, and the physicians on the medical staff at Baylor Dallas were the first in the country to be in-serviced and approved to treat patients with it. Within a week of FDA approval, the vaccine was received and treatment protocols began with eligible prostate cancer patients. “It’s an innovative new option for treating patients,” said Thomas Hutson, DO, PharmD, a medical oncologist on the medical staff at Baylor Dallas.

“While surgery remains the mainstay of treatment, there is hope that in the future utilization of minimally invasive procedures and emerging technologies like vaccines can minimize the burden of treatment while maintaining excellent outcomes for men with prostate cancer,” said W. Scott Webster, MD, chief of urology and a physician on the medical staff at Baylor Dallas.

Provenge, or sipuleucel-T, is a therapeutic vaccine that instructs the body’s immune system to recognize and kill cancer cells. Patients receiving Provenge provide a blood sample, from which white blood cells are extracted. The white blood cells are then exposed to the substance found in prostate cancer cells. The process “trains” the immune system to react to prostate cancer cells when it is reintroduced to the patient’s body through an intravenous infusion. This process is then repeated two additional times, 2 weeks apart, so the patient receives a total of three doses of cells.

Thomas Hutson, DO, PharmD and W. Scott Webster, MD
“We’re very excited to be the first to offer this new prostate cancer vaccine to our patients,” said Alan Miller, MD, PhD, medical director of Baylor Sammons Cancer Center, chief of oncology at Baylor Dallas and medical director of oncology for Baylor Health Care System. “This vaccine provides an alternative treatment option for patients who otherwise have had limited success with other therapies.”

**Head and Neck Cancer: Database**

by Jack Snipes, MD

Clinical research is an important component of Baylor Sammons Cancer Center. Baylor Dallas, Baylor Research Institute, and the Division of Surgical Oncology are collaborating to develop a Surgical Oncology Clinical Research Database (SOCRD) under the guidance of John Preskitt, MD, FACS, chief of surgical oncology; Jack Snipes, MD, physician on the medical staff at Baylor Dallas; Edward B. De Vol, PhD, vice president of quantitative sciences for Baylor Health Care System; Jennifer Peattie, clinical applications manager of Baylor Regional Transplant Institute; Angelia Drake, RN, BSN, clinical research specialist of quantitative sciences for Baylor Health Care System; and John O’Brien, MD, physician on the medical staff at Baylor Dallas. The immediate goal of this project is to establish a clinical research database in head and neck surgery to support the clinical research of established surgeon-investigators, and post-graduate surgical residents and fellows. As the platform is developed, it will be expanded to the entire spectrum of surgical oncology patients.

This research database is designed to query information across multiple databases, including medical records, radiology reports, and pathology reports, and to integrate them with clinical data unique to the practice of surgical oncology. An important design consideration for the use of the clinical research database will be the requirement for informed consent as appropriate for patient participation, as well as institutional review board oversight to maintain patient confidentiality, and to ensure the ethical use of the data and resources. A major advantage of a research database compared, for example, to obtaining data from the electronic medical record is that the data in a research database is actively curated, which ensures that all relevant information is collected and accurate, as is required to support the integrity of the research conclusions.

Once this database is completed, it will be possible to answer basic and clinical research questions in a matter of hours or days rather than months or years, thereby greatly reducing the barrier to research by allowing almost real-time hypothesis testing at a computer workstation. The kind of questions this database is designed to answer are far-reaching: for example, Which surgical procedure or medical intervention give a better quality of life? What are the cost-benefit ratios of these treatments? Which patient attributes are predictive of a good surgical outcome? Is there a biomarker for adverse outcomes in certain cancers? Can we identify any medications that should not be used in conjunction with a given procedure?

It is not difficult to see how this database will facilitate health care, help inform health care decisions, and implement new and better ways to advance surgical oncology. In addition, this database, in conjunction with other relevant oncology databases, biospecimen repositories, and tumor registries, can be integrated to support large-scale clinical trials for furthering cancer research and care.

Above: Baylor Diagnostic Imaging Center at Junius, Below: Baylor Diagnostic Imaging Center at North Dallas

**Breast Imaging: Imaging Center Recognition, Expansion, and New Technology**

Both of Baylor Dallas’ Darlene G. Cass Women’s Imaging Center locations have been designated as Breast Imaging Centers of Excellence by the Commission on Quality and Safety and the Commission on Breast Imaging. Both centers also are accredited by the American College of Radiology (ACR) in mammography and have...
participated in the ACR voluntary accreditation programs in stereotactic breast biopsy, breast ultrasound and ultrasound-guided breast biopsy.

Experts believe the increase in the number of women surviving breast cancer today is partly related to women being better educated and more proactive about regular screening.

Advancements in screening technology have also increased early diagnoses. Baylor University Medical Center at Dallas is ensuring that advanced screening technology is convenient to women by opening additional Baylor Breast Imaging Centers:

- Rockwall (opened June 2010)
- Cedar Hill (opened August 2010)
- Forney and Mansfield (opening in spring 2011)

“To bring quality screening mammography to women in the suburbs and rural areas, we used to offer our mobile mammography units,” said Cheri Marchant-Armstrong, RT (M), manager of Baylor Dallas’ Darlene G. Cass Women’s Imaging Center. “We have found that being in the neighborhoods is a convenient way to offer quality patient care.”

The new facilities are conveniently located within these communities and offer advanced screening technology, including digital mammography. If an area of concern is detected, patients are referred for diagnostic imaging at Darlene G. Cass Women’s Imaging Center, two locations, one on the Baylor Dallas campus and the other in North Dallas, offer diagnostic imaging and screening.

“We have a capacity to screen 31 to 32 patients at each satellite facility every day,” said Marchant-Armstrong. “We are working to understand each community’s preferences for convenient hours and Saturday availability. Our goals are to provide easy access, advanced technology and quality patient care right in patients’ neighborhood.”

The breast imaging center on Baylor Dallas campus also features advanced diagnostic technology, including the new positron emission mammography scan (PEM). “This device can help provide useful information about subtle changes in breast tissue,” said Marchant-Armstrong, RT (M). “PEM is a highly advanced medical imaging tool that is a relatively new, advanced application of positron emission tomography scanning specific to the breast. We can view both normal and abnormal metabolic activity, as well as the anatomic details of any area where this activity is taking place.”

This technology is most often used to detect and localize breast cancer and determine the extent of the spread of cancer and its response to therapy. “This information can help your physicians better understand what is occurring and determine the most effective treatment options,” she said.
Patient Support

Patient Spotlight: Laura Granado

Because her sister had breast cancer, Laura Granado decided to go through the Hereditary Cancer Risk Program at Baylor Charles A. Sammons Cancer Center at Dallas. Genetic testing showed she was at high risk for breast and ovarian cancer. She discovered a lump and after a biopsy was diagnosed with breast cancer. At Baylor Dallas, Laura underwent a double mastectomy followed by reconstructive surgery. “I had great support from the hospital staff. My nurse navigator was awesome. She listened to me and told me everything to expect.” Laura is back to work and taking care of her family. “Thanks to Baylor, I’m living a full and healthy life.”

Patient Navigation Program

Modern cancer care can be complex and multidisciplinary. To obtain a timely diagnosis and treatment, the patient with a suspected cancer needs to understand and access this care efficiently. Baylor Charles A. Sammons Cancer Center’s Patient Navigation Program offers assistance in navigating this cancer journey. The patient navigator, a specially trained nurse, help patients by:

• Simplifying access to services such as education, support, and identification of needed resources
• Facilitating contact with the specialists and support teams that will be needed in the management of the cancer
• Helping to schedule appointments
• Providing information so that patients and their caregivers understand their disease and their personalized plan of care

A Physician’s Perspective: W. Scott Webster, MD

The patient navigation program helps guide patients through their cancer care, every step of the way. The navigators assist with appointment scheduling, specialist referrals, and obtaining patient records and images. As awareness of this free program grows, so does its success.
Likewise, the patient navigation program is helpful for referring physicians, such as W. Scott Webster, MD, chief of urology and a physician on the medical staff at Baylor University Medical Center at Dallas. “I’ve used the patient navigation program many times and it makes things easier for both the patient and the physician. I like that through a single phone number there is someone dedicated to guiding a patient through the care process,” says Webster. “The program makes a stressful situation much simpler for patients in navigating through cancer care,” he says.

**Passing the Torch Relay**

In another event for survivors, employees of Baylor Dallas cheered on survivors of ovarian and breast cancer as they passed a torch in a relay around campus. This “Passing the Torch” event held on Thursday, September 30, promoted their victories over cancer as well as awareness of the genetic link between breast and ovarian cancers. This year, Baylor Dallas employees and cancer survivors were invited to write a song or poem for the event as walkers made their way around campus. Afterward, a special program and reception was held in the park behind Baylor Tom Landry Health and Wellness Center.

**Cancer Survivorship Celebrations**

During the week of June 7 to 11, 2010, the Virginia R. Cvetko Patient Education Center hosted daily celebrations in honor of cancer survivorship. Activities included a patient art exhibit, information tables on resources and support groups, an ice cream social and coffee bar, nutrition information by oncology dieticians, a strolling violinist, therapy dogs, clowns and more. The annual Charlotte Johnson Barrett Lectureship was held.
OPENING DOORS 9

during the week and featured psychologist Dan Shapiro, PhD, presenting “A Funny Thing Happened on My Way to Chemotherapy.” Dr. Shapiro was diagnosed with cancer at age 20 and believes his sense of humor and attitude helped him endure 5 years of treatment, relapses, and nine surgeries. A record number attended this 26th annual lecture. As part of an annual tradition, Dallas campus employee cancer survivors were also invited to a celebration in their honor, which featured lunch, giveaways, and drawings for gifts.

Annually, the Cvetko Center holds three separate celebrations to honor survivors of prostate, ovarian, and breast cancers. Survivors and their guests are treated to a wonderful luncheon, keynote presentation, information and resource tables, and door prize drawings. Many returning survivors say they look forward to this event every year and the ability to talk to other survivors like themselves. The 2010 celebrations featured Joel Allison, BHCS president and CEO, speaking on “The Future of Health Care in America,” Lois Ramondetta, MD, gynecologic oncologist, presenting on “The Importance of Hope During Treatment,” and Kathy LaTour, breast cancer survivor and journalist, presenting an inspirational message, “One Mutant Cell.”

Finally, in 2010

Baylor Charles A. Sammons Cancer Center at Dallas hosted its first Blood and Marrow Transplant Reunion and Conference. Transplant recipient patients were invited to spend a day with their former physicians and care team, and, most of all, celebrate their survivorship. Meg Brown, author and cancer survivor, served as keynote speaker. Meg shared her story of overcoming a life-and-death battle with cancer and revealed her secrets to surviving a nearly fatal bout with non-Hodgkin’s lymphoma.

The highlight of the event was when patient Cliff Lazenby had a face-to-face meeting with his donor. When Cliff was diagnosed with leukemia, the search began to find
a life-saving donor in the Be the Match® Registry. Cliff knew Baylor Dallas was the best place to be to save his life. Maybe it was the care he received, maybe it was the transplant, and maybe it was the female cells he received but Cliff walked out of Baylor Dallas last fall a changed man.

Eager to meet the woman who changed his life, Cliff was thrilled when donor Kathleen Colias agreed to fly in from Chicago to attend this first-of-its-kind event. The reunion brought smiles, tears, and information about the donation experience and ended with a beautiful song sung by Cliff to Kathleen, as well as his wife and daughter — the women that changed his life.

**Community Prevention Events and Cancer Screenings**

In 2010, Baylor hosted several cancer awareness events and screenings. The awareness events covered breast cancer, prostate cancer, and lung cancer:

- **For Women for Life** was held on January 22, 2010, and attracted nearly 200 women from across the Dallas area. The event offers free health screenings and presentations by specialists. It is a day that celebrates women’s health.

  *Right: Telisha Carter, breast cancer survivor, on the runway at the Pink Passion® Fashion Show.*

  *Below: Cristina Vaida, RN, BSN, demonstrating breast self exam techniques at the Mary Kay Expo.*

- The 2010 men’s health education event, *It’s a Guy Thing*, was held on Saturday, June 19, 2010, with approximately 200 participants. The festivities included a variety of health screenings, information booths, and educational breakout sessions. Robert Mennel, MD, spoke on men’s cancer. Other topics included general men’s health, fitness and exercise, the signs of stroke and heart concerns, and nutrition.

  *Top: Top: Mary Kay Expo was held during July and August 2010. Baylor W.H. & Peggy Smith Breast Center provided breast cancer and gynecological cancer education materials to hundreds of Mary Kay sales professionals at the expo, held at the Dallas Convention Center.*

  *Bottom: Baylor Sammons Cancer Center and Saks Fifth Avenue Galleria Dallas asked the community to show its passion for fashion and battling breast cancer during the Pink Passion® Shoe Design Contest and Fashion Show. Now in its third year, Pink Passion encourages people to decorate a shoe with pink flair and add a touch of the color teal in support of ovarian cancer awareness and the genetic*
link between the two cancers. The winner of the contest received a $750 shoe shopping spree at Saks Fifth Avenue Galleria Dallas. On October 23, 2010, Saks Fifth Avenue Galleria Dallas hosted a fall fashion show featuring breast and ovarian cancer survivors.

- In honor of American Cancer Society's Great American Smokeout on November 18, 2010, the Cvetko Center, Lung Cancer Center, and Martha Foster Lung Care Center staffs set up information booths and distributed materials on smoking and strategies for quitting to about 200 people. They gave “quit kits” to those who committed to kick the habit.

Free community screenings were offered as well:

- During National Oral, Head and Neck Cancer Awareness Week, Baylor Sammons Cancer Center at Dallas hosted its first head and neck cancer screening on April 17, 2010 in collaboration with the Baylor College of Dentistry. Of the 128 patients who were screened, 37 received abnormal results and were encouraged to seek follow-up with their physician.

- Baylor served as a screening site for the Dallas Dermatological Society’s annual skin cancer screening on May 22, 2010. Among the 222 patients screened, 10 had basal cell carcinomas, four had squamous cell carcinoma, and one had a suspected case of melanoma.

- During Baylor Dallas’ annual prostate cancer screening on September 25, 2010, 241 men were screened. Abnormal prostate-specific antigen levels were identified in 32 participants, who were encouraged to seek follow-up with their physicians.

**Staff Spotlight: Jennifer Williams**

Jennifer Williams has been named oncology events and community relations coordinator for Baylor Charles A. Sammons Cancer Center at Dallas. She coordinates health fairs and screenings throughout the community to raise awareness of cancer prevention, detection, and research advances.

“I collaborate with companies, schools, churches and other organizations such as the American Cancer Society, to make sure our entire community is aware of ways to protect themselves from cancer, early diagnoses options and Baylor Dallas’ advanced treatment options,” said Williams. “We also have information about cancer clinical trials at Baylor Dallas to help further these advances.”

Williams also oversees the development and implementation of the Baylor Sammons Cancer Center Ambassador Program. An ambassador serves as Baylor’s liaison to the community by assisting patients with information and access to services and programs offered at Baylor Sammons. “Currently we have one ambassador who serves several communities east of the Dallas/Fort Worth area,” said Williams. “We hope to grow our program to eight ambassadors in the future.”

Left: Jerald Sklar, MD examines Judith Brooks during the skin cancer screening on May 22, 2010.

Right: Jennifer Williams, right, with Trudy Cresswell, marketing director for Saks Fifth Avenue, at the Pink Passion Shoe Design Contest and Fashion Show.
Patient Spotlight: Paul Miller

Although he was a heavy smoker for 40 years, Paul Miller ignored a persistent cough for more than a year. “What’s so insidious about smoking is that you don’t realize at first what it’s doing to you,” he said. His doctor ordered a chest x-ray, which revealed a tumor in his right lung the size of a tennis ball. At Baylor Charles A. Sammons Cancer Center at Dallas, Paul underwent four rounds of chemotherapy to shrink the tumor, and when it was small enough, he had surgery to remove it. “It was amazing to see how the team at Baylor worked together. They wanted to do things right, always keeping me, the patient, in mind.” Paul is now cancer free and spends more time with his wife, kids, and grandchild. “I wake up every day and think how nice it is to still be here.”

In Memoriam: Ernestine “Ernie” Wayne

Ernestine “Ernie” Wayne had a strong belief that service to others was the highest calling imaginable in life, and she frequently put that belief into action. On July 1, 2010, at the age of 87, Ernie passed away at home surrounded by family.

During World War II, Ernie began her personal service to others by caring for burn patients at Cedars-Sinai Hospital in Los Angeles. After marrying the love of her life, Bradley Wayne, they moved to Dallas, where Ernie was one of the original volunteers at the Suicide Prevention Center. This experience sparked in her the desire to turn her ideas and dreams of what was needed in the community into reality by teaming with Baylor Health Care System.

“My mother had three great loves: my father, Brad; her children, grandchildren, and great-grandchildren; and Baylor, which was never an institution but more an extension of her family,” said her son, Jon Wayne.

Whenever Ernie Wayne and the Wayne family have seen a need, they have asked how it could be filled. Their thoughtful influence is felt today in several areas throughout
Baylor Dallas and Baylor Sammons Cancer Center:

- **Ernie’s Appearance Center:** One of the nation’s first cancer boutiques, Ernie’s ensures that cancer patients get the information and tools to address needs related to a positive self-image.

- **Bradley Wayne Interfaith Garden of Prayer:** The legacy of Brad Wayne lives on in a place where cancer patients and their families at Baylor Sammons come to pray, reflect, or simply gather their thoughts.

Ernie was the recipient of the Wings of Eagles Award as well as a member of both the Keepers of the Flame and the Boone Powell Sr. Society at Baylor Health Care System. She was also a member of the Baylor Health Care System Foundation board of directors for 15 years.

Through her gifts and talents, Ernie Wayne’s legacy will carry on and touch the lives of countless patients who will walk through the doors of Baylor Sammons Cancer Center.

*Left: Ernestine “Ernie” Wayne
Above: The Bradley Wayne Interfaith Garden of Prayer*
In 1956, the American College of Surgeons formally adopted a policy to encourage, through their approvals program, the development of hospital-based cancer registries. It was believed that by periodically reviewing the results of cancer treatment regimens, the hospitals and physicians might reveal weaknesses in local patterns of care and develop a better understanding of the disease and its treatment.

The Cancer Registry at Baylor University Medical Center at Dallas was founded in 1960, and its data management methods have evolved over the past 50 years to keep pace with advances in medicine, science, and technology. Within 2 years of its inception, in 1962, Baylor University Medical Center achieved accreditation from the American College of Surgeons Commission on Cancer. Continuing on this path of excellence, the most recent Commission on Cancer accreditation in 2008 was achieved with the notable distinction of “with commendation.” In addition, Baylor Dallas was the first facility in North Texas to be accredited by the National Accreditation Program for Breast Centers.

The Cancer Registry focused on quality of data collection and management in 2010. Staff consists of five cancer registrars, one readmit registrar, three cancer registry clerks, the cancer registry supervisor, and manager. Five of the staff members are currently certified tumor registrars, and the goal is to have all staff certified. The registry staff as a group have over 70 years of experience. Two new members joined the team this year: Nicole Housinger, CTR, and Leslie Williams, registrar in training.

With its focus on quality in 2010, the Cancer Registry developed a plan to perform concurrent review of the data elements included in the National Cancer Data Base (NCDB) Cancer Program Practice Profile Reports (CP3R) for breast, colon and rectal cancers. Priority goals included review of the CP3R data elements on applicable cases quarterly by the cancer registrars. In addition, elements from the Mastery of Breast Surgery quality improvement program were reviewed quarterly. This process has improved retrieval of required data elements that may require a cancer case “second look.” Many of these cases do not have documentation of completion of the first course of treatment at the time of the initial abstract. The registrars now receive a quarterly update from our electronic registry system that generates a quick, efficient report of missing data elements leading to a specific data search and retrieval. The registry’s goal is to have an estimated performance rate on the initial NCDB CP3R of at least 75% in all measures in our 2009 data submission.

In addition to the CP3R, the Cancer Registry continues to review the quality, accuracy, and efficiency of data abstracting. It continues to meet and exceed the goals of the Commission on Cancer in follow-up, abstracting timeliness, and error-free submission of 2009 data to the NCDB.

In 2010, Baylor University Medical Center approved the implementation of a new software application that assists in the case finding process. This software automatically codes and selects reportable cancer cases and then forwards them for appropriate action, greatly improving data quality and cost efficiency. The implementation of this new software will decrease the staff hours required to perform pathology casefinding, as well as improve efficiency in case review and case selection.

Education remains a focus in the Cancer Registry. The implementation of the seventh edition of the AJCC Staging Manual, the 2010 Facility Oncology Registry Data Standards, and the 2010 Collaborative Stage Site Specific Factors required increased education for all staff. The Baylor Dallas Cancer Registry continued to sponsor, in conjunction with the Texas Cancer Registry, monthly North American Association of Central Cancer Registries webinars, which provided site-specific information related to abstracting and coding of cancer cases.

In August, Baylor Sammons Cancer Center hosted the ninth annual regional Cancer Registry Conference, “Personalizing Medicine: Prognostic and Therapeutic Advances in Oncology,” a day-long program featuring physician speakers from the medical staff at Baylor Dallas. Attendees included all disciplines caring for cancer patients.
Table 1

2009 Baylor Dallas Top 10 Sites Compared to National and State Statistics

<table>
<thead>
<tr>
<th>Primary Site</th>
<th>USA Top 10</th>
<th>Baylor Dallas Top 10</th>
<th>Texas Top 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung</td>
<td>Breast</td>
<td>Prostate</td>
<td></td>
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<tr>
<td>Prostate</td>
<td>Lung</td>
<td>Breast</td>
<td></td>
</tr>
<tr>
<td>Breast</td>
<td>Colon/Rectum</td>
<td>Lung</td>
<td></td>
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<tr>
<td>Colon/Rectum</td>
<td>Prostate</td>
<td>Colon/Rectum</td>
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<td>Bladder</td>
<td>Liver</td>
<td>Bladder</td>
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<td>Melanoma</td>
<td>Corpus Uteri</td>
<td>Non-Hodgkin's Lymphoma</td>
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<td>Non-Hodgkin's Lymphoma</td>
<td>Kidney/Renal</td>
<td>Melanoma</td>
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<tr>
<td>Leukemia</td>
<td>Pancreas</td>
<td>Corpus Uteri</td>
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<tr>
<td>Pancreas</td>
<td>Leukemia</td>
<td>Leukemia</td>
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</tbody>
</table>

Table 2

2009 Baylor Dallas Top 10 Sites Compared to National Statistics

<table>
<thead>
<tr>
<th>Primary Site</th>
<th>Baylor Dallas 2009 Total</th>
<th>% of Cases</th>
<th>USA 2009 Total</th>
<th>% of Cases</th>
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<tbody>
<tr>
<td>Total New Cases</td>
<td>2,943</td>
<td>1,479,350</td>
<td>21%</td>
<td>13%</td>
</tr>
<tr>
<td>Breast</td>
<td>625</td>
<td>194,280</td>
<td>21%</td>
<td>13%</td>
</tr>
<tr>
<td>Lung/Bronchus</td>
<td>260</td>
<td>219,440</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>Colon/Rectum</td>
<td>211</td>
<td>146,970</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>Prostate</td>
<td>190</td>
<td>192,280</td>
<td>6%</td>
<td>13%</td>
</tr>
<tr>
<td>Liver</td>
<td>159</td>
<td>22,620</td>
<td>5%</td>
<td>2%</td>
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<tr>
<td>Corpus Uteri</td>
<td>126</td>
<td>42,160</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Kidney/Renal</td>
<td>118</td>
<td>57,760</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Ovary</td>
<td>106</td>
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<td>Pancreas</td>
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<td>3%</td>
<td>3%</td>
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<td>Leukemia</td>
<td>89</td>
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</table>

Summary of 2009 Cancer Registry Data

By John T. Preskitt, MD, FACS

During reporting year 2009, the cancer registry at Baylor University Medical Center at Dallas abstracted 2,943 analytical cases (cases in which patients were first diagnosed or initially treated at this facility). That amounts to 12% of all the cases in our region and 3% of all Texas cases. This number increased from 2008, when the total was 2,892. Baylor Dallas is in Texas Health Service Region 3, with 142 reporting facilities in 19 counties.

Our top 10 sites compared with US data, as well as Texas data, are listed in Table 1 from highest to lowest. The distribution of cases at Baylor Dallas was similar to national statistics from the National Cancer Data Base, with the exception of melanoma, bladder, and lymphoma, which made up a smaller percentage of overall Baylor Dallas cases, whereas kidney, uterus, ovary, and liver cancers made up a greater percentage of cases.

Baylor Dallas saw over 10% of the Region 3 cases and a higher percentage of the following tumor sites: esophagus, stomach, rectum, liver, pancreas, breast, all gynecologic sites (cervix, uterus, ovary), kidney, brain, thyroid, myeloma, and leukemia. Specifically, Baylor Dallas saw 43% of brain/central nervous system tumors, 42% of liver tumors, 20% of all gynecological tumors combined, 18% of myeloma, 15% of thyroid, 16% of kidney, 15% of breast, 17% of pancreas, and 13% each of rectum and stomach cancers.

The top five sites of diagnosis were similar to those of the previous year, including breast (625 compared with 642 in 2008), lung (260 vs. 262), colon/rectum (119 vs. 127 and 92 vs. 110), prostate (190 vs. 159), and liver/biliary (159 vs. 155).

The largest increases in numbers of newly diagnosed cases over 2008 data were in nasal/sinus (300% increase, 4 cases), bone (113% increase, 17 cases), ovary (77% increase, 106 cases), and endocrine (98% increase, 117 cases). Overall, compared to 2008, there was a positive variance in cases of 2%.
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<th>Female</th>
<th>In Situ</th>
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<th>Regional</th>
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Benign includes: Gastrointestinal stromal tumors, Benign Meningiomas, Benign Brain, & other CNS Benign. Other/Ill-Defined includes ill-defined sites and hematopoietic diseases not included in the leukemia/lymphoma/myeloma category.
## 2009 Analytic Cases

### Gender and General Stage

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<th>Primary Site</th>
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<th>Female</th>
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<th>Local</th>
<th>Regional</th>
<th>Distant</th>
<th>Benign</th>
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Inflammatory Breast Cancer: The Baylor Dallas Experience
By Justin M. Goldfarb, DO, and John E. Pippen, MD, FACP

It is estimated that 207,090 women will be diagnosed with and 39,840 women will die of breast cancer in 2010 in the United States. Inflammatory breast cancer (IBC) accounts for approximately 1% to 6% of all breast cancer cases in the US. This rare and aggressive form of breast cancer is diagnosed clinically by the rapid onset of diffuse erythema and edema (peau d’orange) of at least a third of the skin overlaying the breast. Tumor emboli blocking dermal lymphatic channels lead to the characteristic “inflammatory” skin changes; however, this is not necessary to make the diagnosis. The primary tumor of IBC is classified as T4d by definition, even if no underlying palpable mass is present in the breast. Women diagnosed with IBC have inferior survival outcomes compared with women with other forms of breast cancer. IBC patients tend to be younger, and IBC tumors are more likely to overexpress HER2 than non-IBC tumors. Hormone receptor negativity also occurs at a higher frequency in IBC tumors. At presentation, most women with IBC have lymph node involvement, and approximately one third have distant sites of disease. Historically, attempts to treat IBC with surgery alone or surgery combined with radiation therapy resulted in median overall survival times of less than 15 months and local recurrence rates as high as 50%.

The treatment of IBC has dramatically improved with the advent of multimodality therapy. Results from a large retrospective study of patients with IBC performed over a 20-year period demonstrated that initial treatment with an anthracycline-based regimen followed by local therapy resulted in 5- and 10-year survival rates of 40% and 33%, respectively. The incorporation of taxanes has also been associated with higher pathologic complete response rates and better survival outcomes. According to data from the National Cancer Institute’s Surveillance, Epidemiology, and End Results database, for women who were diagnosed with IBC between 1988 and 2001, the 5-year survival rate was approximately 40%. This compares with about 87% for all breast cancers combined.

The National Comprehensive Cancer Network (NCCN) panel recommends preoperative chemotherapy with an anthracycline-based regimen with or without taxanes for the initial treatment of patients with IBC. Inclusion of trastuzumab in the chemotherapy regimen is recommended for patients with HER2-positive disease. Patients responding to preoperative treatment should then undergo mastectomy with axillary lymph node dissection. Any remaining planned chemotherapy should be completed after the mastectomy, followed sequentially by endocrine therapy in patients with hormone receptor-positive disease. Finally, post-mastectomy chest wall and regional node irradiation is recommended after the completion of any planned chemotherapy. As a historical reference, Baylor Sammons Cancer Center medical committee and breast site committee constructed IBC treatment guidelines in 1989 that are in all practical purposes identical to the current NCCN guidelines.

In 2010, the joint medical committee at Baylor Sammons Cancer Center requested a review of the IBC cases seen at our institution from 2003 to 2009 to evaluate compliance with the aforementioned guidelines as well as measure Baylor Dallas’ outcomes data in accordance with the National Cancer Data Base (NCDB). This report presents those findings.

Methods
Using the NCDB data from Baylor University Medical Center at Dallas, we retrospectively analyzed 51 cases entered into the database from 2003 to 2009 with the diagnosis of cancer of the breast (ICD-O-2/3 codes C50.0 through C50.9), with a recorded T stage of 4, who were managed at Baylor Sammons Cancer Center. Our data were evaluated for compliance with the NCCN practice guidelines for IBC, with outcomes measured against survival data from the NCDB. To evaluate our outcomes data internally, we extracted data on age, race/ethnicity, type of insurance, and chemotherapy regimens.

Results
Patient characteristics. Fifty-one patients with stage III (T4) breast cancer were identified from the Baylor cancer registry between 2003 and 2009. Two of the patients were <40 years, 9 were in their 40s, 17 in their 50s, 14 in their 60s, 6 in
their 70s, and 3 >80 years. In terms of race/ethnicity, 35 were white, 13 were black, 2 were Hispanic, and 1 was Filipino.

**Treatment.** Of the 51 patients, 48 (94%) were administered neoadjuvant chemotherapy; 45 (88%) underwent a mastectomy; 44 (86%) received adjuvant radiation therapy after completion of chemotherapy and surgery; and of the 28 patients who had positive estrogen and/or progesterone receptors, 26 received hormonal therapy. (51% of total patient group) (Figures 1–4).

Chemotherapy regimens included doxorubicin and cyclophosphamide (28 patients); fluorouracil, epirubicin, and cyclophosphamide (9 patients); cyclophosphamide, doxorubicin, and fluorouracil (4 patients) followed by a taxane (with or without trastuzumab); and a variety of other combination regimens incorporating a taxane, doxorubicin, cyclophosphamide, trastuzumab, or capecitabine.

**Standard of care.** Of the 28 patients with hormone receptor-positive breast cancer, 23 (82%) received the standard of care treatment for IBC as outlined in the NCCN practice guidelines (Table). Of those who did not receive standard multimodality therapy, 1 refused radiation, 2 died before receiving additional therapy, 1 had contraindications for surgery, chemotherapy, and radiation, and 1 was referred to Baylor after mastectomy. Nineteen of the 23 patients (83%) with hormone receptor-negative breast cancer received standard of care treatment. Two of those who did not expire before additional therapy, and 2 had contraindication to either chemotherapy or radiation therapy.

**Survival.** As of December 2010, the median survival for these patients (who were entered into the database between 2003 and 2009) was 45 months. Of the 32 patients (63%) who were alive, 27 had no evidence of disease, and 5 were alive with metastatic breast cancer. Of the 19 patients who died, 16 deaths were attributed to breast cancer (5 were never disease free, and 11 had recurrence identified 1–3 years after treatment). Three patients had no evidence of breast cancer at the time of death but died secondary to other cancers (lung cancer, cervical cancer, and acute lymphocytic leukemia). When comparing Baylor’s data to NCDB data, there was no difference in survival based on chemotherapy agents, race/ethnicity, payer type, or age. The Kaplan-Meier survival curves (Figure 5) appear to be superimposable starting at year 3. The sample size from Baylor Sammons Cancer Center was not large.
enough to detect any statistically significant differences in survival.

Discussion

This retrospective analysis of patients treated for IBC at Baylor Sammons Cancer Center from 2003 to 2009 provides insight into practice patterns as well as outcomes data. The 51 patients analyzed during this time frame is likely an underrepresentation of the true number of cases seen at our cancer center, considering that 600–650 new patients with breast cancer are seen at our institution each year. Most likely, inconsistencies in coding prevented us from indentifying all cases. For instance, patients may have been coded as locally advanced breast cancer, which carries a different ICD code.

Overall, the vast majority of patients at our cancer center were treated with multimodality therapy, which represents the standard of care as outlined in the NCCN practice guidelines. The few patients who did not receive standard treatment had extenuating circumstances. For instance, a few patients died before receiving planned therapy, some had contraindications such as advanced age and poor performance status, and 1 patient refused. Only 2 patients in the analysis did not receive the standard of care: 1 patient underwent a mastectomy without neoadjuvant chemotherapy at an outside institution before seeking care at Baylor, and the other patient underwent a lumpectomy by choice. The median survival of patients in this retrospective analysis of IBC was 45 months at the time of this publication.

In conclusion, IBC remains a rare but aggressive form of breast cancer. The application of multimodality therapy as directed by a multidisciplinary team has improved survival for patients with IBC. Patients treated at Baylor Sammons Cancer Center from 2003 to 2009 received treatment in accordance with the NCCN guidelines with survival outcomes similar to those published in the NCDB.

References

The Sensitivity and Specificity of Sentinel Lymph Node Biopsy for Breast Cancer at Baylor University Medical Center at Dallas: a Retrospective Review of 488 Cases
By S. Michelle Shiller, DO, Robert Weir, PA, John Pippen, MD, Metin Punar, MD, and Dan Savino, MD

Sentinel lymph node (SLN) biopsy has become the standard of care for breast carcinoma management, as it precludes the negative morbid effects—including decreased shoulder range of motion, lymphedema, and paresthesias—of unnecessary axillary lymph node dissection. However, the method of pathologic evaluation of the lymph node has been scrutinized to obtain the greatest sensitivity, specificity, and negative predictive value, ultimately for the benefit of the patient. This retrospective study analyzed 488 biopsies completed by two surgeons and read by multiple pathologists affiliated with Pathologists Biomedical Laboratories.

On the subsequent day, three levels of the SLN were analyzed with hematoxylin and eosin stain and immunohistochemistry with cytokeratin AE1-3 and the appropriate control. Touch imprint cytology and/or frozen section analysis (where applicable) correctly identified 78 of 89 macrometastases, with a sensitivity of 88%, specificity of 100%, and negative predictive value of 97%. Sensitivity was 72% for micrometastases and 60% for isolated tumor cells, each with 100% specificity. In conclusion, the sensitivity and specificity of SLN biopsy at our institution compares with the higher end of percentages reported in the literature.

This study compares the performance of histopathologic evaluation of axillary SLN biopsy in breast carcinoma at Baylor University Medical Center at Dallas to that of other pathology practices.

Methods
A total of 488 consecutive SLN biopsies performed by two surgeons at various surgical centers from January 1, 2005, through April 1, 2009, were retrospectively reviewed to determine the method of lymph node analysis (i.e., TI or FS); cases of macrometastasis, micrometastasis, and isolated tumor cells (ITCs); and any false-negative or false-positive results. Among the study population, 2 patients were in their 20s, 10 in their 30s, 73 in their 40s, 157 in their 50s, 140 in their 60s, 72 in their 70s, 33 in their 80s, and 1 in their 90s.

TI cytology was performed using the standard 0.5-cm cut-off for lymph node sectioning. Once touched, the slide was fixed in ethanol and then stained with hematoxylin and eosin. Cases that had suspicious cells but were not definitive were subsequently frozen and stained, also using hematoxylin and eosin. Standard definitions were used for micrometastasis (<2 mm) and isolated tumor cells (individual tumor cells or small clusters, <0.5 mm).

Analysis of the permanent processing included reassessment of the TI cytology and FS analysis (where applicable) and evaluation of three step sections of the lymph node by hematoxylin and eosin stain.
immunohistochemical staining with a positive and negative control, and cytokeratin AE1-3 (pan-cytokeratin) on the Ventana iView system (Tucson, Arizona).

Results
From the 488 cases, 922 total lymph nodes were assessed by TI cytology, with an average of 1.89 lymph nodes per case. Of these, 179 lymph nodes were also submitted for FS analysis, a rate of 19.4%.

The Table summarizes the results. Considering only macrometastases, the sensitivity of SLN biopsy was 88%, the specificity 100%, the positive predictive value 100%, and the negative predictive value 97%. Eleven macrometastases were missed intraoperatively, a rate of 1.2%.

For ITCs or micrometastases, 65 intraoperative negative diagnoses were changed at the time of permanent section. This change occurred at an overall rate of 7.1%, with 13 consisting of micrometastasis (1.4%) and 52 consisting of ITC (5.6%). The sensitivity for detecting micrometastasis was 72.2% with 100% specificity, and the negative predictive value was 96.9%. ITC sensitivity was 60%, with 100% specificity and a 94.7% negative predictive value.

Discussion
SLN biopsy continues to be an area of extensive study in the management of breast carcinoma. Studies have considered aspects of sensitivity and specificity with respect to breast carcinoma subtype, tumor size, metastasis size, method of morphologic evaluation, method of sectioning lymph nodes, recurrence rate, rapid use of cytokeratin staining, and the utility of intraoperative molecular-based assays. Universally, SLN biopsy has provided decreased morbidity for the patient. However, recurrent disease still occurs, perpetuating research to discover the best evaluative approach in the management of the disease.

Many studies have considered the sensitivity and specificity of SLN biopsy, and a metaanalysis of 31 studies conducted by Tew et al (12) described a sensitivity range of 44% to 100% (with most studies within 50% to 70%) and a specificity of 100%, including all analytical techniques. Repeatedly, the sensitivity and specificity of TI cytology have paralleled those of FS analysis, without a statistically significant difference. Sensitivity for macrometastasis ranged from 70% to 98% with a pooled 81% average, and sensitivity for micrometastasis ranged from 5% to 57%, with a pooled 22% average. These findings coincide with those of additional relevant studies that were reviewed.

We report an 88% sensitivity for macrometastasis and a 72% sensitivity for micrometastasis. Variables reported to influence the spectrum of results include the experience of the reviewing pathologist, skill of the individual submitting tissue for intraoperative evaluation, sampling error (e.g., when no tumor cells were seen in a retrospective review of the intraoperative TI cytology, but tumor cells were present in the permanent section), and median tumor size. Specifically, as expected, sensitivity for SLN biopsy increased as tumor size increased and decreased as the proportion of micrometastasis increased. Other studies have shown that the size of the primary tumor and the size of the SLN metastasis were predictors of nonsentinel node metastasis.

Table
**Sensitivity, Specificity, and False-Negative Results for 488 Cases of Sentinel Lymph Node Biopsy for Breast Cancer at Baylor University Medical Center at Dallas**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statistic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macrometastasis</td>
<td>Sensitivity</td>
<td>88.0</td>
</tr>
<tr>
<td></td>
<td>Specificity</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Rate of frozen section</td>
<td>19.4</td>
</tr>
<tr>
<td></td>
<td>Positive predictive value</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Negative predictive value</td>
<td>97.0</td>
</tr>
<tr>
<td></td>
<td>Rate of missed macrometastasis</td>
<td>1.2</td>
</tr>
<tr>
<td>Micrometastasis</td>
<td>Sensitivity</td>
<td>72.0</td>
</tr>
<tr>
<td></td>
<td>Specificity</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Negative predictive value</td>
<td>96.9</td>
</tr>
<tr>
<td>Isolated tumor cells</td>
<td>Sensitivity</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td>Specificity</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Negative predictive value</td>
<td>94.7</td>
</tr>
<tr>
<td>Rate of change of diagnosis postoperatively</td>
<td>7.1*</td>
<td></td>
</tr>
</tbody>
</table>

*N = 65: 13 (1.4% of total) involving micrometastases and 52 (5.6% of total) involving isolated tumor cells.
Cserni and colleagues considered the number of levels examined with respect to sensitivity. In their study, a mean of 49 levels were examined, and it was determined that one or two sections from the central component of the node (the hilar region) would have missed 6 of 21 cases (29%). Further, despite this extensive method of sectioning, micrometastasis was detected in two lymph nodes only by immunohistochemistry. This study found that three levels should be investigated along with immunohistochemistry but that, in the event of a negative study, further levels may be necessary if clinically warranted (e.g., large tumor size/T2 or greater, unfavorable histology). Another study by Turner et al suggested immunohistochemistry at two levels to assist in the detection of micrometastasis and two levels with hematoxylin and eosin to increase sensitivity, control cost, and improve efficiency. The method suggested by Cserni is followed at Baylor University Medical Center at Dallas.

A change in diagnosis postoperatively occurs 9% to 30% of the time, according to a study by Sahin, Guray, and Hunt from M. D. Anderson Cancer Center. As reported above, at Baylor University Medical Center at Dallas, a postoperative change in diagnosis occurred less frequently: 7% of the time overall, with 1.4% occurring with micrometastases and 5.6% with ITC. This also coincides with the greater rate of detection with increasing size of metastasis.

Management of micrometastatic disease, frequently in comparison with ITC, is another component of breast carcinoma addressed by much research. In a study by Reed et al, which included 1259 patients, with 57 patients with micrometastasis and 25 patients with ITC, no additional positive nodes were identified in 13 patients who were diagnosed with ITC and subsequently had an axillary lymph node dissection (ALND). However, 11 of 41 patients (27%) with micrometastasis had additional positive nodes. Demographically, a greater percentage of patients with micrometastases are 50 years or younger, with lymphatic or vascular invasion. Similarly, in Reed at al’s study, 6 of the 8 (75%) patients with micrometastasis and distant recurrence were 50 years old or younger, and most (7 out of 8) patients with micrometastatic disease had only one focus at the time of initial surgery. However, 7 of the patients with recurrent micrometastasis underwent ALND, with recurrent disease in 5 of 7 (71%) of cases. Most of the patients with micrometastatic disease received chemotherapy (n = 45, 79%), radiation therapy (n = 39, 68%), or both (n = 31, 53%). Of these patients, 10% who received both modalities or radiation alone had recurrence with distant metastases, as opposed to 22% of patients who received no treatment after a mean follow-up of 4.9 years. However, these differences were not statistically significant. Two patients with ITC had recurrences, both with poorly differentiated, hormone-receptor–negative tumors, after having previously received chemotherapy. Further, both of the ITC patients with recurrence had ALND without additional positive nodes identified. Ultimately, this study determined that nodal micrometastasis is associated with more positive nonsentinel nodes and a worse prognosis.

Another study by de Boer et al involved 2707 patients: 856 with node-negative disease and no adjuvant therapy, 856 with ITC or micrometastasis and no adjuvant therapy, and 995 with ITC or micrometastasis with adjuvant therapy. The median follow-up in this study was 5.1 years. For both patients with ITC and patients with micrometastasis who did not receive adjuvant therapy, the unadjusted 5-year disease-free survival rate was significantly reduced when compared with node-positive, adjuvant therapy patients (76.5% vs 86.2%, P < 0.001 for the groups combined: 77.2% vs 83.0%, P < 0.04 for the ITC group alone; 75.9% vs 87.9%, P < 0.001 for the micrometastasis group alone). Ultimately, a reduced risk of events was noted in the node-positive, adjuvant-therapy cohort when compared with the node-positive, no-adjuvant-therapy cohort (hazard ratio 0.57; 95% CI 0.45–0.73).

As cited in other studies, other factors influencing the risk of recurrence included tumor size and tumor grade. This was one of a few studies that found that ITC influenced overall disease-free survival. Further, de Boer et al proposed that the size of tumor deposit may not have an influence on 5-year disease-free survival. Another study by de Boer et al involved 2707 patients: 856 with node-negative disease and no adjuvant therapy, 856 with ITC or micrometastasis and no adjuvant therapy, and 995 with ITC or micrometastasis with adjuvant therapy. The median follow-up in this study was 5.1 years. For both patients with ITC and patients with micrometastasis who did not receive adjuvant therapy, the unadjusted 5-year disease-free survival rate was significantly reduced when compared with node-positive, adjuvant therapy patients (76.5% vs 86.2%, P < 0.001 for the groups combined: 77.2% vs 83.0%, P < 0.04 for the ITC group alone; 75.9% vs 87.9%, P < 0.001 for the micrometastasis group alone). Ultimately, a reduced risk of events was noted in the node-positive, adjuvant-therapy cohort when compared with the node-positive, no-adjuvant-therapy cohort (hazard ratio 0.57; 95% CI 0.45–0.73).

Van Deurzen et al reported second echelon lymph node metastasis in 13%, 20%, and 48% of cases for ITC, micrometastasis, and macrometastasis, respectively. The cases of ITCs in sentinel lymph nodes and second echelon metastasis involved one lymph node. The issue of the management of ITC versus micrometastasis lacks definitive resolution at present.

The differences in detecting metastatic invasive lobular versus ductal carcinoma have also been considered and debated. While consistent agreement on the issue does not exist, three important features
distinguishing metastatic lobular carcinoma are agreed upon: 1) lobular carcinoma cases have a higher rate of conversion from node-negative to node-positive disease with immunohistochemistry, 2) lobular carcinoma has a higher percentage of immunohistochemistry-detected disease, and 3) lobular carcinoma has a greater proportion of single-cell metastases. Horvath et al. 26 reported no difference in sensitivity and specificity in detecting metastatic or micrometastatic lobular or ductal breast carcinoma. The study by Horvath et al considered FS analysis, and the study by Creager et al considered TI cytology. The sensitivity for TI cytology reported by Creager et al was 82%, well below the sensitivity determined in the retrospective analysis at our institution. Moreover, the same issues arise with ITCs and micrometastases as exist with ductal carcinoma.

The future direction of the management of ITC and micrometastasis lies in methods to determine this limited, though potentially significant, disease in real time. Methods investigated thus far have included intraoperative cytokeratin staining by immunohistochemistry and molecular-based assays. A study performed by Krishnamurthy et al at M. D. Anderson in Houston, Texas, investigated the intraoperative processing of SLNs using a rapid pan-cytokeratin immunohistochemical stain 18. The procedure required an average of 25 minutes (range 8–25 minutes), not including time to retrieve and prepare the specimen. Patients included in the study had T1 to T3 tumors; those with stage IV disease were excluded. In the study, the lymph nodes were sectioned according to previously mentioned standards, with a TI cytology prepared and two sections—one FS and one slide prepared with the rapid cytokeratin analysis. Overall, of the 297 lymph nodes studied (n = 100), intraoperative rapid cytokeratin detected 100% of macrometastases and 50% of micrometastases, with an overall sensitivity of 80% in detecting metastatic disease. Thus, overall, the sensitivity was similar for the detection of macrometastasis and slightly improved for detecting micrometastasis, which coincided with previous studies on the topic. One case of micrometastasis was detected by rapid cytokeratin that was not detected with FS. Again, as determined previously with other TI and FS studies, this one difference could be attributed to sampling error. The advantages for rapid cytokeratin immunohistochemistry reported by Krishnamurthy et al included better detection of micrometastasis, as well as the ability to accurately measure the size of the metastasis to distinguish it from ITC. Certainly, this could be helpful if the ultimate decision is that ITCs do not present a decreased 5-year disease-free survival rate. However, the management of the finding of ITC is still debated in the literature. Further, the improvement is not statistically significant, and the practical aspects of incorporating this into the model of the intraoperative workup of SLN biopsies should be considered on an institutional basis. As of yet, this is not a widely practiced approach, and the literature on the topic has been experimental and comparative in nature.

Another area of future promise for the intraoperative analysis of SLN biopsies involves the use of molecular-based assays. To date, no effective assays have been developed. In fact, in testing solid tumors of any sort, a reasonable amount of tumor (usually no less than 20% of nucleated cells in a sample) must be present for detection. However, for hematolymphoid malignancies, assay design has allowed detection of much lower tumor burden in a sample (sometimes as low as one or two detectable cells). These methods are impractical at present for implementation in the intraoperative setting due to cost and time constraints. Of course, with the increasing sensitivity seen with these assays, some specificity is lost. Further, the hematolymphoid malignancies of this nature are usually directed at detecting minimal residual disease, which implies a known mutation upon initiation of the study. While these same principles can be applied to solid tumors, including breast cancer, this paradigm has yet to be established. Further, it is understood that while a molecular genetic event may be detected, due to the natural biology of cancer, new clones are constantly emerging and a unique clone can prevail.

In a study by Blumencranz et al., 27 a molecular-based assay for detection of axillary lymph node metastasis found encouraging results for macrometastases. The main limitation of this study, as with any study considering molecular analysis of axillary lymph node status, is sampling, particularly with metastases of decreasing size. Another study by Martinez et al. 9 compared the GeneSearch BLN assay to intraoperative histologic evaluation. In this study, results similar to the gold standard histologic studies were reported. Again, however, this was limited to macrometastases. Moreover, this approach requires additional staff trained in setting up such assays, which is not economically practical in all facilities.
A similar study by Tsujimoto et al. found sensitivity in detecting macrometastasis similar to histologic evaluation. Unlike the previous two studies mentioned, however, this study also reported potential for detection of micrometastatic disease, but the sensitivity was not provided.

Each of the above-mentioned studies considered the use of polymerase chain reaction amplification of extracted DNA with primers for cytokeratin. Veridex is the only company currently approved by the Food and Drug Administration for evaluation of the sensitivity and specificity of detection of circulating tumor cells utilizing molecular-based assays on patients. This company reports that a positive finding in the setting of breast cancer is five circulating tumor cells. While Veridex does not purport to resolve the ITC/micrometastasis issue, the company offers an alternative method to determine prognosis without the morbidity of ALND. Veridex has yet to be validated in clinical trials to determine relevance, but studies are in progress.

Another alternative method gaining interest in molecular diagnostics is next-generation sequencing. With this highly parallel, high-throughput evaluative method, fewer numbers of aberrant cells are required for detection. However, as a new technology, this method still requires significant improvements in the balance between speed and accuracy before it reaches clinical practice.

**Conclusion**

Since axillary lymph node status is the single most important prognostic indicator in breast carcinoma, evaluation of the sensitivity and specificity of the techniques utilized to establish this information is critical. Currently, the gold standard for intraoperative analysis is TI cytology or FS analysis. The variability in the sensitivity and specificity in these methodologies indicates that a more sensitive method is needed. Further, the management of micrometastasis and ITCs and their impact on long-term survival need to be more clearly delineated. From a pathological perspective, remaining limitations in evaluation include histopathologic guidelines to classify tumors present in the subcapsular sinus, capsule, or perinodal soft tissue. Measurement of tumor cells/clusters with a dispersed pattern in nodal sections is the other issue that remains unresolved. The pathologists at Baylor University Medical Center at Dallas perform above the national average in the intraoperative diagnosis of axillary lymph node status.
References


Baylor Sammons Medical Oncology Fellowship

By Marvin J. Stone, MD

In addition to excellence in patient care and research, education has been a prime objective of Baylor’s Charles A. Sammons Cancer Center since it opened in 1976. Marvin J. Stone, MD, director of the medical oncology fellowship program, explained, “Our medical staff participates in the education of medical students and residents, but we devote most of our teaching activities to fellows. When they complete their training, they will be doing what we do—practicing medical oncology and hematology.” Forty-five fellows have completed the program, with two-thirds of them staying on to serve the North Texas community. Steve Paulson, MD, oncologist on the medical staff at Baylor Dallas and former fellow, pointed out, “The only way we can be sure to have adequate cancer care in our community and in our state is to continue to invest in the education of our medical oncologists.”

“Baylor Dallas is a teaching institution, and that is one reason why the level of clinical quality here is so high,” said Dr. Stone. More than 3,000 new patients with a wide spectrum of tumors come to Baylor Sammons Cancer Center each year. Fellows see patients with virtually all types of solid tumor and hematologic malignancies. Thus fellows have an opportunity to care for acute and chronically ill patients in the hospital and the clinic. Many patients participate in clinical research trials, and so the fellows become familiar with the design and interpretation of experimental treatments as well as conventional approaches.

Teaching in Baylor’s medical oncology fellowship program is patient oriented. Oncology rotations are designed so that each fellow spends 1 or 2 months with one

Fellows from left to right: back: hematology: Prescilla Wood, MD; medical oncology: Justin Goldfarb, DO; Reva Schneider, MD; Micah Burch, MD; breast imaging: Cory Morgan, MD; medical oncology: Ayman Barakat, MD; front: breast imaging: Ty Leete, MD; medical oncology: Vibha Thomas, MD; Yanjun Ma, MD, PhD; breast surgery: Elise Roe, MD.
attending medical oncologist or hematologist. “A unique feature of Baylor Sammons Cancer Center’s oncology training program is the large amount of one-on-one time spent between the fellow and the oncology attending. This side-by-side interaction between fellow and attending leads to constant teaching and learning for both parties,” commented Robert Mennel, MD, medical director of clinical oncology. Fellows also spend time in blood and marrow transplantation, pathology, gynecologic oncology, and radiation oncology. More than 20 multidisciplinary site tumor conferences are held by Baylor Sammons Cancer Center each month. The discussions dealing with diagnosis and treatment at these conferences provide fellows with valuable information and perspective about patient management. Fellows also attend a number of other oncology and hematology conferences with basic science, clinical research, and journal club formats. In addition, they engage in research projects, many of which eventuate in presentations at national meetings and published articles in peer-reviewed medical journals.

“The educational benefit of having fellows is not solely to the trainees. By having fellows, oncologists on the medical staff are challenged to keep pace with the most recent advances, thus elevating the care given,” stated Alan Miller, MD, PhD, medical director of Baylor Sammons Cancer Center, chief of oncology at Baylor Dallas and medical director of oncology for Baylor Health Care System.

Oncology has emerged as one of the most exciting areas of medicine. Dedication to lifelong learning is important because new information constantly changes practice. During fellowship, trainees acquire the knowledge and skills required of a front-rank oncologist and the habits to continue their education in the future.

The fellowship program currently has six fellows engaged in a 2-year course of study. Barry and Lana Andrews recently donated $200,000 in honor of Amy Anderson, MD, and Daniel DeMarco, MD, who serve on the medical staff at Baylor Dallas. This generous gift will benefit the medical oncology fellowship program. Drs. Stone and Miller hope to expand the fellowship to 3 years and nine fellows by 2013.

Hematopathology Fellowship Program
By John R. Krause, MD

In July 2009, a fellowship program was started at Baylor University Medical Center at Dallas by John Krause, MD, fellowship director and a hematopathologist on the medical staff at Baylor Dallas. This 1-year program concentrates on hematopathology which includes interpretation of peripheral blood and bone marrow specimens, lymph node and spleen specimens, and other body tissues suspected of having a hematologic disorder. The fellow must also spend time in other areas of the laboratory to learn and incorporate important ancillary tests such as flow cytometry, molecular pathology, and cytogenetics. A 1-month rotation at Cook Children’s Hospital in Fort Worth is included so the fellow can gain experience in pediatric hematopathology. The fellow also gains experience in professional monitoring of the general hematology laboratory.

Baylor Dallas’ hematopathology service is very busy, with approximately 2,000 bone marrow specimens and 450 to 500 tissue biopsy specimens annually. The fellow initially examines many of these specimens and presents the diagnosis to the hematopathology faculty. The fellow also participates in teaching of the pathology residents and any medical student who rotates.

Hematopathology Diagnostic Microphotographs

Hodgkin lymphoma. Reed-Sternberg cell

Acute promyelocytic leukemia with Auer Rods

Peripheral blood. Hairy cell leukemia

Intravascular lymphoma. Central nervous system. Intravascular lymphoma
have completed the program, including the four breast surgical oncologists currently on the medical staff at Baylor Dallas.

During the 1-year period, fellows spend 4 months in breast surgery, 2 months in medical oncology, and 1 month each in surgical pathology, radiation oncology, plastic surgery, psychosocial oncology, clinical research, and mammography. Approximately 700 new breast cancers are seen at Baylor Dallas each year; thus, the breast fellows have significant experience in operative and nonoperative management of diseases of the breast. In addition to the clinical training, they attend breast oncology multidisciplinary conferences biweekly and a resident breast cancer conference twice a month. The breast fellows help to organize this conference, which includes lectures as well as journal articles.

Breast Imaging Fellowship
By Ronald C. Jones, MD

In 1980, Mr. and Mrs. Wirt Davis established a $500,000 endowment in honor of her parents, Helen Buchanan and Stanley Joseph Seeger. This endowment established the fellowship in breast oncology—perhaps the first in the United States—which was led by Harold Cheek, MD the first surgeon in North Texas to limit his practice to diseases of the breast. In 1995, Ronald C. Jones, MD, a surgeon on the medical staff at Baylor Dallas, succeeded Dr. Cheek as program director. The fellowship is funded through the Baylor Health Care System Foundation with monies donated to this cause. Since the fellowship began in 1982, 25 surgeons have completed the program, including the four breast surgical oncologists currently on the medical staff at Baylor Dallas.

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Clinical Research Network presented “Melanoma as an Example of Evidence-Based Medicine.”

The Department of Internal Medicine and Baylor Sammons Cancer Center hosted the Marvin J. Stone Lectureship on March 23, 2010. Robert A. Kyle, MD, professor of medicine, laboratory medicine, and pathology at the Mayo Clinic College of Medicine, was the guest speaker. Dr. Kyle gave his presentation, “Utilization of Risk Management of Multiple Myeloma with Novel Agents,” to physicians, residents, interns, fellows, and ancillary staff in attendance. This lectureship was established in 2009 in honor of Dr. Stone’s leadership, commitment, and dedication to patient care, education, and research.

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21st Annual City-Wide Head and Neck Conference

Baylor University Medical Center at Dallas hosted the 21st Annual City-Wide Head and Neck Conference on September 3, 2010. This year’s conference featured Christine Gourin, MD, of Johns Hopkins Head and Neck Cancer Center, who discussed “Contemporary Trends in Head and Neck Cancer Care.”

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**External Research Grants Project**

Under the direction of Richard Boland, MD, chief of gastroenterology and physician on the medical staff at Baylor Dallas, the GI cancer research laboratory is currently working on 4 major, National Institute of Health funded projects designed to study Lynch syndrome or HNPCC, a mathematical analysis of the kinetics of methylation in the genesis of CRC, a clinical chemoprevention trial for individuals diagnosed with precancerous colon polyps, and the role of the human JC polyomavirus (JCV) in CRC.

The GI cancer research laboratory is focused on the molecular biology and genetics of gastrointestinal cancers. The GI cancer research laboratory conducts basic, clinical, and translational studies, with a special emphasis where basic cellular and molecular research is translated into diagnostic and therapeutic applications to reduce incidence, morbidity, and mortality of colorectal cancer.

**New Screening Tool for Colorectal Cancer**

Accepted medical guidelines recommend getting a first colonoscopy to check for colorectal cancer at age 50. Although this procedure offers an extremely effective way to identify colorectal cancer and even prevent it, up to 75% of adults who should be screened are not.

“If you just think of the word ‘colonoscopy,’ you react,” said Ajay Goel, PhD, principal investigator and senior scientist with Baylor Research Institute (BRI). “Most people just don’t want to go through the prep.”

With so few adhering to screening guidelines, a multinational team of researchers at BRI performed one of the largest studies of its kind to develop and test another option: a simple stool sample test. Researchers included Dr. Goel and Richard Boland, MD, chief of gastroenterology and physician on

Certain innovative techniques and technologies established at Baylor Dallas have come directly from research studies conducted at the GI Cancer Research Laboratory.
the medical staff at Baylor University Medical Center at Dallas.

The BRI research team concluded that their newly developed, DNA test of stool samples might be developed into a useful screening test for colorectal cancer.

Unlike colonoscopy, this screening method involves no bowel cleansing, no anesthesia, and no time away from work or family. Instead, the screening test requires only a stool sample that could be collected at home as often as necessary.

In addition, the test requires only basic laboratory instruments, making it adaptable to most clinical laboratories. For people at higher risk for colon and rectal cancer and those who will not or cannot have a traditional colonoscopy, a stool screening test could offer a quick, reliable way to test for recurrence.

“We have all kinds of screening tests today that point to the need for a colonoscopy to rule out cancer,” Dr. Boland said. “But most people don’t have cancer. We are hoping that the fecal DNA methylation analysis will be optimized to give us an answer that says, ‘You don’t have cancer; you don’t need a colonoscopy.’”

Breast Tomosynthesis Mammography: Three-Dimensional Mammography for the 21st Century

For women with high risk of developing breast or ovarian cancer, several options are available, including increased surveillance. For breast cancer, this surveillance has typically been carried out with standard mammography, augmented when necessary with ultrasonography or magnetic resonance imaging. Now, a new adaptation of mammography is being tested at Baylor Dallas as part of a multinational study.

Although standard two-dimensional (2D) mammography has been a powerful tool in reducing breast cancer mortality over the last 35 years, nearly one out of five women diagnosed with breast cancer had a negative mammogram within the preceding year. Why is the false-negative rate for 2D mammography so high?

By compressing the breast and collecting images of the breast from two views, standard mammography attempts to visualize a three-dimensional object in two dimensions. Structures within the breast overlap each other, sometimes obscuring lesions. Conversely, these areas of overlap can also mimic the appearance of lesions, resulting in call-backs that are stressful for the patient.

Breast tomosynthesis mammography is a form of three-dimensional (3D) mammography. Like standard mammography, it uses x-rays to form the image, but the x-ray tube moves in an arc above the breast, allowing multiple images to be taken. These images are pieced together using a computer, and the radiologist is then able to “slice” down through the breast. Early studies with this new technology indicated that breast tomosynthesis mammography had increased sensitivity and specificity compared with 2D mammography, resulting in a lower call-back rate.

Joseph Spigel, MD, a diagnostic radiologist on the medical staff at Baylor Dallas, is concerned about the problem of call-backs. “Patient recalls are problematic at multiple levels,” he said. “Patients pay an emotional price, and it is a sheer inconvenience having to go back for a second appointment.”

Baylor Dallas participated in a multinational study examining the efficacy of tomosynthesis. The major cause of call-backs is the finding of an asymmetric density on a screening mammogram. Baylor recruited 150 women aged 40 to 85 who had a finding of an asymmetric density on a single-view conventional 2D screening mammogram within the previous 3 months. The device used for this research is an investigational tomosynthesis machine that can take both 2D and 3D
mammograms while the breast remains in a single compression. (This device has not been approved by the FDA at this time.) The radiologists will be examining how often the diagnosis changes when using 3D tomosynthesis images compared with standard 2D images. If additional areas of interest are discovered on the 3D images, Baylor will pay for the studies needed to investigate them.

Although the tomography images are similar to standard mammographic images, radiologists must learn how to manipulate and view them. “We are seeing breast tissue differently than we have before,” said Dr. Spigel. “There will be a new ‘normal’ with tomosynthesis. We see so many more benign things like cysts that we don’t see in 2D. We need to learn how to filter them down so that we can more accurately determine which patients to send for a sonogram.”

The breast tomosynthesis mammography trial is proving to be very popular, and Baylor Dallas is well on the way to recruiting the required 150 patients. “Here in Dallas we have very educated patients,” said Dr. Spigel, “and with the current state of medicine, the best patient is an educated patient.”

New Clinical Oncology Research Coordination Office and Online Listings

Cheryl Sampson, CCRP, MBA, joined Baylor Dallas as the new director of clinical oncology research coordination. In her new role, Sampson is responsible for the coordination and oversight of all oncology research conducted at Baylor Dallas, as well as the coordination of oncology research associated with non-Baylor entities such as Mary Crowley Cancer Research Center, Texas Oncology, US Oncology, and others that work collaboratively with Baylor Dallas. She will oversee oncology research among all parties to decrease duplication of efforts and provide efficiency, consistent communication, progress reports, adherence to stated goals and objectives, and complete follow-up.

An online database of clinical trials at Baylor Sammons Cancer Center offers physicians convenient access to open clinical trials in oncology.
One coordination effort has involved creating an online database of trials. Patients and their physicians can now access information about open clinical trials in oncology at Baylor Sammons Cancer Center by following these steps:

- Go to BaylorHealth.com/CancerResearch.
- Click on “Search for Cancer Clinical Trials.” From the drop-down box under step 2, click on a diagnosis and view a list of studies.
- Click on the study for details such as the inclusion/exclusion criteria.

**International Leader in Cancer Drug Development to Advise Cancer Center**

Daniel Von Hoff, MD, has agreed to work with Baylor Charles A. Sammons Cancer Center as it develops its Innovative Clinical Trials Center. Dr. Von Hoff is currently physician-in-chief of the Translational Drug Development Institute in Phoenix, Arizona. He is also chief scientific officer of Scottsdale Healthcare and is chief scientific officer for US Oncology. Dr. Von Hoff has major interest in developing new cancer agents and has participated in clinical trials of over 200 new anticancer agents. In April 2010, Dr. Von Hoff received the David A. Karnofsky Memorial Award from the American Society of Clinical Oncology for his “outstanding achievements in cancer research and for his impact on the treatment of patients with cancer.”

Dr. Von Hoff will assist Sammons leaders in developing the new center, which will bring patients with cancer the option of participating in various clinical trials. The Innovative Clinical Trials Center will focus on a “precision medicine” approach, in which treatments will be based upon the unique makeup of the patient’s tumor. Treatments will include antineoplastic and biologic agents. There will be a focus on immune-based therapies such as vaccines developed in Baylor Institute for...
Immunology Research, as well as from collaborating institutions.

“We are honored to have an advisor like Dan von Hoff in our battle against cancer,” said Alan M. Miller, MD, PhD, medical director of Baylor Sammons Cancer Center, chief of oncology at Baylor Dallas and medical director of oncology for Baylor Health Care System. “He will help us build on the existing clinical research strengths of our center and provide increased opportunity and hope to individuals with cancer in our region and beyond.”

**Progress of Select Research Projects**

In 2009, Baylor Sammons Cancer Center awarded to four investigators its first pilot project research awards, totaling $700,000. The awards and Investigators are listed below. The investigators have been actively pursuing work leading to several publications and a grant from the National Cancer Institute.


4. Karolina Palucka, MD, PhD: Phase I/II single-arm clinical trial with a second-generation dendritic cell vaccine for melanoma. This effort resulted in a grant from the National Cancer Institute.

**ASCO Accomplishments**

At the 2010 meeting of the American Society of Clinical Oncology, 22 abstracts featured authors from Baylor Sammons Cancer Center, including 5 abstracts for which Baylor Sammons researchers were first authors. Authors included Thomas Hutson, DO, PharmD, Joyce O’Shaughnessy, MD, Karolina Palucka, MD, PhD, Jacques Banchereau, PhD, Joseph Fay, MD, Harold Urschel, Jr., MD, Richard Boland, MD, Joanne Blum, MD, PhD, and Cynthia Osborne, MD. Seven of the abstracts related to gastrourological cancers; seven to breast cancer; two each to brain cancer, lung cancer, and melanoma; and one each to gastrointestinal and gynecological cancers.

*Baylor researchers have pioneered studies focusing on genes that predispose certain families to colon cancer.*
These confocal microscope images show dendritic cells, the initiators of the body’s immune responses. They are the main focus of research at Baylor Institute for Immunology Research.


39. Izbicka E, Streepert RT, Yeh IT, Pressley O, Grant M, Andrews JV, Kuhn J, O’Saughnessy J. Effects of alpha-difluoromethylornithine on markers of proliferation, invasion, and


Collins Family Foundations Make Gift for Bridge of Hope

The Calvert K. Collins Family Foundation, the Collins-Fisher Foundation, the James M. Collins Foundation and the Ruth C. and Charles S. Sharp Foundation united to create a generous $1 million grant. This donation will name the Collins Family Bridge of Hope connecting the outpatient cancer building and the renovated inpatient cancer center at the Carr P. Collins Center within the new Baylor Charles A. Sammons Cancer Center.

“There was something particularly appropriate for us all that it would be named the Collins Family Bridge of Hope since it was reaching across the campus and across the generations,” said Michael Collins. Michael, the grandson of Carr Collins and Dee Collins Torbert and the son of James Collins, helped facilitate the gift.

“We were reaching across the campus and the generations,” said Michael Collins. Michael, the grandson of Carr Collins and Dee Collins Torbert and the son of James Collins, helped facilitate the gift.

““The Collins Family Bridge of Hope will stand as a lasting symbol of the generosity, faith and trust of one family in this institution of healing,” said Baylor Health Care System Foundation Officer Lindalyn Adams, who organized the effort.

The grant will also establish the Collins Family Endowment for Oncology Nursing Certification. The fund will support nurses at Baylor University Medical Center at Dallas in attaining and maintaining certification through the Oncology Nursing Society.

Gifts Help Fund Advanced Conference Center

A technologically advanced conference center is being built on the 10th floor of the outpatient building of the new Baylor Sammons Cancer Center, thanks to the combined efforts of physicians, corporate sponsors and individual donors.

Among the conference center’s greatest individual supporters has been the H.L. Hunt family, who have contributed more than $2 million for the project. To date, more than $4 million has been raised for the conference center.

“This facility will be critical to our ongoing efforts to raise the level of service and care we provide our patients,” said Joel Allison, president and chief executive officer of Baylor Health Care System. “That so many have come together to support it shows how wide-ranging its impact will be throughout the community.”

Primary uses of the conference center will include physician conferences, hospital events, board meetings, public health classes, cancer education classes, guest speaker appearances, doctor-patient question-and-answer sessions and other programs to enrich and educate medical staff, patients, family members and caregivers.

The conference center will provide a centralized venue for both Baylor and the larger Dallas community, while also benefitting physicians. This will enable Baylor to continue its progress in cancer research, education and treatment.

Foster-Skiles Gift to Fund Healing Garden

A generous gift of $3 million from the estate of Martha Foster-Skiles will provide a place of solace for patients and family members engaged in the fight against cancer at Baylor Dallas.

The gift will fund the Martha Foster-Skiles Healing Garden, also called “Lovie’s Garden,” which is being built in front of Baylor Sammons Cancer Center’s new outpatient cancer building.

“I called Martha ‘Lovie,’ and she was the love of my life,” said her husband, Blair Skiles. “We’re creating something special to honor a beautiful woman and to give patients and their families pleasure, contentment and rest when they come for appointments and treatments.”
Healing gardens are an important feature in health care settings, as they provide an elusive moment of peace to patients in trying times. Research shows that natural surroundings not only strengthen the immune response in patients receiving strong treatments but also create a respite for patients, families, visitors and staff.

**Fund Helps Blood and Marrow Transplant Patients Get Back on Their Feet**

Patients with diseases that are treated with blood or marrow transplants have their lives changed in myriad ways. Some patients are not able to work for a period of time, and some are forced to leave their jobs due to their illness. Both situations can create tremendous financial burdens on them and their families.

The blood and marrow transplant program at Baylor Dallas uses the Baylor Health Care System Foundation cancer indigent fund to provide some relief in these situations. Jerry Hopgood, director of the bone marrow transplant program at Baylor Dallas said patients have also received help paying for lodging for family members during a patient's procedure and during the recovery time.

**Celebrating Women’s 11th Anniversary Event for Breast Cancer**

Keynote speakers Jill Eikenberry and Michael Tucker charmed an audience of more than 1,300 on October 21, 2010, as Baylor Health Care System (BHCS) Foundation hosted the 11th annual Celebrating Women luncheon to benefit breast cancer efforts. Jill and Michael shared stories about their acting careers and their struggle with her breast cancer.

An anonymous donor pledged a multi-million-dollar gift to the 2010 Celebrating Women campaign that will benefit breast cancer research, the oncology patient navigators and the oncology chaplaincy program at Baylor Health Care System. Over the last 11 years, the campaign has raised more than $16 million for the fight against breast cancer at Baylor.

Christie Carter and Cindy Carter chaired the event, and Peggy and Carl Sewell were its honorary chairmen. Former Foundation chairman of the board Leonard Riggs, Jr., MD, and his wife, Peggy, were recognized with the Circle of Care Award, as was The Discovery Foundation, which has long supported women’s health initiatives at BHCS. The awards are given to those who have served as advocates, volunteers, educators or donors and have made a difference in the campaign against breast cancer.
Contact Information

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Cancer Center Programs
Blood and Marrow Transplant Inpatient Services 214.820.2744
• Be the Match® 214.820.4279
• Outpatient Center 214.370.1500
• Cutaneous Lymphoma Clinic 214.370.1500
• Graft-Versus-Host Disease Clinic (GVHD) 214.370.1500
Clinical Oncology Research Coordination 214.818.8471
Darlene G. Cass Women's Imaging Center 214.820.2430
• Diagnostic mammography
• Screening mammography
• Other breast imaging
W.H. & Peggy Smith Baylor Sammons
Breast Center 214.820.9600
• Breast cancer prevention research trials
• Breast Care for a Lifetime™
• Breast health education
• Personal risk evaluation
Hereditary Cancer Risk Program 214.820.9600
• Breast and ovarian
• Gastrointestinal
Liver and Pancreas Disease Center 214.820.1756
Lung Cancer Center 214.820.6767
Lymphedema Program 214.820.1931
• Lymphedema prevention and treatment services
Oncology Outpatient Clinic 214.820.6767
• Bone Tumor Center
• Head & Neck Clinic
• Lung Cancer Center
• Speech Therapy
Radiosurgery Center 214.820.7285

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Joanne L. Blum, MD, PhD, Site Leader

Support Services
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Cancer Registry 214.820.3976
Marketing and Public Relations 214.820.2116
Ernie’s Appearance Center 214.820.8282
Prostheses and specialty care items for cancer patients
Nutraceuticals
Sammons Events and Community Relations 214.818.8473
Screenings
• Head & neck cancer (April)
• Skin/melanoma (May)
• Prostate cancer (Sept)
Smoking Cessation Program 214.820.9791
• Martha Foster Lung Care Center
• Tobacco Treatment Services at
  Texas A&M HSC Baylor College of Dentistry 214.828.8379
Virginia R. Cvetko Patient Education Center 214.820.2608
• Patient/family education and support programs
  • Patient resource centers/oncology libraries
  4 Collins Hospital and 6 Roberts Hospital
Worth Street Valet Parking 214.820.8077
Patient Transport 214.818.6400
Baylor Sammons Cancer Center is located on the campus of Baylor University Medical Center at Dallas, and is accessible from U.S. 75 (North Central Expressway/I-45 and I-30).

A map on the following page illustrates freeway access to the medical center.

Valet parking is available at the front entrance and other nearby locations.

Self parking is conveniently located adjacent to Baylor Sammons Cancer Center.

The campus is also accessible riding the DART Green Line to the Baylor University Medical Center station. Baylor Sammons Cancer Center is a two-block walk.
Cancer. We’ve Got Its Number.™

- Baylor Charles A. Sammons Cancer Center is #1 in North Texas and #2 in Texas for cancer treatment according to consumer choice data.
- At 467,000 square feet and 10-stories Baylor Charles A. Sammons Cancer Center the largest outpatient cancer center in North Texas.
- Accessibility: 239 parking spaces beneath Baylor Sammons Cancer Center.
- The projected increase for cancer diagnosis is 19 to 21 percent over the next 5 to 10 years.
- 90,000 cancer visits annually
- 300 cancer care specialists
- 100+ clinical trials
- 35 years of innovative care
- The blood and marrow transplant (BMT) program is the 9th largest in the US, a center of excellence and is an accredited program by the Foundation of Accredited Cellular Therapy; it is the 1 and only program in Texas that offers all elements of the National Marrow Donor Program.
- The breast care program is 1 of 6 in Texas to receive accreditation by the National Accreditation Program for Breast Centers
- Expanding infrastructure for future research will include more clinical trials, additional research laboratory space, additional research staff and specialized clinical trials.
- The building is expected to earn LEED certification from the U.S. Green Building Council.
Cancer.
We’ve got its number.