Thoracic Malignancies: A Growing Center of Excellence at Baylor Sammons Cancer Center

Thoracic malignancies range from the most prevalent (lung cancer, with approximately 225,000 estimated new cases per year) to the less frequent (esophageal cancer, with 18,000 new cases per year) to the extremely rare (malignant pleural mesothelioma, with 2,500 new cases per year). What these cancers generally have in common is a very poor prognosis. The best-studied thoracic cancers have 5-year relative survival rates of only 10% to 17%, in part because they are typically diagnosed when the disease is already well advanced.

(Continued on page 3)

<table>
<thead>
<tr>
<th>Malignancy</th>
<th>Regional or distant metastases present at diagnosis*</th>
<th>5-year survival, all stages*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung cancer</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>Esophageal cancer</td>
<td>68%</td>
<td>17%</td>
</tr>
<tr>
<td>Malignant pleural mesothelioma</td>
<td>Most</td>
<td>10%</td>
</tr>
</tbody>
</table>

*Data from the American Cancer Society and from Siegel et al. (CA Cancer J Clin 2014;64:9–29).
From the Medical Director

Breathing First

I am going to reveal my New York roots by quoting from the late owner of the New York Yankees, George Steinbrenner. “The Boss” was quoted as saying, “Winning is the most important thing in my life, after breathing. Breathing first, winning next.”

Indeed breathing, and the truly wonderful machinery in our bodies that facilitates it, is a marvel. It is something that we take for granted until we notice its absence. We even have a term for its absence: out of breath. One may be out of breath after strenuous exercise, but with a little rest breath comes back. One may be out of breath at high altitudes, as my friend was last summer when we were in Breckenridge, but it came back at sea level.

Imagine being out of breath and not being able to get it back. How frightening must that be? When cancer invades the lungs and airways and takes one’s breath away, it devastates. Until recently, in the battle against lung cancer, we were falling short of Mr. Steinbrenner’s second favorite thing, winning. The battle was clearly being lost. But like a perennial cellar-dwelling baseball team that begins a slow ascent from perennial cellar-dwelling baseball team that begins a slow ascent from the depths of the league, the survival rate in lung cancer has been improving since the mid 1990s. The 5-year survival rate for all stages of lung cancer has improved by 50% in three decades.

This issue focuses on cancers that occur in the chest, lung cancer being the most prominent. Advances in early detection through low-dose computed tomography screening of appropriate populations can lead to intervention at curative stages. Molecularly targeted treatments and immune-based therapies are resulting in longer survivals for those with advanced disease. Of course, continued vigilance in the campaign against tobacco remains a central focus in the reduction of lung cancer incidence and death.

We welcome Dr. David Mason and his colleagues to our oncology team at Baylor University Medical Center at Dallas. Together we will all strive for Mr. Steinbrenner’s two favorite things in the fight against lung cancer, winning and breathing.

To offer patients with thoracic cancers the best chance of increased survival, multidisciplinary care teams are needed to design individualized treatment plans for each patient. Such teams include thoracic surgeons, pulmonary medicine specialists, chest radiologists, medical oncologists, radiation oncologists, and lung pathologists, among others. At Baylor Sammons Cancer Center at Dallas, this treatment philosophy is embodied in multidisciplinary chest tumor conferences that are held on the first, second, and fourth Wednesdays of each month. Although multiple systemic therapy and radiotherapy regimens are now in use or are being tested for the treatment of patients with thoracic cancer, surgery remains the gold standard of care in patients with resectable disease, providing the best chance for a cure.Thoracic oncology is still commonly used at some centers, but in most cases less-invasive surgical approaches are now possible, usually providing a shortened time in the hospital, faster recovery, and diminished pain.

Baylor Sammons Cancer Center’s reputation as a center of excellence for the treatment of thoracic cancers is growing with the formation of the Chest Cancer Research and Treatment Center. A major step forward in the development of this center has been the recruitment of David P. Mason, MD, as the new chief of the Department of Thoracic Surgery at Baylor University Medical Center at Dallas. Dr. Mason comes to Baylor Dallas from the Cleveland Clinic Department of Thoracic and Cardiovascular Surgery, where he specialized in general thoracic surgery, minimally invasive thoracoscopic and laparoscopic surgery, lung and esophageal cancers, malignant mesothelioma, and lung transplantation. He has authored or coauthored numerous chapters in medical textbooks and published articles in such publications as Annals of Thoracic Surgery, Journal of Thoracic Oncology, and Journal of Thoracic and Cardiovascular Surgery.

Dr. Mason was originally attracted to thoracic surgery during his residency in general surgery at the Brigham and Women’s Hospital in Boston. “Thoracic surgery has multiple aspects that appeal to me,” he said. “It involves a multidisciplinary approach to patient care that I like. It is intellectually challenging and requires close collaboration with other specialists. Most importantly, it involves building longstanding relationships with patients, which I find extremely rewarding.”

One of Baylor Sammons Cancer Center’s areas of specialization is minimally invasive surgery. This includes video-assisted thoracoscopic surgery and robotic surgery. These less-invasive alternatives are being increasingly utilized to treat larger and more advanced tumors. Even as the surgery has become more extensive, the risks and complications have decreased. Patients who historically may not have been candidates for surgery due to advanced age or comorbidities may do well with this less-invasive approach. In addition, with faster recovery, adjuvant treatment can be started earlier, potentially increasing the chances for cure.

Baylor Sammons Cancer Center at Dallas is also keenly interested in building collaborations to improve outcomes in patients with esophageal cancer, where treatment still remains suboptimal. “Most patients present with advanced tumors, and surgery alone is just not good enough,” Dr. Mason said. “Different treatment regimens including chemotherapy and radiation therapy before and after surgery have been attempted, but we are still trying to determine the best regimen to improve survival.”

Dr. Mason envisions the developing Chest Cancer Research and Treatment Center as a focused center for collaborative care based on advanced techniques in thoracic surgery, well-defined treatment pathways for systemic therapy and radiotherapy, and the availability of clinical trials that offer innovative new treatment options. Looking towards the future, he commented, “When physicians anywhere in this region want to refer a patient with a challenging thoracic malignancy, I want them to think first of Baylor Dallas.”

In the remainder of this issue of CancerUpdate, we discuss lung cancer screening with low-dose computed tomography; SNApShot, a molecular panel to determine the most appropriate therapy for lung cancer; and current lung cancer trials underway at Baylor Sammons Cancer Center.

“When physicians anywhere in this region want to refer a patient with a challenging thoracic malignancy, I want them to think first of Baylor Dallas.”

David P. Mason, MD
Lung Cancer Screening with Low-Dose Computed Tomography

The 5-year relative survival rate for patients with lung cancer is 45% when the disease is still localized at diagnosis, but decreases to 24% with regional metastasis and only 4% with distant metastasis. Unfortunately, patients usually do not develop symptoms severe enough to seek medical help until the disease is relatively advanced. The large survival benefit associated with early diagnosis underlines the importance of a screening test that can detect lung cancer before it becomes symptomatic.

Plain film chest x-ray, with or without sputum cytology, has an intuitive appeal as a straightforward and inexpensive screening test. However, in 2004, the US Preventative Services Task Force looked at seven studies comparing chest x-rays with or without sputum cytology versus no intervention for lung cancer screening. The studies showed no significant difference in mortality rate per 1000 person-years at follow-up times of up to 20 years. This finding was confirmed recently in the large multicenter randomized prostate, lung, colorectal, and ovarian cancer screening trial.

The National Lung Screening Trial (NLST) compared the effects of low-dose helical computed tomography (CT) and standard chest x-ray on lung cancer mortality rates when used as a screening tool for lung cancer. The study population consisted of heavy smokers and former smokers aged 55 to 74 who were considered to be at high risk for lung cancer, and the primary endpoint was death from lung cancer. The study found a reduction of almost 20% in relative risk of mortality associated with low-dose CT screening.

In November 2014, the Centers for Medicare and Medicaid Services (CMS) announced that low-dose CT would be reimbursed once per year for beneficiaries who fit the criteria outlined in the NLST:

- Aged 55 to 74
- At least a 30 pack-year history of smoking
- A current smoker or one who quit in the prior 15 years

The CMS also outlined other criteria, including a required written order from a primary care provider, radiologist eligibility criteria, and imaging center eligibility criteria.

Site-Specific Tumor Conferences at Baylor Charles A. Sammons Cancer Center at Dallas

At Baylor Sammons Cancer Center at Dallas, a key element at the heart of our approach to patient care and education is the site-specific tumor conference program. Rather than focusing solely on recommendations for patient care, the site-specific conferences also aim at educating the medical professionals attending the conference.

Unlike tumor boards, continuing medical education credit is available for physicians who attend. Because several patients with the same diagnosis are presented at each conference, attendees are provided with an in-depth view from specialists, accompanied by lively discussion. Below please find the schedules for tumor conferences at Baylor Charles A. Sammons Center at Dallas.

Conference Schedules

| Baylor Dallas |
|----------------|------------------|
| **Bone and Soft Tissue** | 1st Tuesday |
| **Breast** | Alternating Thursdays |
| **Chest MDT** | 1st, 2nd, and 4th Wednesdays |
| **Colorectal MDT** | Alternating Thursdays |
| **Endocrine** | 3rd Tuesday |
| **Gl** | Alternating Thursdays |
| **Gynecology** | Wednesdays |
| **Head and Neck** | 2nd and 4th Tuesdays |
| **Head and Neck Journal Club** | 5th Tuesday |
| **Hematopoietic Diseases** | Wednesdays |
| **Liver MDT** | 2nd and 4th Tuesdays |
| **Neuro-oncology** | 2nd and 4th Wednesdays |
| **Pancreas MDT** | 1st and 3rd Fridays |
| **Skin MDT** | 1st and 3rd Tuesdays |
| **Skull Base** | 1st Wednesday |
| **Urology MDT** | 2nd (MDT) & 3rd Wednesdays |

*BMDT: Multidisciplinary Team Conference

Baylor Dallas

The site-specific tumor conferences are on the 10th floor conference center in the outpatient cancer center. The exceptions to this are the liver and pancreas tumor conferences, which are held in the transplant large conference room on the 9th floor of the outpatient cancer center, as well as the gynecology tumor conference, which is in room 8 of the lower level of Truett, and the skull base tumor conference, which is in the Radiology resident classroom.

For more information about site-specific tumor conferences at Baylor Charles A. Sammons Cancer Center at Dallas, please call 214.820.4073.
SNaPshot: A Molecular Panel to Direct Treatment Choice in Non–Small Cell Lung Cancer

Using the powerful tools of molecular biology, researchers are closing in on the tantalizing goal of precision medicine: the ability to customize treatment for each individual cancer patient. Rather than selecting treatments based on broad criteria (tumor histology or grade, disease stage), therapies can be selected based on the molecular analysis of the patient’s own tumor, optimizing the likelihood of treatment success.

Non–small cell lung cancer (NSCLC) is associated with driver gene mutations, somatic mutations that confer a selective growth advantage to the tumor. Many of these driver gene mutations in NSCLC are on the MAPK pathway, including EGFR, ALK, KRAS, MET, ROS1, HER2, BRAF, and NRAS. In NSCLC, the most commonly associated genetic abnormality (10% to 15% of cases) involves mutation or overexpression of EGFR. Patients with this type of abnormality can be treated with the EGFR inhibitors erlotinib and gefitinib. Another 2% to 7% of cases have a chromosomal rearrangement involving the EML4-ALK or ROS1 genes; crizotinib may be indicated for patients with these tumors.

For almost 5 years, pathologists at Baylor University Medical Center at Dallas have used SNaPshot, a multigene screening panel, for the molecular characterization of tumor samples from patients with NSCLC. According to George Snipes, MD, PhD, a pathologist on the medical staff at Baylor Dallas, SNaPshot is a polymerase chain reaction–based multiplex panel that simultaneously screens for 40 different mutations in 9 driver genes. Based on the result of the SNaPshot assay, complementary reflex testing for the EML4-ALK and ROS1 rearrangements using fluorescence in situ hybridization may be run for each patient. Using these tests, the 78% to 88% of patients who do not carry mutations in EGFR, EML4-ALK, or ROS1 can be directed towards other therapies, including clinical trials for new agents targeting their specific genetic mutations.

"SNaPshot uses a simple but robust technology," commented Dr. Snipes. "We only need a very small amount of tissue, and the procedure will work with formalin/paraffin preparations, which are standard in pathology labs. Essentially every patient newly diagnosed with NSCLC at Baylor Dallas has a sample of his or her tumor submitted for this test."

In line with recommendations from the International Association for the Study of Lung Cancer and the American Society for Clinical Pathology, among others, the SNaPshot panel in use at Baylor Dallas was developed in collaboration with the chest conference multidisciplinary group, representing a consensus of expert opinion in lung cancer at Baylor Dallas.

"Using these tests, the 78% to 88% of patients who do not carry mutations in EGFR, EML4-ALK, or ROS1 can be directed towards other therapies, including clinical trials for new agents targeting their specific genetic mutations."  

George Snipes, MD, PhD

Three-Year Hematology/Oncology Fellowship Will Start in July 2015

Since the 1970s, the medical oncology fellowship at Baylor University Medical Center at Dallas has trained interns in the management of patients with neoplastic disease. This has historically been a 2-year fellowship program, with fellows receiving their training at the Baylor Charles A. Sammons Cancer Center at Dallas. Upon successful completion of the program graduates became eligible to sit for the Medical Oncology board exam. In a program weighted heavily with outpatient experience, the fellows learn about the basic pathophysiologic mechanisms and therapy of neoplastic diseases and are introduced to the basic concepts of clinical research.

Beginning in July 2015, this program will expand to a 3-year combined hematology/medical oncology fellowship. In the updated curriculum, more hematologic rotations will be available, including a blood bank rotation and a special rotation in coagulation. Addition of the hematology-options will allow those completing the fellowship to be eligible to become board certified in hematology as well as medical oncology, making them more competitive for positions after the completion of training. An option will be available in the third year to spend up to 6 months on research, allowing time to conduct more robust research and to publish more research papers.

Micah Burch, MD, associate program director of the fellowship program, feels that the expansion of the fellowship program is an important and necessary step, taken at a critical time. “If you look at national trends, most programs are moving in this direction,” he said, “and we want to make sure that our fellows stay competitive. At Baylor Dallas, we have always had excellent training in clinical hematology, supported by our broad patient base and our faculty infrastructure.”

On December 3, 2014, the first trainees for the combined program were matched. Beginning the three year fellowship in July of 2015 will be Drs. Leah Zehrkopf and Anju Nair. Dr. Zehrkopf obtained her MD from the University of Texas Southwestern Medical School and is completing her Internal Medicine Residency at Baylor University Medical Center. Dr. Nair is currently a Chief Resident in Internal Medicine at the University of Arizona, where she did her residency following graduation from Ross University School of Medicine.

Alan M. Miller, MD, PhD, medical director of the Cancer Center, Chief of Oncology and Program Director of the Fellowship Program is looking forward to the new beginning. “We are fortunate to have attracted two outstanding physicians to be the first trainees in our dual program.”
Clinical Trials in Non–Small Cell Lung Cancer: Bringing New Targeted and Immunologic Therapies from the Bench to the Bedside

Chemotherapy with or without radiation therapy is considered a standard treatment option for stage II and III non–small cell lung cancer (NSCLC). In patients with stage IV disease, chemotherapy or epidermal growth factor receptor (EGFR) kinase inhibitors and anaplastic lymphoma kinase (ALK) inhibitors may result in modest to significant improvements in survival, along with control of tumor-related symptoms. However, the results of standard treatments remain poor for the vast majority of patients, with 5-year relative survival rates of less than 5% to 10%. Clearly, well-designed clinical trials investigating new treatment options are crucial.

At Baylor Sammons Cancer Center, ongoing trials are looking at new targeted and immunologic therapies for the treatment of NSCLC. Kartik Konduri, MD, medical director of the Lung Cancer Center at Baylor Sammons Cancer Center, is principal investigator on multiple trials currently recruiting patients:

- A phase 3 trial is comparing veliparib plus carboplatin and paclitaxel versus placebo plus carboplatin and paclitaxel in previously untreated advanced or metastatic squamous NSCLC (NCT02106546). Veliparib is a poly(ADP-ribose) polymerase (PARP)-1 and -2 inhibitor. The PARP protein is involved in the repair of DNA single-strand breaks. When PARP activity is inhibited, the DNA damage cannot be repaired and the cells die. Because of this, PARP inhibitors accentuate the effects of platinum-based chemotherapy. This study focuses on patients with squamous NSCLC instead of adenocarcinoma for several reasons. A previous phase 2 trial of veliparib in patients with NSCLC showed increased efficacy in squamous cell carcinoma compared with adenocarcinoma. There are currently few therapeutic options for squamous NSCLC; conventional chemotherapy has little efficacy against it, and there are fewer genetic targets and markers compared with adenocarcinoma. The trial will evaluate the safety and efficacy of adding veliparib to a standard platinum-containing chemotherapy regimen for the first-line treatment of patients with advanced or metastatic disease. The primary endpoint will be progression-free survival. Side effects from this drug have historically been manageable and include nausea, vomiting, rashes, and a drop in some blood counts.

- Two trials are investigating humanized monoclonal antibodies against the negative immunoregulatory cell surface receptor programmed cell death-1 (PD-1). PD-1 is expressed on the surface of activated T cells. Numerous cells in the body express the PD-1 ligand, PD-L1. When PD-L1 binds to PD-1, the T cell is inactivated, preventing autoimmune attacks against the body’s own cells. However, a variety of cancers also produce PD-L1, making them immune to T cell attack. When antibodies bind to PD-1, blocking PD-L1 binding, the T cells are able to recognize and attack the cancer cells. Anti-PD-1 agents tend to accentuate immune response, so side effects typical of autoimmune responses are common, including irritation to the skin, colon, liver, and lung. Such side effects have generally been manageable in earlier studies. Nivolumab is a fully humanized anti-PD-1 monoclonal antibody. In a phase IIIb/IV safety trial, it is being tested in subjects with advanced or metastatic NSCLC who have progressed during or after receiving at least one prior systemic therapy regimen. A second agent, pembrolizumab, is being compared with chemotherapy in a phase III trial as a frontline treatment for patients with metastatic NSCLC.

- A trial using CO1686, a third-generation EGFR inhibitor, is evaluating the benefits of CO1686 treatment for patients with secondary resistance mutations (T790M) after failure of front-line EGFR therapy for patients with EGFR mutations.

- A trial is evaluating docetaxel with or without ganetespib for second-line treatment. Ganetespib belongs to a class of compounds called heat shock protein inhibitors that influence functions of important “chaperone” proteins affecting cell survival.

- Elderly patients make up a large proportion of advanced lung cancer patients. A trial is evaluating the safety and efficacy of combination therapy with carboplatin and Abxaxane in two different schedules for patients over the age of 70. A prior phase III trial suggested a beneficial effect in the elderly, and this will be further studied in this ongoing trial.

Dr. Konduri is excited about lung cancer trials currently underway at Baylor Sammons Cancer Center and about the overall direction of research in this area: “We are moving into DNA testing to tailor treatments for specific patients and also seeing new approaches that can activate the patient’s own immune system to attack the cancer. At Baylor Sammons, we have developed advanced technological approaches to take advantage of these new opportunities. A broad patient base combined with our very effective multidisciplinary treatment approach make this an ideal environment to evaluate new treatments. We are in a new era of therapies for lung cancer.”

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Kartik Konduri, MD
Baylor Charles A. Sammons Cancer Center welcomes David P. Mason, MD, as the new Chief of Thoracic Surgery and Lung Transplantation for Baylor Scott & White Health

Dr. Mason also heads the Department of Thoracic Surgery at Baylor University Medical Center Dallas (BUMC) and the Center for Thoracic Surgery. Previously, he was on the surgical staff at John Hopkins and more recently the Cleveland Clinic, where he was a member of the staff of the Department of Thoracic & Surgery for ten years. Dr. Mason has a wide array of experience in all areas of non-cardiac thoracic surgery and lung transplantation. He is especially well-known for his innovations in the area of minimally invasive surgical techniques. Dr. Mason is a member of several national committees including being co-chair of Thoracic Transplant Committee of the American Society of Transplant Surgeons and a member of the International Advisory Committee of the American Association for Thoracic Surgery.

Cancer Update interviewed Dr. Mason about his vision for the Department of Thoracic Surgery in the area of cancer. There were two main reasons Dr. Mason came to Baylor. First, Baylor is a quality, compassionate health care organization that shares and supports his vision for growing an innovative, forward thinking department of thoracic surgery. Second, Dallas is a large, vibrant, world-class city that provides a fertile environment for growth and collaboration. Dr. Mason noted that Baylor is dedicated to looking for ways to continuously improve itself; to do not only what is best for Baylor, but more importantly what is best for its patients.

Dr. Mason’s plan is to establish a thoracic surgery program that would be the first of its kind in Dallas. His goal is to attract leading specialists in pulmonology, radiology, pathology, oncology, and surgery. These physicians will work together collaboratively to deliver quality care to patients with various thoracic malignancies. In addition to cancer patients, Dr. Mason works with patients with gastroesophageal disease (GERD), emphysema, and those in need of a lung transplant. Dr. Mason wants to further develop the team approach at Baylor Dallas and throughout Baylor Scott & White Health to deliver quality care for these conditions.

One way this team approach can be fostered is through the use of multidisciplinary team (MDT) conferences. Use of MDT’s was the standard of care at the Cleveland Clinic. Dr. Mason wants to further improve upon and expand MDTs at BUMC in his goal to establish a center of excellence in the newly chartered Chest Cancer Research and Treatment Center for treatment of thoracic malignancies. The team is comprised of genetic counselors, nurse navigators, pathologists, medical oncologists, radiation oncologists, thoracic surgeons, surgical oncologists, and radiologists. All of the members review the plan of care for every patient with lung cancer. Thus, patients receive a tailored treatment plan that is in keeping with National Comprehensive Cancer Network NCCN guidelines and guidelines put forth by the American College of Chest Physicians. Not only is the plan for a patient’s care vetted by the team, but the handling of the plan will be gauged by quality measures. The goal is to create and adhere to a set of standards consistently used for all patients, with checks to maintain quality of care. Through standardization of treatments for a given type of cancer, a checklist can be developed to provide each patient who comes through the doors of Baylor Dallas the same quality of care.

As a first step in accomplishing this goal, Dr. Mason is working with John Preskitt, MD, medical director of the Division of Surgical Oncology, and Claude A. Denham, MD to establish a data registry on lung cancer patients at Baylor Dallas, as part of the Surgical Oncology Research Database (SOCRD). This registry will include patient data on pathology, surgical approach, treatment, genetics, follow-up, and quality of life issues. This information will be used to facilitate research in lung cancer. Currently, a chest MDT conference is being held twice monthly for all members of the team to come together and discuss patient care.

Dr. Mason brings to Baylor Health Care System and Baylor Dallas impressive surgical expertise and exciting plans for the future. He commented: “I am truly invigorated being here at Baylor and in Dallas. We have a tremendous team all striving to improve. I am certain that our future is bright”.

“I am truly invigorated being here at Baylor and in Dallas. We have a tremendous team all striving to improve. I am certain that our future is bright”. David P. Mason, MD

Welcome to new Members of the Medical Staff At Baylor Charles A. Sammons Cancer Center at Dallas

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Baylor University Medical Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desmond D’Souza, MD</td>
<td>Thoracic Surgery/ Thoracic Malignancies</td>
<td>Baylor Medical Center</td>
</tr>
<tr>
<td>David P. Mason, MD</td>
<td>Chief of Thoracic Surgery and Lung Transplantation</td>
<td>Baylor University Medical Center</td>
</tr>
<tr>
<td>Michelle Nichols, MD</td>
<td>Medical director of the Virginia R. Cvetko Center/Psychiatry</td>
<td>Baylor University Medical Center</td>
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### New Clinical Trials at Baylor Charles A. Sammons Cancer Center at Dallas

<table>
<thead>
<tr>
<th>Site</th>
<th>Study ID</th>
<th>Location</th>
<th>Principal investigator</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Breast</td>
<td>TO-1447</td>
<td>Texas Oncology - Dallas</td>
<td>Cynthia R. Osborne, MD</td>
<td>An Expanded Access Study of Palbociclib in Combination with Letrozole as treatment of post-menopausal women with Hormone Receptor Positive, HER2 Negative Advanced Breast Cancer for whom Letrozole Therapy is deemed Appropriate</td>
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<tr>
<td>GU</td>
<td>14064</td>
<td>Texas Oncology - Dallas</td>
<td>Thomas E. Hutson, MD</td>
<td>CRLX101-208: A Randomized, Phase 2 Study to Assess the Safety and Efficacy of CRLX101 in Combination with Bevacizumab in Patients with Metastatic Renal Cell Carcinoma (RCC) versus Standard of Care (SOC) (Investigator's Choice).</td>
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<tr>
<td>Hematology</td>
<td>TO-1428</td>
<td>Texas Oncology - Dallas</td>
<td>M. Yair Levy, MD</td>
<td>An Expanded Treatment Protocol of panobinostat (LBH588) in combination with bortezomib and dexamethasone in patients with relapsed or relapsed and refractory multiple myeloma.</td>
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<tr>
<td></td>
<td>014-129</td>
<td>Baylor Dallas</td>
<td>M. Yair Levy, MD</td>
<td>A Phase I Dose Escalation with Two Disease Specific Expansions, Multicenter, Open-label, Safety, Pharmacokinetic and Pharmacodynamic Study of LOR-253 in Patients with Relapsed or Refractory Hematologic Malignancies.</td>
</tr>
<tr>
<td>Skin</td>
<td>14124</td>
<td>Texas Oncology - Dallas</td>
<td>C. Lance Cowey, MD</td>
<td>Expanded Access Program With Nivolumab for Subjects With Histologically Confirmed Stage III (Unresectable) or Stage IV Melanoma Progressing Post Prior Systemic Treatment Containing an Anti-CTLA-4 Monoclonal Antibody (CA209158).</td>
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<tr>
<td></td>
<td>TO-1118</td>
<td>Texas Oncology - Dallas</td>
<td>C. Lance Cowey, MD</td>
<td>Phase II Study Of Continuous Oral Vemurafenib In Patients With Locally Advanced, Stage III Or Metastatic Melanoma And Activating Exon 15 Braf Mutations Other Than V600e.</td>
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<tr>
<td></td>
<td>TO-1302</td>
<td>Texas Oncology - Dallas</td>
<td>C. Lance Cowey, MD</td>
<td>A Multi-Site Retrospective Observational Study Of US Patients With Unresectable Or Metastatic Melanoma Receiving Ipilimumab (Yervoy) As First-Line Therapy.</td>
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<tr>
<td>Solid Tumor</td>
<td>14064</td>
<td>Texas Oncology - Dallas</td>
<td>Carlos H. Roberto Becerra, MD</td>
<td>A Phase I Study of Intravenous LB-100 for Injection as a Single Agent and in Combination with Docetaxel in the Treatment of Patients with Advanced Solid Tumors (L12-20661).</td>
</tr>
</tbody>
</table>

**Online Access to Clinical Trials**

Physicians and patients can now access information about clinical trials in oncology at Baylor Sammons Cancer Center with these steps:
- Go to BaylorHealth.edu/Sammons.
- Click on "Research" on the left-hand menu, then click on "Clinical Trials" in the drop-down menu.
- Select a condition (e.g., "Cancer") and then select a specific disease (e.g., "Breast Cancer").

For additional details or questions about the studies, please contact the Office of Clinical Oncology Research Coordination at 214.818.8472, 817.698.8472 or via e-mail at cancer.trials@baylorhealth.edu.
Recent Publications from Baylor Sammons Cancer Center at Dallas

October 18 to February 16, 2015


Open Water and Pool Swim to Fight Cancer

Join the Swim Across America Family for the 5th Annual Dallas Open Water Swim and 3rd Annual Pool Swim. At Swim Across America, the money you raise stays in our community, supporting early-stage cancer research at Baylor Charles A. Sammons Cancer Center at Dallas.

SATURDAY, MAY 30, 2015
OPEN WATER SWIM
1/2 mile, 1 mile, 2.4 miles
The Harbor at Lake Ray Hubbard, Rockwall

SUNDAY, MAY 31, 2015
DALLAS POOL SWIM
1/2 mile, 1 mile, Relays
Town North YMCA, Dallas

BENEFITING: Swim Across America Innovative Clinical Trial Center.

REGISTER AND MAKE A DIFFERENCE:
SWIMACROSSAMERICA.ORG/DALLAS