Healing and hope happen when **integrative therapies** treat the whole person, an **innovative** approach provides advanced treatment options and **individualized** care is designed around patient needs and goals.
Anyonw who works in the health care space knows that this is a time of change for the industry. We are adapting to a new health care environment, but as we navigate the intricacies of what changing policy means for our business, we have to focus on the most important aspect of all—how it affects our patients.

At CTCA® at Southwestern, our job is to navigate these changes while we ensure our resources are maximized in every way to serve the people who matter most.

Our patients are our inspiration in every way, and their needs are the first things on our minds when we make any improvement or decision. We look to them for input on how we can make our organization better, and they continue to provide us valuable opportunities to improve our care.

And this year, our team has not wasted a moment in finding ways to take the inspiration our patients give us and turn it into innovative, individualized, and integrative care.

“Our job is to navigate these changes while we ensure our resources are maximized in every way to serve the people who matter most.”

The proof, they say, is in the pudding, and nothing is more indicative of how much work has been done to serve our patients than the award of the Quality Oncology Practice Initiative (QOPI®) Certification for our outpatient program. Ours is the only program in Oklahoma to receive this important distinction, and it puts a seal of approval on what we already knew—that our model provides only the highest quality care for our patients.

On the innovation front, we continue to expand our capabilities. We have installed and begun operating the da Vinci® Xi™ Robotic Surgery System, which is only made more impressive by the improvement of our thoracic surgical services with new physician talent, Dr. Peter Baik. The combination of his expertise with the precision of this system will make an impact for many of our patients who would have previously undergone highly invasive surgeries, rather than the laparoscopic techniques made possible by the combination of physician talent and technology we now have.

In addition, we have implemented a variety of other programs and protocols to make our care go above and beyond what our patients expect. I’m particularly proud of our Cancer Fighters® program and its growth this year. This program provides our patients a way to connect with each other and with the support organizations in their home communities. The work our Cancer Fighters do brings hope to new patients who walk in our doors, and there are few things more important than helping to forge those connections and create an active network of survivors across our region.

I encourage you to peruse this report mindfully. We are proud of what we have done in this past year, and each piece of this report highlights a different facet of the care we work so hard to perfect. But this is more than a collection of case reports, data and statistics. This report represents the lives of the patients who fight cancer every day, and our effort to help make that fight one that they can win.

Sincerely,

Richard Haldeman
President and Chief Executive Officer
VONDA’S STORY:
A Journey of Inspiration

In late 2012, Vonda Zimmerman began experiencing fatigue, night sweats, constipation, rectal bleeding and pain so severe that it interrupted her sleep.

The 47-year-old mother of three made an appointment with her general practitioner, who then referred her to a colon specialist. When Vonda received the cancer diagnosis, she was not completely surprised. She and her husband had been researching possible explanations for her symptoms, so they suspected she may have cancer. Knowing it was a possibility, though, did not make receiving the news any easier.

In the time following her diagnosis, Vonda and her husband continued searching for information on her condition while exploring treatment options and potential care providers. Their research led them to select CTCA at Southwestern Regional Medical Center as their first choice for treatment. “I was impressed with the approach of treating the entire person, not just the disease,” Vonda explained.

During her evaluation, Vonda met her care team, which included Director of Medical Oncology Theodore Pollock, MD, and Gastroenterologist Leon Yoder, MD. Dr. Yoder performed a diagnostic colonoscopy and confirmed Vonda’s diagnosis: stage IIIB squamous cell carcinoma of the anus. Dr. Yoder also discovered that three-quarters of Vonda’s anal canal was fragile and obstructing, so he performed argon plasma ablation during the procedure to control bleeding.

WORKING TOGETHER

For Vonda’s treatment plan, the team considered two possible directions: treat the cancer with chemotherapy and radiation therapy, or take a surgical approach. After consulting with Surgical Oncologist Pierre Greeff, MD, they learned that surgery for Vonda’s particular type and stage of cancer would likely necessitate a colostomy and stoma in her lower abdomen, so they opted to
pursue the nonsurgical option. In January of 2013, Vonda began chemotherapy, consisting of Mitomycin-C and 5-FU every four weeks, and radiation therapy, which she received once a day for six weeks.

Throughout treatment, Vonda worked with several integrative oncology providers to help manage potential side effects of treatment. “Vonda’s dietitian went over what types of foods would be good to eat and what would be good to stay away from during treatment,” said Karen Nevener, RN, CHPN, Vonda’s Care Manager. “The goal was to maintain her energy level and her weight while helping support her immune system. Her naturopathic oncology provider also helped with supplements and herbs to manage nausea and cramps.”

**ADJUSTING TO LIFE AFTER TREATMENT**

In May of 2013, Vonda returned for a follow-up appointment with Dr. Yoder. “All in all, she had an amazing response to treatment,” Dr. Yoder said. “Vonda showed no signs of any mass. She had mild thickening of the ano-rectal wall post-treatment, but she indicated no signs of bleeding or pain in the affected area.”

As Vonda continued to follow up with her oncology and rehabilitation teams, she also worked with Survivorship Practitioner and Clinical Nurse Specialist Stephanie Moore, APRN, ACNS-BC, to address issues of intimacy and sexual health. During their work together, Vonda recognized she had an opportunity to help others manage the sexual side effects of the treatments she had received. “Vonda realized she couldn’t be the only patient who had the issue,” Stephanie said. “So we started talking about ways to bring this to light with patients going forward. We want to make sure people are aware of it, and let them know how important it is to talk about it up front.” As Vonda explained: “Couples don’t always understand what’s going on, and it can be very stressful for a marriage.”

Today, Vonda continues to assist the Survivorship team with developing tools and resources to help patients address this important topic. She is also an active member of Cancer Fighters®, a community of CTCA patients and caregivers who nurture, engage and empower others.

*No case is typical. You should not expect to experience these results.*

**From Left:**

Stephanie Moore, APRN, ACNS-BC, Survivorship Practitioner; Theodore Pollock, DO, FACOI, Director of Medical Oncology and Vice Chief of Staff; Karen Nevener, RN, CHPN, Care Manager; Vonda Zimmerman, Anal Cancer Survivor since 2012; Darrin Hines, Oncology Rehabilitation/Manual Therapist; John Sibley, DC, Chiropractor; and Leon Yoder, DO, FACP, Gastroenterology Fellow Director and Gastroenterologist
Expanded Services and Highlights

As a health care industry leader with a steadfast commitment to its patients, CTCA continuously searches for advanced medical treatments to improve patient quality of life. These services/highlights occurred in 2014.

**BEREAVEMENT PROGRAM**
CTCA at Southwestern launched a bereavement program in 2014 that focuses on providing critical support to loved ones following a cancer patient’s passing. This 12-month support program provides patients’ loved ones with structured resources, outreach and assistance as they move through the grieving process.

**CANCER FIGHTERS® EXPANSION**
In summer 2014, the Cancer Fighters program unveiled a new dedicated space within CTCA for Cancer Fighters to interact with each other and connect during and after their fight with cancer. The attractive new space provides resources for patients, an engaging environment to join with others as well as avenues to become more involved with the Cancer Fighters program.

**COMMISSION ON CANCER OUTSTANDING ACHIEVEMENT AWARD**
In 2014, the Commission on Cancer (CoC) of the American College of Surgeons named CTCA at Southwestern as one of its 2013 Outstanding Achievement Award recipients. The Tulsa hospital is one of only 10 CoC-accredited programs in the U.S. to receive this award four consecutive times. In addition, CTCA was the only 2013 recipient from Oklahoma to be recognized with this award, which recognizes cancer programs that exceed the national standard in providing quality care to cancer patients.

**DA VINCI® XI™ ROBOTIC SURGERY SYSTEM**
This latest da Vinci Surgical System is a sophisticated robotic platform designed to expand the surgeon's capabilities and offer a state-of-the-art minimally invasive option for major surgeries, including gynecologic, urologic, pulmonary and ear, nose and throat cases. The technology can provide surgical patients with less invasive surgical options in addition to shorter hospital stays, reduced blood loss, lower risk of infections and less scarring.

**GENETECH PRO 02 ML28897 RESEARCH STUDY**
This research study offers medication for patients with advanced solid tumors that have progressed despite administration of standard-of-care treatment, patients where no standard therapy exists or patients for whom a trial of targeted therapy is considered the best available treatment option. This study evaluates four different treatment regimens to discover if they are effective against targeted mutations, focusing specifically on the genomic mutations: human epidermal growth factor 2 (HER2), epidermal growth factor receptor (EGFR), BRAF-activating mutation, and mutations of the hedgehog pathway.

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**VONDA’S STORY: TEAMWORK**
Director of Medical Oncology Theodore Pollock, MD, led Vonda’s oncology care team.

“The timing of radiation therapy and chemotherapy to hopefully keep her out of surgery were challenging. Her excellent response to therapy guided the decision-making process.”

– Theodore Pollock, DO, FACOI
Director of Medical Oncology and Vice Chief of Staff
MEDICAL ONCOLOGY FELLOWSHIP PROGRAM ACCREDITATION

In the fall of 2014, CTCA at Southwestern received accreditation through the American Osteopathic Association to start a medical oncology fellowship program, a first for all of CTCA. The program is set to begin summer 2015 under the direction of Dr. Simeon Jaggernauth with the support of Drs. Theodore Pollock, Ritwick Panicker, Sagun Shrestha and Deepu Madduri. The fellowship program will be the third oncology fellowship in Oklahoma, joining the University of Oklahoma and Oklahoma State University.

ON-SITE HISTOLOGY, CYTOLOGY AND STEM CELL PROCESSING LABORATORIES

To better support program expansions throughout the hospital, CTCA at Southwestern opened a stem cell processing lab in 2014 as well as expanded its existing pathology lab to include in-house histology and cytology. These expansions provided CTCA clinical providers and patients with faster turnaround times on stem cell processing and key lab orders as well as a greater continuity of care.

QUALITY ONCOLOGY PRACTICE INITIATIVE (QOPI®) CERTIFICATION

In 2014, CTCA at Southwestern became the first program in Oklahoma to be certified by the QOPI Certification Program, an affiliate of the American Society of Clinical Oncology. This program provides a three-year certification for outpatient hematology-oncology practices that meet the highest standards for quality cancer care as well as rigorous chemotherapy safety criteria.

SCHWARTZ CENTER ROUNDS®

Schwartz Rounds is a program of the Schwartz Center, which was founded in 1995 by Ken Schwartz, a Boston health care attorney who died of lung cancer at the age of 40. The center exists to ensure that all patients receive compassionate care, and it partners with health care organizations around the country to bring this mission to life. In June, CTCA at Southwestern became the first hospital in Oklahoma to provide Schwartz Rounds, a forum that allows Stakeholders from all disciplines to openly discuss the most challenging emotional and social issues they face in caring for patients and caregivers. Evaluations have shown that regular Schwartz Rounds participants feel more compassionate, less stressed, and more appreciative of the contributions of their colleagues, and, as a result, deliver better patient care.

THORACIC SURGICAL SERVICES

With the addition of Thoracic Surgeon Peter Baik, DO, in July 2014, CTCA expanded our thoracic surgery offerings. Procedures offered by Dr. Baik include minimally invasive thoracic procedures, including laparoscopic surgeries, video-assisted thoracic surgeries, robotic surgeries, and chest wall reconstructions. Dr. Baik is trained in cardiothoracic surgery as well as in minimally invasive esophageal and thoracic surgery.

TRUFREEZE®

In fall 2014, CTCA at Southwestern added truFreeze to our arsenal of technologies. This cryospray treatment is used primarily for lung, esophageal and stomach cancers and uses a spray mechanism that allows a freezing mixture to be sprayed onto the tumor or surrounding areas. With truFreeze, larger areas can be covered quickly, and it also allows bulky tumors to be frozen at one time, all while preserving the underlying tissue and creating an environment where healthy tissue can regrow. This technology provides patients with relief from airway obstructions and pleural effusion in the lungs as well as tumors in the esophagus, including pre-cancerous Barrett’s esophagus, and the stomach. Southwestern is also exploring this application for malignant pleural effusion.
Case Study

The following case study recounts the progress of a patient who received treatment at CTCA at Southwestern Regional Medical Center in Tulsa, Oklahoma. The patient had been treated by a primary care physician prior to seeking help at CTCA in 2013. To protect the patient’s privacy, we refer to her as “Jane.”

Jane is being treated by Medical Oncologist Sagun Shrestha, MD. In addition, Jane’s integrative care team includes a surgical oncologist, chemotherapy team, a care team manager, a physical therapist, an occupational therapist, an acupuncturist, and a nutritionist.

WHY JANE VISITED CTCA

Jane was 60 years old when she first arrived at CTCA in 2013. After experiencing abdominal pain, she had visited her local primary care physician where a mass in the pancreas was discovered and blood work revealed a high tumor marker reading. After receiving an endoscopy and biopsy, Jane was diagnosed with pancreatic carcinoma. She started chemotherapy treatment with her physician, but transferred to CTCA in Tulsa in January of 2013 to have access to the integrative services offered.

THE CHALLENGE FOR DR. SHRESTHA AND JANE’S CARE TEAM

Jane had already received treatment for breast cancer in 2001 through which she had surgery on her left breast, as well as chemotherapy, radiation, and hormone therapy. Jane received genetic testing, which revealed that she was positive for the BRCA-2 gene, and she also had a significant family history of ovarian, prostate, and gastrointestinal cancer.

“It had been over 10 years since Jane received treatment for breast cancer, so her body had fully recovered, but her previous experience had provided her insight into what she should expect in undergoing treatment for pancreatic cancer,” said Dr. Shrestha.

“The chemotherapy treatment Jane experienced was an aggressive treatment and it included the use of three different drugs in the FOLFIRI-NOX regimen.”

– Sagun Shrestha, MD
CTCA Medical Oncologist
THE TREATMENT PLAN
Dr. Shrestha continued Jane’s original chemotherapy treatment plan from her physician, which included 12 rounds of FOLFIRI-NOX. This treatment is often used for locally advanced pancreatic cancer patients in an effort to shrink a tumor for surgical removal. After six cycles of FOLFIRI-NOX, Jane’s tumor markers normalized and a CT scan showed shrinkage of the tumor.

“The chemotherapy treatment Jane experienced was an aggressive treatment and it included the use of three different drugs in the FOLFIRI-NOX regimen. She had one round of treatment every two weeks, which required Jane to come to CTCA for four days, and she had a total of 12 rounds to complete her treatment over a period of six months,” said Dr. Shrestha. “As we treated Jane with chemotherapy, her tumor markers improved drastically, and a CAT scan revealed a consistent decrease in the size of her tumor. However, with pancreatic cancer, the best option is to eradicate the cancer entirely, so I recommended she have surgery to remove the remaining 5 mm of cancer.”

In September 2013, Surgical Oncologist Pierre Greef, MD, performed exploratory laparotomy, radical resection of the tail and body of the pancreas (removal of the pancreas), left oophorectomy (removal of the left ovary), left adrenalectomy (removal of the adrenal gland), and splenectomy (removal of the spleen). During surgery, Jane also received intraoperative radiation therapy (IORT) to the pancreatic bed at time of surgery to decrease the likelihood of recurrence.

THE RESULT
After surgery, Jane’s pathology report indicated no remaining cancer. She continues to visit CTCA at Southwestern every three months for follow-up appointments, and she has received a positive report at each visit.

Jane’s pathology report indicated no remaining cancer.

“When Jane received a diagnosis of pancreatic carcinoma, especially after already having gone through breast cancer treatment previously, she could have easily accepted the diagnosis as a death sentence or thought that nothing could be done. But she continued to be positive throughout the entire process and treatment and it made a tremendous difference for her,” said Dr. Shrestha.

No case is typical. You should not expect to see these results.
VONDA’S STORY: CONFIDENCE
Gastroenterologist Leon Yoder, MD, performed the diagnostic colonoscopy and endoscopic ultrasound that confirmed Vonda’s diagnosis.

“All in all, Vonda had an amazing response to treatment. If her good response continues, we will probably move her follow-up appointments to yearly.”

– Leon Yoder, DO, FACP
Gastroenterology Fellow Director and Gastroenterologist
Jay Foley
Administration/VP

John Frame, MD
Breast Surgery

Karen Gilbert, RPT
Oncology Rehabilitation

Geoffrey Graham, DO
Hospitalist

Alma Hallmark, RN, OCN, CBCN, CBPN-IC
Nurse Navigation

Laurie Harder, CTR
Cancer Registry

Tammi Holden, RN, BSN
Clinic

Jodi Hudson
American Cancer Society

Glinda Huitt, RN, BSN, OCN
Nursing/Inpatient Services

Simeon Jaggerauth, DO
Medical Oncology

Michael Kayser, DO
Genetics

Doug Kelly, MD
Radiation Oncology

Michael Langham, MCE, CGBC
Pastoral Care

Steve Mackin, CEO
Administration/CEO

Susan Magill
Patient Relations

Ed McKay, RT, (R), (N), CNMT, BA, MA
Imaging

Jeff Newhouse, DPh, MBA
Pharmacy

Joe Nicholson, DO
Administration/VP

Tena Pagett, RT, (R), (T)
Radiation Oncology

Theodore Pollock, DO
Medical Oncology

Carla Rausch, RT
Cardiopulmonary

George River, MD
Medical Oncology

Susan Schlesinger, RN, BS, CHC
Compliance

Sagun Shrestha, MD
Medical Oncology

Davena Talley, RN, BSN, MBA, CNOR
Surgery

Oneita Taylor, MD
Radiation Oncology

Tracy Tetzner, RN, BSN
Care Management

Coraliean Wilkerson, BS, MT(ASCP)SBB
Laboratory

Lynn Valz
Lean Six Sigma

Leon Yoder, MD
Gastroenterology

*List reflects membership from 2013 Cancer Committee
Cancer Committee Chairman’s Report

CTCA at Southwestern Regional Medical Center is a leading cancer center for comprehensive, compassionate, patient-centered and integrative cancer care.

This year our center received the prestigious QOPI (Quality Oncology Practice Initiative) certification; a program founded by the American Society of Clinical Oncology, which emphasizes a commitment to excellence and ongoing quality improvement in hematology-oncology outpatient practice. After comprehensive chart reviews and an on-site evaluation (to ensure compliance with 20 chemotherapy safety standards), our Medical Oncology service received the QOPI honor. Ours is the only Medical Oncology practice in Oklahoma to hold this quality certification. All credit goes to the tireless efforts of Teri Jennings, Amy Finn, Shelly Ware, Bri’Anne Walton and Harpreet Jakhar.

Due to the results of our QOPI certification, the Cancer Committee identified two areas of continued focus for this year. The two goals that were set by the Cancer Committee included documentation of the intent of chemotherapy (palliative vs. curative) and detailing of the chemotherapy/targeted therapy plan at the start of any new regimen. We have instituted a process to report the findings to the Cancer Committee in an effort to improve the patient’s quality of care.

Also, soon after our QOPI certification, our Radiation Oncology service received its accreditation from the American College of Radiology. Congratulations to Radiation Oncologist Dr. Michael Payne and his team for their excellent performance.

Several patient safety initiatives were launched and completed under the leadership of Denise Geuder, Vice President, Patient Care Services and Chief Nursing Officer.

Over the last year, we have successfully implemented three different Cancer Conferences. These conferences continue to be well attended with comprehensive case presentations in a multidisciplinary setting.

With the formation of a centralized Institutional Review Board, we expect clinical research to get a big boost.

Dr. Peter Baik joined our staff as a cardiothoracic surgeon. He is trained in minimally invasive and robotic thoracic surgery. Our center acquired a da Vinci robot and robotic surgery is now fully operational at our center.

Under the strong leadership of Dr. John Frame, breast surgeon, our NAPBC-accredited breast center continues to thrive and provides exceptional care to breast cancer patients.

In response to this, our cancer program has enlisted the help of Dr. Tim Holder, medical director of supportive care and survivorship, and Stephanie Moore, APRN, survivorship practitioner. They are spearheading our cancer survivorship program, and are to be applauded for their efforts.
The Commission on Cancer made cancer survivorship a major priority in 2014 and the future. In response to this, our cancer program has enlisted the help of Dr. Tim Holder, Medical Director of Supportive Care and Survivorship, and Stephanie Moore, APRN, Survivorship Practitioner. They are spearheading our cancer survivorship program, and are to be applauded for their efforts.

On behalf of the entire Cancer Committee, I would like to give my heartfelt thanks to Mr. Richard Haldeman, our CEO; Mr. Jay Foley, our COO; Mrs. Denise Geuder, our CNO and VP of Patient Care Service; and Ms. Tammi Holden, Senior Executive; for their strong support throughout all our endeavors. Our success would have been impossible without their help.

We are proud to be a part of the effort to “Reimagine CTCA,” and continually remind ourselves that it is only and always about the patient.

Sincerely,

Ritwick Panicker, MD

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**VONDA’S STORY: SURVIVORSHIP**

Stephanie Moore, Survivorship Practitioner, worked with Vonda to help ensure her quality of life continued to improve after her treatment.

“One of the areas that patients struggle with during and after cancer treatment is sexual health and intimacy. This was an issue for Vonda. During a survivorship visit, I always ask about sexual health and if the patient has any questions.”

– Stephanie Moore, APRN, ACNS-BC
Survivorship Practitioner

**VONDA’S STORY:**

Stephanie Moore, Survivorship Practitioner, worked with Vonda to help ensure her quality of life continued to improve after her treatment.

“One of the areas that patients struggle with during and after cancer treatment is sexual health and intimacy. This was an issue for Vonda. During a survivorship visit, I always ask about sexual health and if the patient has any questions.”

– Stephanie Moore, APRN, ACNS-BC
Survivorship Practitioner
2013 Cancer Conference Report*

During 2013, weekly disease-specific Cancer Conferences focusing on Breast, Lung, and Head/Neck cases as well as General Cancer Conferences were attended by a multidisciplinary team including medical oncology, radiation oncology, radiology, pathology and surgery.

The nursing and ancillary staff also attended these conferences to ensure comprehensive representation. Together, they reviewed cases in detail and discussed stage, prognostic indicators, national guidelines and plans for appropriate diagnostic studies, therapies and a clinical trials. These prospective, patient-oriented and multidisciplinary physician care planning meetings provide free consultations to our patients and education for the medical and hospital staff.

*2013 data shown to coincide with 2013 Primary Site Table.

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<th>NUMBER OF CASES</th>
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<td>CNS/Brain</td>
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<td>Head/Neck</td>
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<td>Ill-Defined Site</td>
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<tr>
<td>Soft Tissue</td>
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<td><strong>TOTAL</strong></td>
<td><strong>253</strong></td>
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Cancer Registry Report

CTCA at Southwestern Regional Medical Center Cancer Registry maintains a data system designed for the collection, management and analysis of data on individuals diagnosed with cancer. The Cancer Registry has entered more than 18,700 cases into the database since its inception in 1991.

During 2013, 948 new cases were accessioned into the Cancer Registry database at CTCA at Southwestern. Of these cases, 408 cases were analytic (either diagnosed at Southwestern or received all or part of their first course of treatment at Southwestern) and 329 were non-analytic (diagnosed elsewhere and received their first course of treatment elsewhere) and 211 non-reportable cases. There were 324 male patients and 411 female patients. We accessioned patients from 39 states, 12 patients from the Virgin Islands, 2 patients from the Bahamas and 1 patient from the Northern Mariana Islands, with the largest percentage of patients residing in Oklahoma.

The American College of Surgeons Commission on Cancer mandates that at least 90 percent of the analytic patients from the last five years and at least 80 percent from the reference year (1991) are followed yearly. The Southwestern Regional Medical Center Cancer Registry meets this standard with 86 percent current follow-up on patients seen since 1991 and 91 percent on patients seen in the last five years.

The registry staff maintains the daily functions of the registry and ensures data accuracy with continuous quality improvement reviews by Cancer Committee physicians. The registry provides the Cancer Committee with information from which clinical application and analysis of patient outcomes can be determined.

Cancer Registry Activities

- Responded to 241 requests for data during 2013
- Submitted all required cases error free on initial submission to the National Cancer Data Base
- Participated in and attended the Oklahoma Cancer Registrars Association Educational Workshop in Oklahoma City
- Submitted all required cases to the Oklahoma Central Cancer Registry
- Attended the National Cancer Registrars Association 39th Annual Educational Conference in Washington, DC
- One stakeholder held the Public Relations Chair in the Oklahoma Cancer Registrars Association, attended quarterly executive committee meetings and prepared quarterly newsletters for the association
- Coordinated and attended monthly Cancer Committee meetings
- Coordinated and attended weekly Head and Neck, Thoracic, Breast, and General Cancer Conferences
- Coordinated and attended monthly corporate-wide Thoracic Conferences
- Attended NAACCR webinars
- Participated in Clinical Care Conferences and staff education meetings
- Maintained membership with the National Cancer Registrars Association
- Maintained membership with the Oklahoma Cancer Registrars Association
- Played an integral role in the completion of the Annual Report
- Participated in the National Cancer Registrars Association National Cancer Registrars Week by attending a photo opportunity with the Governor of the State of Oklahoma, Mary Fallin
- Participated in the Leukemia and Lymphoma Society’s Light the Night fundraising event
## 2013* | Primary Sites

### SUMMARY BY BODY SYSTEM, SEX, CLASS, STATUS AND BEST CS/AJCC STAGE REPORT

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<th>PRIMARY SITE</th>
<th>TOTAL (%)</th>
<th>M</th>
<th>F</th>
<th>ANAL</th>
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<th>STG 0</th>
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<th>STG II</th>
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*2013 is the most complete data due to capturing complete treatment on each case.*
### SUMMARY BY BODY SYSTEM, SEX, CLASS, STATUS AND BEST CS/AJCC STAGE REPORT

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<th>STG III</th>
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<td>Chronic Myeloid Leukemia</td>
<td>1</td>
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<td>0</td>
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<td>0</td>
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</tr>
<tr>
<td>MESOTHELIOMA</td>
<td>1 (0.1%)</td>
<td>1</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MISCELLANEOUS</td>
<td>22 (3.0%)</td>
<td>12</td>
<td>10</td>
<td>13</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>735</td>
<td>324</td>
<td>411</td>
<td>406</td>
<td>329</td>
<td>12</td>
<td>71</td>
<td>85</td>
<td>66</td>
<td>140</td>
<td>30</td>
</tr>
</tbody>
</table>

EXCLUSIONS: Not Male and Not Female

0
2014 Estimated Leading New Cancer Cases*

<table>
<thead>
<tr>
<th>SITE</th>
<th>MEN (%)</th>
<th>WOMEN (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UNITED STATES</td>
<td>SOUTHWESTERN</td>
</tr>
<tr>
<td>Prostate</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Urinary Bladder</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Melanoma of the Skin</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Kidney and Renal Pelvis</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Non-Hodgkin Lymphoma</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Oral Cavity and Pharynx</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Leukemia</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Liver and Intrahepatic Bile Duct</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>All Other Sites</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*New Leading Cancer Cases 2014 estimates from the American Cancer Society Cancer Facts and Figures 2014 compared with 2013 analytic data at Southwestern.

2013 735 TOTAL NEW CASES BY STATE FOR SOUTHWESTERN REGIONAL MEDICAL CENTER

[VIRGIN ISLANDS] 1 1
[BAHAMAS] 2
[NORTHERN MARIANA ISLANDS] 1
Pancreatic cancer is the fourth leading cause of cancer death in the U.S. The poor five-year survival rate of less than five percent is reflected in the incidence of new cases (43,920) and deaths (37,390) during 2012 (the worst survival rate of any solid tumor).  

Most diagnoses occur between the ages of 65-80. The median survival for resectable pancreatic carcinoma (8% of those with diagnosis) is two years, while patients who have a locally advanced tumor (27%) have a median survival of only one year. Those patients who demonstrate metastases (53%) only live approximately seven months, but these data are pre-FOLFIRI-NOX.

Risk factors for the development of pancreatic cancer include tobacco smoking and pancreatitis. Five percent of cases are attributed to a familial type. Other less well understood etiologies include post-gastrectomy, post-cholecystectomy, high fat intake, high meat intake, industrial carcinogens, diabetes mellitus, and family history.

Several histologies, including exocrine and neuroendocrine, have been demonstrated in pancreatic cancer. Adenocarcinoma comprises 90% of the histology, but acinar cell carcinomas (younger) and cystic neoplasms (less aggressive) have also been documented. Some of the more common symptoms of pancreatic cancer include pain, jaundice, weight loss, anorexia, depression, nausea and vomiting, thrombophlebitis or Trousseau’s syndrome, pruritus, fatigue, and new onset of diabetes.

Diagnosis is made with a CT scan. Preferably, a pancreatic protocol is utilized for the CT scan to assess early portal phase and will show enhancement of the glandular tissue. This allows attenuation difference between the hypodense tumor and the normal pancreas. EUS, ERCP, MRCP, laparoscopy, percutaneous biopsy and laparotomy are all also utilized for diagnosis and staging. Imaging is utilized to assess resectability and specific criteria apply. The unresectable criteria that most surgeons accept are as follows: 1) >180 degree involvement of the superior mesenteric artery (SMA) or celiac artery, 2) unreconstructible superior mesenteric vein (SMV) or portal vein, 3) aortic involvement, and 4) metastasis to lymph nodes beyond the resection bed. In addition, a category labeled borderline resectable has been defined and includes: 1) short segment SMV occlusion, 2) gastroduodenal artery (GDA) encasement, 3) <180 degree abutment of the SMA, and 4) abutment or encasement of the hepatic artery (reconstructible). These criteria are used in many institutions, including Cancer Treatment Centers of America (CTCA), for protocol driven therapy. CTCA at Southwestern had a pancreatic protocol for resection with intraoperative radiation therapy (IORT) for patients deemed resectable by the surgical oncologist. Those patients labeled borderline or marginally resectable were eligible to go on a neoadjuvant FOLFIRI-NOX regimen and then were reevaluated for resectability by surgical oncology (Protocol SRMC 12-08). Intraoperative decision making about unresectability is the goal for these borderline cases. All patients receive adjuvant radiotherapy and systemic chemotherapy as well.

**METHODS**

In the present study, we retrospectively reviewed our pancreatic cancer experience at CTCA at Southwestern with data collected through the cancer registry to evaluate survival and prognostic factors. Table 1 lists the overall number of patients at Southwestern diagnosed with pancreatic malignancy in 2012. The demographics and treatment-related therapy were collected and evaluated for appropriateness according to national guidelines and institutional resources. Data was analyzed using the statistical package from SAS.
### RESULTS

Table 1 depicts the entire group of pancreatic neoplasm patients in 2012. Forty patients with pancreatic malignancy were identified. Overall, 36 patients had adenocarcinoma, two patients had neuroendocrine histology, and one patient had acinar cell carcinoma. One patient with lymphoma was excluded from the analysis. Thirty-six of these patients underwent biopsy, while four were taken to surgery without malignant biopsy results available. Figure 1 illustrates the

<table>
<thead>
<tr>
<th>PRIMARY SITE</th>
<th>TOTAL (%)</th>
<th>ANALY</th>
<th>STG I</th>
<th>STG II</th>
<th>STG III</th>
<th>STG IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORAL CAVITY AND PHARYNX</td>
<td>13 (1.5%)</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>DIGESTIVE SYSTEM</td>
<td>248 (28.5%)</td>
<td>131</td>
<td>10</td>
<td>26</td>
<td>23</td>
<td>67</td>
</tr>
<tr>
<td>Esophagus</td>
<td>14 (1.6%)</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Stomach</td>
<td>20 (2.3%)</td>
<td>13</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Small Intestine</td>
<td>9 (1.0%)</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Colon (excluding Rectum)</td>
<td>71 (8.2%)</td>
<td>29</td>
<td>1</td>
<td>9</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Rectum and Rectosigmoid</td>
<td>38 (4.4%)</td>
<td>13</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Anus, Anal Canal and Anorectum</td>
<td>7 (0.8%)</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Liver and Intrahepatic Bile Duct</td>
<td>23 (2.6%)</td>
<td>13</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Gallbladder</td>
<td>4 (0.5%)</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other Biliary</td>
<td>6 (0.7%)</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Pancreas</td>
<td>55 (6.3%)</td>
<td>39</td>
<td>1</td>
<td>8</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>Retroperitoneum</td>
<td>1 (0.1%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RESPIRATORY SYSTEM</td>
<td>145 (16.6%)</td>
<td>94</td>
<td>11</td>
<td>7</td>
<td>24</td>
<td>51</td>
</tr>
<tr>
<td>BONES AND JOINTS</td>
<td>2 (0.2%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>SOFT TISSUE</td>
<td>12 (1.4%)</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>SKIN (excluding Basal and SS)</td>
<td>12 (1.4%)</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>BASAL &amp; SQUAMOUS SKIN</td>
<td>4 (0.5%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>BREAST</td>
<td>157 (18.0%)</td>
<td>78</td>
<td>22</td>
<td>22</td>
<td>11</td>
<td>15</td>
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<tr>
<td>FEMALE GENITAL SYSTEM</td>
<td>61 (7.0%)</td>
<td>17</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>MALE GENITAL SYSTEM</td>
<td>76 (8.7%)</td>
<td>46</td>
<td>6</td>
<td>35</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>URINARY SYSTEM</td>
<td>40 (4.6%)</td>
<td>26</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>EYE &amp; ORBIT</td>
<td>1 (0.1%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BRAIN &amp; OTHER NERVOUS SYSTEM</td>
<td>24 (2.8%)</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ENDOCRINE SYSTEM</td>
<td>16 (1.8%)</td>
<td>10</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>LYMPHOMA</td>
<td>21 (2.4%)</td>
<td>15</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>MYELOMA</td>
<td>4 (0.5%)</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LEUKEMIA</td>
<td>12 (1.4%)</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MESOTHELIOMA</td>
<td>3 (0.3%)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>KAPOSI SARCOMA</td>
<td>1 (0.1%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MISCELLANEOUS</td>
<td>19 (2.2%)</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>871</strong></td>
<td><strong>460</strong></td>
<td><strong>72</strong></td>
<td><strong>100</strong></td>
<td><strong>83</strong></td>
<td><strong>162</strong></td>
</tr>
</tbody>
</table>
breakdown of pancreatic cases including those resected and their respective histology. Out of the 11 patients that underwent surgery, eight patients actually had a resection; the procedures included: laparoscopic cholecystectomy (two), omentectomy (one), extended Whipple (one), Whipple (five), and distal pancreatectomy (two). At the last follow-up, six of the eight resected patients were still alive. Overall survival at 500 days (the length of follow-up for the patients evaluated) was 35 percent and the median survival was 415 days (see Figure 2).

In the resection group, four out of five patients received IORT at the time of the resection, while one unresectable patient received IORT. At the last follow-up, two were alive and three were dead due to disease. Thirty-seven patients received chemotherapy, and 10 patients received adjuvant external beam radiation therapy. Of the three patients who did not receive chemotherapy, one did not receive treatment (by patient choice) and two had surgery only (one neuroendocrine tumor and one small distal primary). Three patients had resections at outside institutions (Knoxville, TN;
TABLE 2: PATIENT DETAILS

<table>
<thead>
<tr>
<th>TUMOR LOCATION</th>
<th>SURGERY</th>
<th>RESECTION</th>
<th>TREATMENT</th>
<th>IORT</th>
<th>FOLLOW-UP</th>
<th>STATUS</th>
<th>ADDITIONAL COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neck</td>
<td>Resection</td>
<td>Extended Whipple</td>
<td>Radiotherapy/1-Cycle Gemzar</td>
<td>Yes</td>
<td>12/27/2012</td>
<td>DOD</td>
<td>Portal vein resection</td>
</tr>
<tr>
<td>Head</td>
<td>Resection</td>
<td>Whipple</td>
<td>Adj. Sutinib</td>
<td>Yes</td>
<td>6/25/2013</td>
<td>AWD</td>
<td>Portal vein resection thrombus/Neuroendocrine</td>
</tr>
<tr>
<td>Head</td>
<td>Resection</td>
<td>Whipple</td>
<td>Adj. Gemzar/Concurrent 5FU/Radiotherapy</td>
<td>No</td>
<td>2/06/2013</td>
<td>DOD</td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>Resection</td>
<td>Whipple</td>
<td>Neo Adj. Previous Bypass</td>
<td>Yes</td>
<td>1/28/2014</td>
<td>AWD</td>
<td>Post-op portal vein stent placement</td>
</tr>
<tr>
<td>Tail</td>
<td>Resection</td>
<td>Distal Pancreas/Spleen</td>
<td>None</td>
<td>No</td>
<td>1/20/2014</td>
<td>NED</td>
<td>Neuroendocrine</td>
</tr>
<tr>
<td>Head</td>
<td>Resection</td>
<td>Whipple</td>
<td>Adj. Gemcitabine Single Agent</td>
<td>No</td>
<td>12/05/2014</td>
<td>NED</td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>Laparotomy</td>
<td>Laparoscopic Cholecystectomy/Lymph Node Biopsy</td>
<td>Adj. Folfirinox</td>
<td>No</td>
<td>1/22/2014</td>
<td>AWD</td>
<td>Right groin lymph node excised</td>
</tr>
<tr>
<td>Neck</td>
<td>Laparotomy</td>
<td>Laparoscopic Cholecystectomy</td>
<td>Adj. Folfirinox</td>
<td>No</td>
<td>1/05/2013</td>
<td>DOD</td>
<td></td>
</tr>
<tr>
<td>Tail</td>
<td>Resection</td>
<td>Distal Pancreas/Spleen</td>
<td>No</td>
<td>No</td>
<td>11/04/2014</td>
<td>NED</td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>Resection</td>
<td>Whipple</td>
<td>Adj. 5-Flourouracil</td>
<td>Yes</td>
<td>12/07/2013</td>
<td>DOD</td>
<td></td>
</tr>
</tbody>
</table>

DOD = Dead of disease, AWD = Alive with disease, NED = No evidence of disease

FIGURE 3: RESECTED VS. NOT RESECTED

![Graph showing survival distribution function for resected versus not resected tumors](image-url)
Amarillo, TX; Oklahoma City, OK) by surgeons who routinely perform the operation. In order to fulfill CoC 4.6 requirements, the eight patients who underwent surgery were further evaluated in order to assess the sequence of treatment and the details surrounding their surgery (see Table 2).

At the 500-day follow-up period, there was a slight trend toward increased survival in the resection group compared with the group that did not undergo resection. The median survival time for the resected group was 423 days, while the median survival period for the group that did not undergo resection was 376 days. However, this difference was not statistically significant, which is likely due to the small sample size ($p = 0.3179$, see Figure 3). Moreover, survival was not significantly affected by cancer stage ($p = 0.7291$, see Figure 4).

**DISCUSSION**

Our demographics suggest that there is an increasing number of patients that are self-referring to Southwestern for the management of their pancreatic cancer. In 2013, there were 52 total pancreatic cancer patients treated at Southwestern, 35 of which were analytic. Although the numbers for 2014 are not available, many of these patients are candidates for surgery as well. In 2012, there were eight total resections performed. Because only five were performed at Southwestern, our surgical team and surgeons are in a lower volume group compared with national averages. However, updated totals from 2013 show that 22 patients underwent resection, 13 of which were performed at Southwestern. Thus, these data reflect an increasing trend,
and places Southwestern into a higher volume category nationally. Several studies have shown improvements in quality surgical measures including perioperative morbidity and mortality rates in higher volume centers.\(^5,6\) In addition, the rates of pancreatectomy and the use of multimodality treatments also significantly increase in higher volume centers.\(^7\)

Surgical quality is outlined and summarized in Table 3. Measures of surgical quality include histological confirmation, accurate staging, adequate node dissection, high resectability rates, and low positive margin rates. In the group of patients that we analyzed, the total incidence of resection was eight out of the 11 patients operated upon (73 percent). For Southwestern, the rate of resection was five out of six (83 percent). Compared with previously published averages (79 to 83 percent), it is within the appropriate range based on a larger series reported in the laparoscopy and modern CT imaging era.\(^8,9\) The positive margin rate (12.5 to 20 percent) and positive node rate (14 to 39.7 percent) are also comparable to previously published averages (17 percent\(^6\) and 52 to 58 percent,\(^9,10\) respectively). In addition, the 30-day mortality in our study was 0 percent compared to previously reported average of 4.9 percent\(^5\) Moreover, the average length of stay in our patients was 16 days, which was shorter than the previously reported average length of 18 days.\(^12\) Long-term follow-up of the patients that were resected will allow further survival analysis.

Innovative therapies including IORT, portal vein stents, and neoadjuvant strategies are utilized frequently at our institution (see Table 2). These innovative strategies likely contribute to the overall survival rates at Southwestern compared with national averages. According to the National Cancer Database, the overall survival rates for pancreatic cancer diagnosed from 2003 to 2006 was 28.1 percent at one year;\(^11\) while the overall survival at 500 days (1.37 years) for our cases at Southwestern was 35 percent (see Figure 2).

Overall, these data reflect an evolving area of management for patients with pancreatic cancer at Southwestern.

**VONDA’S STORY: INTEGRATION**

John Sibley, DC, provided chiropractic care to help Vonda recover after treatment

“Chiropractic treatment helped Vonda slowly get off her pain medication, improved her activities of daily living and allowed her return to work and a normal lifestyle.”

– John Sibley, DC  
Chiropractor
REFERENCES:


NOTE: This report is Monitoring Compliance with Evidence-Based Guidelines Commission on Cancer Standard 4.6.
Comprehensive Services
Our Technologies, Treatments and Services

**MEDICAL SERVICES**

**Cardiology**
- Echocardiogram (ECHO)
- Electrocardiogram (EKG)
- Holter Monitors
- Nuclear Medicine Rest/Stress Test
- Transesophageal Echocardiogram (TEE)

**Chemotherapy/Immunotherapy/Targeted Therapy**
- Chemoradiation
- Chronotherapy
- Continuous Infusion Chemotherapy
- Genomic-Based Therapy
- High-Dose Chemotherapy
- High-Dose Inpatient IL2
- Hormone Therapy
- Immunotherapy
- Intra-Arterial Hepatic Chemotherapy
- Intraperitoneal Chemotherapy (IPC)
- Intrathecal Chemotherapy
- Intratumoral Chemotherapy
- Intravenous Chemotherapy
- Metronomic Chemotherapy/Fractional Dose
- Monoclonal Antibody Therapy
- Provenge® (for Prostate Cancer)
- Oral Chemotherapy
- Radioimmunotherapy
- Small-Molecule Inhibitors
- Targeted Drug Therapy
- Yervoy™ (for Metastatic Melanoma)
- Zevalin® (for Non-Hodgkin Lymphoma)

**Critical Care**
- Intensive Care Unit
- Invasive and Minimally Invasive Cardiac Monitoring

**Diagnostics**
- Imaging
  - All Digital: Portable Fluoroscopy and X-Rays
  - Barium Swallow or Enema
  - Chest X-Ray
  - CT Angiography with 3D CT
  - CT Fluoroscopy
  - Bone Density Scan (Dexa)
  - Magnetic Resonance Imaging (MRI)
  - MR Computer-Aided Detection (CAD)

**Gynecologic Oncology**
- Ablation of Intra-Abdominal Tumors
- Anterior and Posterior Colporrhaphy
- Cervical and Uterine HDR Brachytherapy
- Colposcopy
- Cone Biopsy/Loop Electrosurgical Excision Procedure (LEEP)
- Diaphragm Surgery
- Endometrial Carcinoma Staging
- Full Range of Open Laparoscopic Gynecologic Surgery
- Hormone Therapy
- Hysterectomy
- Hysteroscopy
- Inguinal Lymphadenectomy
- Intrapерitoneal Chemotherapy
- Omentectomy
- Ovarian Cancer Debulking and Staging
- Pelvix Extenteration
- Radical Ovarian Carcinoma Surgeries
- Radical Vulvectomy
- Salpingo-Oophorectomy

**Hematology**
- Stem Cell Transplant:
  - Autologous
  - Allogeneic
  - Nonmyeloablative/Reduced-Intensity
  - Haploidentical
  - Cord Blood
  - Matched Sibling Donor

**Gastroenterology**
- Argon Plasma Coagulation (APC)
- Celiac Plexus Neurolysis (CPN)
- Cholangiopancreatography
- Cholangioscopy (SpyGlass™)
- Colonoscopy
- Cryoablation
- Endoscopic Mucosal Resection (EMR)
- Endoscopic Retrograde Cholangiopancreatography (ERCP)
- Endoscopic Ultrasound (EUS)
- Enteroscopy
- Esophageal Variceal Banding
- Esophagogastroduodenoscopy (EGD)
- Fiducial Marker Placement
- Flexible Sigmoidoscopy
- Nutritional/Metabolic Support
- Percutaneous Endoscopic Gastrostomy (PEG) Placement
- Single Balloon Enteroscopy
- Stent Placements
- Variceal Hemostasis
- Video Capsule Endoscopy

**Interventional Pulmonology**
- Airway Stent Placement
- Argon Plasma Coagulation (APC)
- Autofluorescence Bronchoscopy
- Balloon Bronchoplasty
- Bronchoscopy
- Cryotherapy/Cryoablation
- Endobronchial HDR Brachytherapy
- Endobronchial Ultrasound (EBUS)
- Endobronchial Valve
- Fiducial Marker Placement
- Indwelling Tunneled Pleural Catheter
- Interventional Pulmonology Procedures
- Lung Nodule Analysis
- Medical Pleuroscopy
- Navigational Bronchoscopy
- Nd: YAG Laser
- Photodynamic Therapy (PDT)
Pleurodesis (with Chemotherapy or TalC)/Pleuroscopy
Rigid Ventilating Bronchoscopy and Flexible Bronchoscopy
Thoracentesis
Transbronchial Needle Aspiration
Tunneled Pleural Catheter Insertion

**Interventional Radiology**
Abcess Drainage and Fluid Collection Management
Ablation
  - Microwave Ablation
  - Radiofrequency Ablation (RFA)
Angiography/Angioplasty/Stent Placement
Arterial Infusion Catheter Placement
Arteriography
Biopsy (CT-Guided, US-guided)
  - Bone Marrow Disography
EMBOLIZATION venography
Inferior Vena Cava Filter
Intrathecal Chemotherapy Administration
Paracentesis
Percutaneous Biliary Drainage (Internal and/or External Stent Placements)
Percutaneous Gastrostomy/Gastrojueunostomy
Percutaneous Image Guided Biopsy
Percutaneous Nephrostomy/Urology Procedures
Percutaneous Nephroureteral Stenting
Portal Vein Embolization
TheraSphere® Radioembolization
Thrombectomy
Transarterial Therapy
  - Bland Embolization
  - Chemoembolization
  - Intra-Arterial Chemotherapy (IAC)
  - Radioembolization
Transjugular Intrahepatic Portosystemic Shunt (TIPS)
Venous Access (PICC, CVC, Port)
Venous Angioplasty/Stenting
Ventral Augmentation (Kyphoplasty) and Vertebral Tumor Ablation

**Neurosurgery**
Brain LAB Stereotactic Radiation Surgery
Craniotomy
Endonasal Endoscopy
Intraoperative Nerve Monitoring
Laminectomy
Minimally Invasive Surgery
Neuroendoscopy
Placement of an Ommaya Reservoir Shunt Placement
Spinal Tumors and Spinal Decompression
Vaccine Therapy
Ventriculoperitoneal Shunt

**Pathology**
Genomic Tumor Analysis
Tumor Tissue Repository

**Radiation Oncology**
3D Conformal Radiation
Accelerated Partial Breast Irradiation (APBI)
Accuboot®
Calypso® 4D Localization System™/GPS for the Body®
CyberKnife® VSILong Tissue Hyperthermia
External Beam Radiation Therapy (EBRT)
High-Dose Rate (HDR) Brachytherapy
Image-Guided Radiation Therapy (IGRT)
Intensity Modulated Radiation Therapy (IMRT)
Intraoperative Radiation Therapy (IORT)
Large Bore CT/RT with Simulation
Linear Accelerator
Local Hyperthermia
Quantitative Ventilation Perfusion Scan
Radioactive Protactants
Stereotactic Body Radiation Therapy (SBRT)
Stereotactic Radiosurgery (SRS) in conjunction with Calypso® 4D Localization
Stereotactic Radiosurgery (SRS)/Stereotactic Radiation Therapy (SRT)
Systematic Radiation Therapy/Ra223
Xenodyne Therapy
TomoHDA
Total Body Irradiation (TBI)
Total Marrow Irradiation (TMI)
Varian® Linear Accelerator with Stereotactic Radiosurgery,
Respiratory Gating, RapidArc and SBRT

**Surgery**
Autologous Fat Grafting (Breast Reconstruction)
Biliary and Intestinal Bypass
Breast Conservation/Reconstruction
Breast Surgery, Including Lumpectomy and Mastectomy
Cavitron Ultrasonic Surgical Aspiration/Sonipet
Comprehensive Anesthesia Services
Cystectomy
Cystoscopy
Cytoreductive (Debulking)
da Vinci® Surgical System
Diagnostic/Staging Surgery
Enteroscopy
ERBEJECT™ 2
Esophagectomy
Gastrointestinal Surgery
Head and Neck Surgery
Extracavitatory Surgery
  - Glossectomy and Resection, Other Oral Cancers
  - Laryngectomy with Voice Restoration Procedures
  - Neck Dissection
  - Parotidectomy and Resection, Other Salivary Malignancies
  - Pharyngectomy
  - Thyroidectomy
Endoscopic Procedures
Free Flap Reconstruction of Head and Neck Defects
Hyperthermic Intraperitoneal Chemotherapy (HIPEC)
Intraoperative Ultrasound
Liver Resection
Lung Wedge Resection
Minimally Invasive Surgery
NEPHRECTOMY (Partial, Radical or Laparoscopic)
Oncoplastic and Breast Reconstruction Surgery
Pancreas Resection
Partial Hepatectomy
Prostatectomy
Pulmonary Lobectomy or Pneumonectomy
Reconstructive Microsurgery
Reconstructive Surgery
Robotic Surgery

**SOUTHWESTERN REGIONAL MEDICAL CENTER | 25**
Segmentectomy
Sentinel Lymph Node Biopsy
Spleenectomy
SPY Elite System
Thoracotomy
Thoracoscopic Resections
Thyroid Resection
Urological Surgery
Vascularized Lymph Node Transfer
Video-Assisted Thoracic Surgery (VATS)
Whipple Procedure

INTEGRATIVE SERVICES
Care Management
24-Hour Nurse On-Call Services
Anticoagulation Clinic
Breast Cancer Nurse Navigation
Discharge Planning

Medical Social Work
Nurse Concierge Services
Nursing Case Management
Palliative Care
Utilization Review Nurse

Clinical Research
Investigator-Initiated Trials and Sponsored Pharmaceutical Trials:
• Chemotherapy
• Compassionate Use Drugs
• Device Trials
• Expanded Access Drugs
• Humanitarian Device Exemptions

Monitoring Safety and Efficacy of Study Drugs
• Naturopathic Medicine
• Nutrition
• Pastoral Care
• Radiation
• Side Effect Reduction
• Stem Cell Transplants
• Treatment Databases
• Quality of Care
• Quality of Life and Outcomes
• Vaccine Therapies

Chiropractic Services
Blood Flow Enhancement
Fatigue Management
Flexibility Enhancement
Joint Mobilization
Mechanical Traction
Nervous System Enhancement
Neuromuscular Reeducation
Soft Tissue Mobilization
Somato-Viscero Reflex Enhancement
Therapeutic Exercise

Image Enhancement
Custom Wig Fittings
Professional Mastectomy Services
• Compression Garments
• Post-Surgical Garments/Forms
Skin Care and Makeup
Spa and Salon Services

Mind-Body Medicine
Animal-Assisted Therapy
Behavioral Health Assessment
Counseling (Individual, Couple, Family for Patients and Caregivers)
Energy Therapies (Qigong)
HeartMath® (Biofeedback Program)
Laughter/Humor Therapy
Psycho-Educational Groups

VONDA’S STORY: HEALING

Darrin Hines, Oncology Rehabilitation/Manual Therapist, helped Vonda take an active role in her recovery.

“In conjunction with Physical Therapy, we developed a series of exercises and stretches that enabled Vonda to have an increased quality of life and start to reduce her pain cycles. Vonda is a joy to work with and I feel blessed to be a part of her care team.”

– Darrin Hines
Oncology Rehabilitation/Manual Therapist
Relaxation and Guided Imagery Training
Schwartz Center Rounds® (Stakeholder/Staff Support)
Stress Management Classes
Support Groups

**Naturopathic Medicine**
- Acupressure
- Acupuncture
- Auricular Therapy (Ear Acupuncture)
- Botanical Medicine
- Detoxification Therapy
- Environmental Medicine
- Essential Oils (Aromatherapy Inhalers, Topical Products)
- Homeopathy
- Hydrotherapy
- Low-Level Laser Therapy
- Nutritional/Dietary Supplements
- Smoking Cessation
- Vitamins and Minerals

**Nutrition Therapy**
- Bioelectrical Impedance Analysis (BIA)
- Diabetes Self-Management Education Program
- Indirect Calorimetry Test
- Individual Nutrition Assessments and Counseling
- Laboratory Blood Analysis (Nutrition Panel including Iron Pale, Vitamin D, Prealbumin)
- Nutrition Anthropometrics
- Parenteral and Enteral Nutrition

**Oncology Rehabilitation**
- Auriculotherapy
- Borg Rating of Perceived Exertion (RPE)
- Fatigue Management
- Flexibility Program
- Interactive Metronome
- Lymphedema Management
- Manual Therapy (Massage Therapy)
- Neuromuscular Re-education with Electrical Stimulation
- Occupational Therapy
- Physical Therapy
- Post Mastectomy Rehab
- Pulmonary Rehab
- ReBuilder®
- Scar Tissue Manipulation
- Speech and Language Pathology

**Pain Management**
- Anatomical Landmark and Ultrasound Guided Procedures
- Blocks of Somatic and Visceral Cancer Pain Syndromes
- Caudal, Lumbar, Thoracic and Cervical Celiac Plexus Neurolysis (CPN)
- Epidural Steroid Injection
- Facet Joint Injections
- Individualized Pain Assessment and Medical Management
- Joint Injections
- Minor and Major Joint and Bursa Injections
- Nerve Block/Nerve Root Block
- Nerve Injections, Implanted Pain Pumps or Nerve Stimulation Devices
- Patient-Controlled Analgesia (PCA) Pain Pump
- Patient-Controlled Epidural (PCEA) Pump
- Peripheral and Central Somatic Nerve and Plexus Blocks
- Spinal Cord/Dorsal Column Stimulators
- Transcutaneous Electric Nerve Stimulation (TENS)
- Trigger Point Injections
- Tunneled Catheter Placements (for Various Nerve Sheaths)

**Patient Relations**
- 24-Hour On-Call Services
- Patient Advocacy

**Quality of Life Center**
- Medical and Symptom Management

**Respiratory Therapy**
- Acute and Chronic Lung Disease
- Airway Education and Management
- Arterial Blood Gases
- Cardiopulmonary services
- CPR/ACLS Responders
- EEG
- Electromyogram
- Exercise Stress Testing
- Mechanical Ventilation Management
- Nerve Conduction Studies
- Nocturnal Pulse Oximetry Testing
- Non-Invasive Ventilation Management
- Oxygen Services
- Patient Assessments

**Pulmonary Function Testing (PFT)** (including Spirometry, Lung Capacity Studies, Diffusion Analysis and Methacholine Airway Challenge)
- Pulse Oximetry
- Respiratory Treatments
- Six-Minute Walk Testing
- Sleep Lab (Polysomnography)

**Spiritual Support**
- Assistance with Advanced Directives and/or Living Wills
- Bible Study and Help Group
- Covers of Love Program
- Crisis Intervention
- Family Consultations
- Grief and Bereavement Counseling and Referral
- Interface with Local Pastor and Church
- Non-denominational Worship Services
- Our Journey of Hope® Program
- Prayer (Individual and Group)
- Singspiration
- Spiritual Counseling
- Taped Ministry
- Telephone Consultations

**Survivorship**
- Age-Appropriate Health Screenings
- Assessment and Management of Long-Term Side Effects of Cancer Treatment
- Develop and Review Individualized Survivorship Care Plan
- Internal Medicine Services in Conjunction with the Quality of Life Program
- One-on-One Patient Education
- Risk Reduction Strategies
- Wellness Recommendations and Coaching

Darrin Hines, Oncology Rehabilitation/Manual Therapist, helped Vonda take an active role in her recovery.
Medical Staff

Daniel A. Nader, DO, FCCP
Chief of Staff, National Clinical Director and Medical Director of Pulmonary and Critical Care

Dr. Nader serves as Director of the Lung Center at CTCA at Southwestern. Dr. Nader earned a medical degree from the University of Health Sciences in Kansas City. He completed both a residency and a fellowship in pulmonary medicine at the Naval Regional Medical Center in San Diego. He is board certified in internal medicine and pulmonary disease. Dr. Nader has been recognized by Castle Connolly as a “top doctor” in pulmonary medicine for the last several years.

Laurence H. Altshuler, MD
Internist and Medical Director of Oncology Intake

Dr. Altshuler earned a medical degree from the University of Oklahoma and then completed an internal medicine residency at the University of Oklahoma Health Sciences Center in Oklahoma City. He earned his bachelor’s degree from Duke University in Durham, where he graduated magna cum laude. Dr. Altshuler is board certified in internal medicine. He is also certified in acupuncture, hypnosis and interactive imagery and has expertise in Western and Chinese herbology.

Peter Baik, DO
Thoracic Surgeon

Dr. Baik earned his Doctor of Osteopathic Medicine at Kirksville College of Osteopathic Medicine in Missouri. He completed a general surgery residency at St. Barnabas Hospital in New York, and then at Arrowhead Regional Medical Center in California, where he served as Chief Resident in General Surgery. He later became a resident in cardiothoracic surgery at the University of Miami Miller School of Medicine/Jackson Memorial Hospital in Florida, and completed a fellowship in minimally invasive esophageal and thoracic surgery at Swedish Medical Center-First Hill in Seattle. He is board certified in general surgery by the American Osteopathic Board of Surgery.

Clinton J. Baird, MD
Medical Director of Neurosurgery Services and Neurosurgeon

Dr. Baird earned a medical degree from Saint Louis University, where he also completed bachelor’s degrees in biology and chemistry and a graduate study in biology. At Johns Hopkins University, he completed an internship in general surgery, a residency in neurological surgery and the Hunterian Neuro-Oncology Research Fellowship, supported in part by the American Brain Tumor Association. He also completed a fellowship in endoneurosurgery at the University of Pittsburgh Medical Center.
Lisa Baldwin, MD
Internist

Board certified by the American Board of Internal Medicine, Dr. Baldwin earned a medical degree from the University of Oklahoma College of Medicine, where she graduated with distinction. She went on to complete the university’s internal medicine residency program. Before pursuing a medical degree, Dr. Baldwin received a bachelor’s degree in radiologic technology/sonography from the University of Oklahoma.

Samuel C. Bieligk, MD, FACS
Surgical Oncologist

Board certified in general surgery and surgical oncology, Dr. Bieligk joined CTCA in September 2011 after serving at St. John’s Regional Medical Center in Joplin, Missouri. He received a bachelor’s degree from the University of Oklahoma and a medical degree from the University of Oklahoma School of Medicine. His post-graduate training includes a general surgery residency and research fellowship/instructorship at Tulane University School of Medicine and a surgical oncology fellowship at Memorial Sloan-Kettering Cancer Center.

Janet Cheek, DO
Internist

Dr. Cheek primarily cares for the daily medical needs of patients served in the metabolic support clinic. She earned a medical degree from the New York College of Osteopathic Medicine. She received a bachelor’s degree in chemistry from Howard University in Washington, DC, where she also completed a post-baccalaureate program. Board certified in osteopathic internal medicine, Dr. Cheek completed an internship and residency at St. Barnabas Hospital in New York.

Rola Eid, DO
Medical Director of Plastic and Reconstructive Surgery and Plastic Surgeon

Dr. Eid earned a bachelor’s degree in biological sciences at the University of Central Oklahoma, graduating cum laude. She completed a Doctor of Osteopathic Medicine degree at Oklahoma State University College of Osteopathic Medicine. Her post-graduate training included a surgery-tracked internship, a residency in general surgery and a fellowship in plastic and reconstructive surgery, all at Oklahoma State University Medical Center, where she served as chief resident and chief fellow. She is board certified in general surgery by the American Board of Surgery and is board eligible in plastic and reconstructive surgery.
James P. Flynn, MD, FCR
Radiation Oncologist
Before joining CTCA, Dr. Flynn taught radiology and radiation oncology and served for 17 years as an attending physician at Overlook Hospital in New Jersey. Board certified by the American Board of Diagnostic and Therapeutic Radiology, Dr. Flynn completed residencies in diagnostic radiation and radiation oncology at New York Hospital, Cornell Medical Center and Memorial Sloan-Kettering Cancer Center. He earned a medical degree from the St. Louis University School of Medicine. He was named a Fellow of the American College of Radiology in 1997.

John Frame, MD, FACS
Breast Surgeon
Dr. Frame is a fellow of the American College of Surgeons and a Diplomate of the American Board of Surgery. Board certified by the American Board of Surgery, he earned a medical degree from Washington University School of Medicine. He completed a surgical internship and residency at the University of Oklahoma Health Sciences Center, where he served as chief resident in surgery. He also completed a research fellowship in cardiovascular surgery at Duke University Medical Center.

Pierre J. Greeff, MD, FACS
Surgical Oncologist
Dr. Greeff trained under one of the most renowned cancer surgeons in the country, John Stehlin, MD. Dr. Greeff earned a medical degree from the Medical School of the University of Cape Town in South Africa. Board certified in surgical oncology, he completed a residency at St. Joseph Hospital in Houston. During his tenure there, he received the distinguished “Service to Mankind Award” presented by the Sertoma Club of Houston.

Scott Hendrickson, DO, FACOI
Gastroenterologist
Dr. Hendrickson received his bachelor’s degree in biology at the University of Central Oklahoma and his Doctor of Osteopathic Medicine at Oklahoma State University. He served his fellowship in gastroenterology at Oklahoma State University Medical Center and his residency in internal medicine at Tulsa Regional Medical Center. He is board certified in internal medicine and gastroenterology. He has published studies in several medical journals and has served as an investigator for multiple clinical trials to advance the treatment of emphysema, HIV, Crohn’s disease and others conditions.
Kendal Hervert, DO
Pulmonologist

Dr. Hervert earned a Doctor of Osteopathic Medicine degree from Lake Erie College of Osteopathic Medicine in Bradenton, Florida, where she received a Dedication to Primary Care Award in internal medicine. She then completed an internal medicine residency, followed by a pulmonary medicine fellowship, at Oklahoma State University Medical Center in Tulsa. During her residency, she earned the DO Excellence in Internal Medicine Award.

Timothy Holder, MD, FAAFP
Physician, Quality of Life Clinic, and Medical Director of Supportive Care and Survivorship

Board certified in hospice and palliative medicine and family medicine, Dr. Holder has more than 20 years of experience in hospice and palliative medicine/symptom control and management. He earned a medical degree from the University of Texas Medical School in Houston. He completed a residency in family practice at Memorial Medical Center in Corpus Christi, Texas, where he earned the Physician Excellence Award and was named “Resident of the Year” for two years.

Simeon Jaggernauth, DO
Medical Oncologist and Program Director of Medical Oncology Fellowship

Dr. Jaggernauth earned his doctorate in medicine from Oklahoma State University Center for Health Sciences College of Osteopathic Medicine. He then completed an internship at Oklahoma State University Medical Center, an internal medicine residency at the University of Oklahoma, and a fellowship in medical oncology at the University of Louisville in Kentucky. He is board certified in medical oncology and internal medicine by the American Board of Internal Medicine. He is also board certified in mechanical engineering and worked in research and development prior to becoming a physician.

Michael Kayser, DO, FACMG
Clinical Geneticist and Medical Director of Genetic Services

Dr. Kayser received his bachelor’s degree in biology from Northeastern State University and his Doctor of Osteopathic medicine from Oklahoma State University College of Osteopathic Medicine. Board certified in clinical genetics and clinical biochemical genetics, Dr. Kayser completed a clinical genetics residency and a clinical biochemical genetics fellowship at the National Institute of Health in Bethesda, Maryland.
Medical Staff (cont.)

**Douglas Kelly, MD**
Radiation Oncologist

A board certified radiation oncologist, Dr. Kelly earned a medical degree from McGill University in Montreal, Quebec. He is a Diplomate of the American Board of Radiology, and a fellow of the Royal College of Physicians and Surgeons of Canada. He completed an internship at Ottawa General Hospital and Ottawa Civic Hospital in Ottawa, Ontario, followed by a radiation oncology residency at Ottawa Regional Cancer Center. He also served as chief resident. Additionally, Dr. Kelly completed an interstitial and intracavitary brachytherapy fellowship at the University of Ottawa.

**Don King, MD, ACP, ACPE**
Hospitalist and Medical Director of Hospital Medicine

Dr. King works together as part of a team to care for inpatients. Board certified in internal medicine and administrative medicine, Dr. King completed residencies in internal medicine at Pacific-Presbyterian Hospital in San Francisco and the University of Illinois. He has held positions as assistant professor of internal medicine, chief of hospital services at the U.S. Air Force hospital in Turkey, and medical director at City of Faith Hospital in Tulsa.

**Steven Leveston, MD**
Hospitalist

After completing a Bachelor of Science degree at the University of Vermont, Dr. Leveston completed his Doctor of Medicine degree at Albany Medical College in New York. He completed his medical internship at Albany Medical Center Hospital in New York, and remained there for a residency in medicine. Dr. Leveston then completed a fellowship in metabolism at Washington University School of Medicine, Barnes Hospital. He is board certified in internal medicine, endocrinology and metabolism by the American Board of Internal Medicine.

**Deepu Madduri, MD**
Medical Director, Bone Marrow Transplant Unit

Dr. Madduri received her medical degree from the University of Oklahoma College of Medicine in Tulsa. She completed her internal medicine residency at St. Mary’s Hospital in California, followed by a fellowship in hematology/oncology at the University of California. She then went on to pursue a bone marrow transplant fellowship at Stanford Hospital. Dr. Madduri is board certified in internal medicine and oncology, and has published her research on breast cancer in *ASCO Connection* and *Journal of Clinical Oncology*.
Timothy McCay, DO  
Medical Director of Imaging and Radiologist

Dr. McCay received an osteopathic medical degree from the College of Osteopathic Medicine at Oklahoma State University. Prior to that, he completed two undergraduate degrees—one in nuclear medicine at the University of Oklahoma Health Sciences Center and the other in chemistry. While working on a second bachelor degree, Dr. McCay conducted research on nuclear medicine cardiovascular imaging. Dr. McCay completed a residency in radiology at Oklahoma State University Medical Center, where he also served as chief intern.

Larry McKenzie, DO  
Pain Management Physician

Dr. McKenzie earned a Doctor of Osteopathy degree from Oklahoma State University (OSU) in Tulsa. He then completed an internship at Columbia Tulsa Regional Medical Center, followed by a family medicine residency at OSU’s College of Osteopathic Medicine, where he also completed an anesthesiology residency. Additionally, he completed a pain fellowship at OSU’s Center for Health Sciences. He holds a bachelor’s degree from Southeast Missouri State University in Cape Girardeau, Missouri, and completed graduate work in the department of anatomy at Oral Roberts University in Tulsa.

Arch Miller III, MD, FACS, FAAP  
Plastic Surgeon

Dr. Miller served in the U.S. Army before attending the University of Texas at Galveston, where he earned a graduate degree in immunochemistry. He then earned a medical degree from the University of Texas at Galveston. After medical school, Dr. Miller completed a general surgery residency and a plastic surgery fellowship at the Bowman Gray Medical Center at Wake Forest University in North Carolina. He is also a fellow of the American College of Surgeons.

Bradley Mons, DO  
Otolaryngologist; Head and Neck Surgeon

Dr. Mons earned a Doctor of Osteopathic Medicine degree from Oklahoma State University Center for Health Sciences. He completed a surgical internship and residency at Ingham Regional Medical Center in Lansing, Michigan, followed by a residency in the Department of Otolaryngology Head and Neck Surgery at the Philadelphia College of Osteopathic Medicine. Dr. Mons also completed a fellowship in head and neck oncology/microvascular reconstruction in the Department of Surgery at the University of Wisconsin.
Ritwick Panicker, MD, FACP
Hematologist and Oncologist

Dr. Panicker received his medical degree from Christian Medical College in Vellore, India. He completed an internal medicine residency at the Mayo Clinic in Rochester, Minnesota, and a medical oncology fellowship at the University of Washington in Seattle. In addition, Dr. Panicker received hematology training at two hospitals in the United Kingdom. He is triple-board certified in medical oncology, hematology and internal medicine.

Michael S. Payne, Jr., MD
Radiologist and Medical Director of Radiation Oncology

Dr. Payne completed a bachelor’s degree from Northwestern University, a medical degree from Rush Medical College and an internship in internal medicine at the University of Illinois. He completed a four-year residency in radiation oncology at the University of Kansas. He is a member of several professional organizations, including the American College of Radiation Oncology and the American Brachytherapy Society.

Theodore W. Pollock, DO, FACOI
Vice Chief of Staff, Medical Director of Medical Oncology

Dr. Pollock brings more than 30 years of oncology experience to CTCA. He earned a medical degree from Kirksville College of Osteopathic Medicine. Dr. Pollock then completed an internship and residency at Doctors Hospital in Columbus, Ohio, as well as a medical oncology fellowship at Memorial Sloan-Kettering Cancer Center in New York. After his fellowship, Dr. Pollock returned to Columbus, where he spent 25 years providing care to cancer patients in a private practice setting. He is board certified in medical oncology and hematology.

George Lambert River, MD, FACP
Hematologist and Medical Oncologist

Dr. River earned a medical degree from Loyola University Chicago Stritch School of Medicine. He completed an internship, a residency in internal medicine and a fellowship in hematology at Cook County Hospital in Chicago. With nearly 50 years of experience in practicing hematology, medical oncology and internal medicine, he has headed the cancer programs at Finley Hospital in Dubuque, Iowa, and Freeman Hospital in Joplin, Missouri. Dr. River is board certified in medical oncology and hematology.
Sagun Shrestha, MD
Hematologist and Medical Oncologist; Medical Director of Pharmacy and Therapeutics

Dr. Shrestha received her medical education at the Maulana Azad Medical College in New Delhi, India. She was chief medical resident at the Jamaica Hospital Medical Center in New York and chief fellow in the Division of Hematology-Oncology at the Long Island Jewish Medical Center, Albert Einstein College of Medicine. She is board certified in medical oncology and hematology.

Edwin Watts, MD
Radiation Oncologist

Dr. Watts earned a medical degree from the University of Oklahoma Health Sciences Center. He then completed a general surgery internship at The Queen’s Medical Center, University of Hawaii in Honolulu, followed by a four-year residency in radiation oncology at the University of Oklahoma Medical Center. Dr. Watts has expertise in gastrointestinal, breast, and head and neck cancers. He is a member of the American Society of Radiation Oncology (ASTRO).

Leon J. Yoder, DO, FACP
Gastroenterologist and Program Director of Gastroenterology Fellowship

Board certified in gastroenterology by the American Board of Internal Medicine and the American Association of Physician Specialists, Dr. Yoder earned a medical degree from Kansas City University of Medicine and Biosciences College of Osteopathic Medicine. He completed a residency in internal medicine at Veterans Hospital in Dayton, Ohio, followed by a fellowship in gastroenterology at the University of Colorado Medical Center.
Integrative Services

**Katherine Anderson, ND, FABNO**  
National Director of Naturopathic Medicine  
Katherine Anderson is a Fellow of the American Board of Naturopathic Oncology. She graduated from Simon Fraser University in British Columbia and completed a naturopathic medicine residency at CTCA. Prior to joining CTCA, she spent several years as a women’s health educator at the University of Toronto. She has served as the president of the Oklahoma Association of Naturopathic Physicians and has been a recipient of the Swiss Herbal Remedies Bursary in recognition of “Excellence in the Promotion of Women’s Health.”

**Kalli N. Castille, MS, RD, CSO, LD**  
Director of Nutritional Support and Culinary  
Kalli Castille and her team of clinical oncology dietitians proactively address patients’ nutritional well-being throughout their care. A registered and licensed dietitian, Kalli earned bachelor’s and master’s degrees in nutritional sciences and health care administration from Oklahoma State University. She has served as president of Oklahoma Academy of Nutrition and Dietetics as well as a two-year term as Oklahoma State Representative for the Oncology Practice group of the Academy of Nutrition and Dietetics.

**Karen R. Gilbert, PT, LLCC**  
National Director of Oncology Rehabilitation  
Karen Gilbert and her team of licensed rehabilitation therapists provide a range of individualized programs, including physical and occupational therapy, speech and language pathology, massage therapy, auriculotherapy, and lymphedema management. She earned a bachelor’s degree in physical therapy from the University of Michigan. She has conducted investigational rheumatology research on fibromyalgia, and facilitates a lymphedema support group for breast cancer survivors.

**Reverend Michael Langham**  
Director of Pastoral Care  
Reverend Michael Langham and his team of chaplains, including certified grief/bereavement counselors, strive to create an atmosphere conducive to healing patients and families. Rev. Langham earned a bachelor’s degree in pastoral care from Oral Roberts University and received clinical pastoral education from the Association of Clinical Pastoral Education at Integris Hospital in Oklahoma City. He is certified by the United States Chaplains Association.
Conclusion

We are proud of all of the accomplishments we made in 2014 and we are excited about 2015, which marks our 25th year in Tulsa. Creating innovative ways to increase more insurance access locally and in our region for patients will be one of our main goals. In addition, we will be working hard to expand our contracting efforts internationally and, as always, we will be focused on staying on the forefront of leading-edge technologies that benefit patients and improve their quality of life.

OUR TEAM AT SOUTHWESTERN REGIONAL MEDICAL CENTER

As part of a national network of hospitals, CTCA at Southwestern offers an integrative and individualized approach to cancer treatment by combining surgery, radiation, and chemotherapy with nutritional counseling, naturopathic medicine, mind-body therapy, and spiritual support to enhance quality of life and reduce side effects. Known for delivering the Mother Standard® of care, CTCA at Southwestern is proud to offer weekend clinic appointments and an Infusion Center that delivers chemotherapy 24 hours a day, seven days a week.

Our facility has 336,385 square feet which includes our operations building. We have 40 inpatient beds and 153 outpatient accommodations. As of November 2014, CTCA at Southwestern had 782 stakeholders and 202 allied medical professionals.

VONDA’S CARE TEAM

Theodore Pollock, DO, FACOI, Director of Medical Oncology and Vice Chief of Staff;
Karen Nevener, Care Manager; Lauren Walker, Clinic Scheduler;
Vonda Zimmerman; Vicki Nichols, RN, Clinic Nurse; Jessica Moore, ND,
Naturopathic Oncology Provider; and Maegan Moore, Medical Assistant