

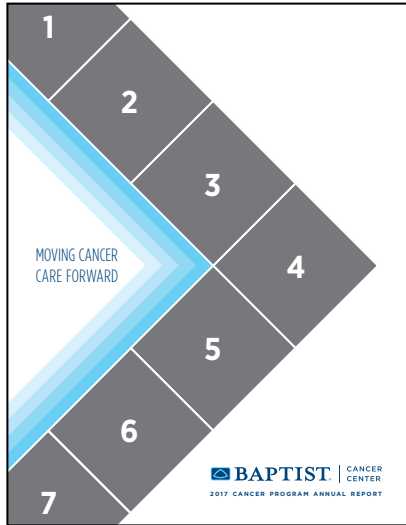


MOVING CANCER
CARE FORWARD

 **BAPTIST** | CANCER
CENTER

2017 CANCER PROGRAM ANNUAL REPORT

ON THE COVER:



1. Dr. Salil Goorha, a specialist in stem cell transplant and malignant hematology, visits with a patient.
2. A new infusion center at Baptist Collierville opened in 2017, offering patients convenient access to another location for infusions and chemotherapy.
3. A gastrointestinal oncologist and surgeon, Dr. Steven Behrman's research has focused over the years on pancreatic cancer.
4. Dr. Raymond Osarogiagbon leads the Baptist Cancer Center's Thoracic Oncology Multidisciplinary Program which has gained international recognition for advancing lung cancer treatment.
5. The Baptist Memphis radiation oncology center led by Rameses L. Sroufe, M.D. offers the CyberKnife® radiosurgery system. The technology uses a precise robotic arm that delivers targeted radiation to tumors while reducing exposure to healthy tissue. Dr. Sroufe specializes in prostate cancer treatment.
6. In April 2017, the FDA recognized Optune® as a fourth modality for cancer care. Dr. Aleksander Jankov is the first Baptist Cancer Center oncologist to become certified to deliver this treatment. © 2017 Novocure™. All rights reserved.
7. Through the Baptist mobile mammography unit and two grants, Baptist Cancer Center brings care to patients, especially to those underserved areas where patients have few options for access to screening.



BAPTIST MEMORIAL HOSPITALS

ARKANSAS

- **Baptist Crittenden** (West Memphis, AR)
(Opening 2019)
- **NEA Baptist** (Jonesboro, AR)

MISSISSIPPI

- **Baptist Attala** (Kosciusko, MS)
- **Baptist Booneville** (Booneville, MS)
- **Baptist Calhoun** (Calhoun City, MS)
- **Baptist DeSoto** (Southaven, MS)
- **Baptist Golden Triangle** (Columbus, MS)
- **Baptist Leake** (Carthage, MS)
- **Baptist North Mississippi** (Oxford, MS)
- **Baptist Union County** (New Albany, MS)
- **Baptist Yazoo** (Yazoo City, MS)
- **Mississippi Baptist Medical Center** (Jackson, MS)

TENNESSEE

- **Baptist Children's Hospital** (Memphis, TN)
- **Baptist Collierville** (Collierville, TN)
- **Baptist Huntingdon** (Huntingdon, TN)
- **Baptist Memphis** (Memphis, TN)
- **Baptist Rehabilitation Hospital** (Germantown, TN)
- **Baptist Restorative Care** (Memphis, TN)
- **Baptist Tipton** (Covington, TN)
- **Baptist Union City** (Union City, TN)
- **Baptist Women's Hospital** (Memphis, TN)
- **Crestwyn** (Memphis, TN)

BAPTIST CANCER CENTER

ARKANSAS

- **Baptist Cancer Center-Crittenden** (Opening 2019)
- **NEA Baptist Fowler Family Center for Cancer Care**

MISSISSIPPI

- **Baptist Cancer Center-DeSoto**
- **Baptist Cancer Center-Golden Triangle**
- **Baptist Cancer Center-North Mississippi**
- **Baptist Cancer Center-Union County**
- **Hederman Cancer Center-Jackson**

TENNESSEE

- **Baptist Cancer Center-Bartlett (Tipton)**
- **Baptist Cancer Center-Collierville**
- **Baptist Cancer Center-Memphis (Tipton)**
- **Baptist Cancer Center-Union City**

BAPTIST CANCER CENTER SATELLITE LOCATIONS

ARKANSAS

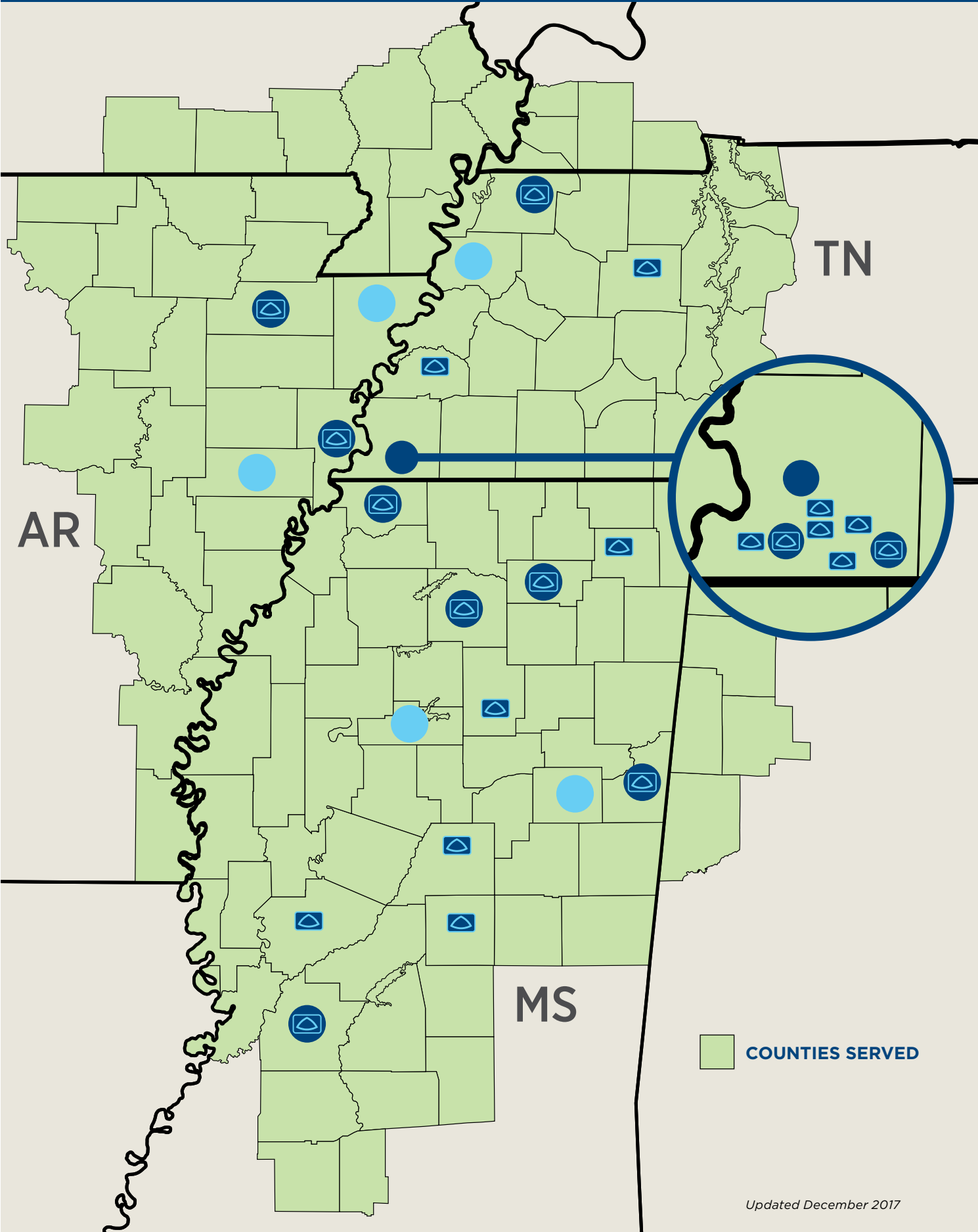
- **Blytheville, AR**
- **Forrest City, AR**

MISSISSIPPI

- **Grenada, MS**
- **Starkville, MS**

TENNESSEE

- **Dyersburg, TN**





Ann Bishop, MSN, FACHE
Oncology Administrator
Baptist Cancer Center

“Geographically, our reach now extends south from Jackson, Mississippi to the corners of northwest Tennessee and northeast Arkansas.”

Strong Foundation, Expanding Care

Cancer is a life-changing event, not only for our patients but for everyone who is a part of their life, including providers and caregivers. At Baptist Cancer Center, our mission is to deliver expert care, treatment and support—when and where our patients need it the most. In 2017, we made significant moves forward thanks to the countless individuals, physicians, and leaders who are dedicated to our patients.

Across the Mid-South region, Baptist Cancer Center is growing both in locations and in services, designed around the belief that expert care can be delivered locally, allowing families the chance to remain close to home. Building on the strong consolidation foundation over the last few years, we continue to grow our services and infrastructure to reach even more patients.

Geographically, our reach now extends from Jackson, Mississippi to the corners of northwest Tennessee and northeast Arkansas. Our recent addition of the Hederman Cancer Center in Jackson, Miss., means Baptist Cancer Center patients have another location offering a full range of services, including medical and radiation oncology, infusion, cancer screening, diagnostics, and support services. The Hederman Cancer Center is designated as a Comprehensive Community Cancer Program by the American College of Surgeons Commission on Cancer and was awarded the Gold Seal of Approval, and Disease-Specific Care Certification in Breast Cancer by the Joint Commission. With this addition and the new infusion center in Collierville, Tenn., we now offer 215 outpatient infusion chairs across the region.

Our clinical and research programs have continued to grow thanks to our clinical teams and NCORP affiliation. Finding answers and improving care, especially for underserved patients in the Mid-South, fuels our research and clinical trial goals.

During 2017, we welcomed Dr. Joseph Santoso, an obstetrician-gynecologist who specializes in gynecologic oncology. Additionally, we added more genetic counseling services, and enrolled patients in our growing multidisciplinary programs like lung, GI and breast. Our Thoracic Oncology program continues to gain national and international recognition for the work they are doing in lung cancer care. We have also expanded our participation in the Oncology Care Model, Centers for Medicare Services (CMS) pilot project by adding additional sites and locations.

As always, for the physicians and patients who place their cancer care in our hands, we are grateful. Every day, our physicians, nurses and caregivers walk hand in hand with our patients to find answers and improve quality of life. It's our unwavering mission.

Ann Bishop

Ann Bishop, MSN, FACHE
Oncology Administrator
Baptist Cancer Center



184 patients participated in the Baptist Health System/Mid-South Minority Underserved NCORP trials, with less than half of the participants holding private insurance.

Our Clinical Trial Expansion Across the Region

The Mid-South region suffers from an abundance of disparities related to cancer morbidity and mortality. At Baptist Cancer Center, we are committed to changing this reality through our participation in the National Cancer Institute Community Oncology Research Program (NCORP). NCORP brings researchers together with local physicians to conduct high quality clinical trials for cancer patients directly in their community.

The five-year grant provides Mid-South patients unprecedented access to clinical trials and research. The Baptist Health System NCORP is one of only 12 centers with an emphasis on broadening access to innovative care to minority and underserved populations. It is the only program within a seven-state region (Oklahoma, Arkansas, Kentucky, Tennessee, Mississippi, Alabama, and West Virginia) to offer National Cancer Institute (NCI)-approved clinical trials for cancer. The Baptist Health System NCORP extends trials to patients in Memphis and Bartlett, Tenn., Southaven and Oxford, Miss., and Jonesboro, Ark. Also, through a strong working partnership with Meharry Medical College, clinical trials are available to patients in Nashville, Tenn.

In 2017, the 29 clinical trials at the Baptist Cancer Center focused on treatment, prevention, and supportive care for patients and survivors. More than 180 patients with lung, breast, gastrointestinal, and hematologic cancers participated in NCI-sponsored research through NCORP.

Patient participation helps:

- Affect their own outcome
- Generate improvements to the standard of cancer care for all

The clinical research operations office provides centralized management and support of our clinical trials by helping to ensure that our trials are conducted with the highest standards according to federal regulations, good clinical practice (GCP), and human subjects protection guidelines.



As part of a breast cancer clinical research trial, Susan meets with **Dr. Sal Vasireddy** and the research team on a regular basis to evaluate her progress.



Susan's Story

Deciding to participate in a clinical trial happens differently for every patient. For Susan Nicholas, a breast cancer patient diagnosed in 2003 at age 54, the decision came nearly 15 years after her original diagnosis. A native of Crittenden County, Ark., Susan's treatment journey included a double mastectomy, chemotherapy and radiation during 2004, followed by reconstructive surgery in 2005.

"I never missed a day of work," she said. With no family history of breast cancer and her cancer staged early, Susan felt positive about her treatment and prognosis.

In 2011, however, the cancer reappeared in her bones, and she began treatment with Dr. Margaret Gore, a hematologist and oncologist. "I felt devastated then, almost betrayed." She underwent another round of radiation, still continuing oral medications as well. In late 2016, her scans revealed little improvement. Her oncologist, Dr. Sal Vasireddy, specializing in hematology, approached her in April 2017 about participating in a Baptist Cancer Center clinical trial. "He and his research nurse gave me lots of material to read, and I felt informed enough to make a decision. He wanted to make sure I had everything needed." Susan said her greatest concern was qualifying for the trial. After talking to her husband and family, she made the decision to participate in a trial targeting hormone receptive-positive breast cancer.

Baptist Cancer Center notified her within 48 hours of her decision that she did in fact qualify as a trial candidate. During the trial, she visits the research nurse once a month for lab work and follow up. "The lesions in my lungs and bones are stable and the liver spot is shrinking," she said. With two sons and five grandkids in her life, Susan feels grateful for the opportunity to be part of research that may make a difference in her life or another.

"I think I'm very lucky to be part of the trial and that I even qualified for it. It's part of who I am now and what I do."

"I think I'm very lucky to be part of the trial and that I even qualified for it. It's part of who I am now and what I do."
– Susan Nicholas



Lindi VanderWalde, MD
Liaison to the Commission
on Cancer

Setting the Standard for Exceptional Care

As an accredited program of the Commission on Cancer, Baptist Cancer Center has greater access to reporting, benchmarking, education, training and development. Baptist Cancer Center physicians and patients know that our exceptional care and growth happens in close collaboration with the Commission on Cancer which is known as the national benchmark for quality care.

The Commission on Cancer, a program of the American College of Surgeons (ACS), recognizes cancer care programs for their commitment to providing high-quality, multidisciplinary patient-centered care.

During 2017, Dr. Lindi VanderWalde, a surgical oncologist specializing in breast cancer, served as the liaison to the commission, and as Baptist Cancer Center's lead voice on a national level. "With our technology and multidisciplinary teams, we are able to provide seamless care to our patients by increasing efficiency and communication," said VanderWalde.

As we grow across the region, Baptist Cancer Center has dedicated resources for prevention, screening, treatment and support for our patients.

This important affiliation and accreditation underscores our unrelenting commitment to continually improve the quality of life and survival for our patients, with clear transparency and accountability to all of our cancer patients and their families.



A **QUALITY PROGRAM**
of the AMERICAN COLLEGE
OF SURGEONS



Joseph Santoso, MD, FACOG

a gynecologic oncologist with specialties in obstetrics, gynecology and critical care

Leading Through Innovative Surgical Techniques

A fast-growing area of care, gynecologic oncology helps female patients solve acute and chronic problems. Our gynecologic oncologists Dr. Sanjeev Kumar and Dr. Joseph Santoso offer patients in the Memphis and north Mississippi areas access to exceptional surgical expertise in women's care. Both are pioneers in research and practice, continually seeking innovative treatments.

Dr. Joseph Santoso joined Baptist Cancer Center in 2017. A board-certified gynecologic oncologist with specialties in obstetrics, gynecology and critical care, Dr. Santoso's past research has focused on the relationship between obesity and cancer, uterine cancer, ovarian cancer, and cervical cancer. In one study, Dr. Santoso's research compares pre- and post-operative methods for blocking pain receptors. Early findings indicate that blocking pain receptors before surgery leads to patients being discharged one day following surgery, rather than up to a week later, when pain is treated after surgery.

In his ovarian cancer research, Dr. Santoso's work focuses on hydrocytosis, or irrigating cancer cells with normal saline or water, effectively exploding cells and providing an alternative to chemotherapies.

Joining Baptist Cancer Center in 2013, Dr. Kumar's research involves many fronts, particularly helping morbidly obese women suffering from lack of care options. In 2017, he was the eighth busiest surgeon in the U.S. using minimally-invasive techniques, particularly the use of robotic technologies for gynecologic cancers. "Robotics is the future of surgery. We see very reliable results," according to Dr. Kumar.

By the third quarter of 2017, Dr. Kumar had performed 285 robotic procedures with 95 percent of the patients considered morbidly obese. Often rejected as candidates for surgery due to weights exceeding 400 pounds, these patients have few options due to greater risks of wound infection, blood loss and pulmonary complications.

Through his dedication to training on robotic technologies, developing and training his OR teams, and educating patients about the risks, has created hope for this particular population of women. "Our program is functioning really, really well. We've established a culture and training by building a system and team."

Dr. Kumar's past research has focused on Hyperthermic Intraperitoneal Chemotherapy (HIPEC), a form of chemotherapy for ovarian cancer that is new to the U.S. and represents one of Baptist's newest services. He has also participated in the NCORP grant through research studies.



Sanjeev Kumar, MD,

a gynecologic oncologist, specializing in minimally-invasive and robotic surgical techniques



The Malignant Hematology & Transplant program has received multiple national recognitions:

- An approved center by the National Marrow Donor Program (NMDP) to perform unrelated donor transplants
- A participating center of the CIBMTR (Center for International Blood and Marrow Transplant Research®)

Expanding Transplant Technology and Expertise

The Baptist Cancer Center's Malignant Hematology & Transplant Program provides patients full support and consultation for malignant hematologic conditions. Our physician experts treat acute myeloid leukemia, acute lymphocytic leukemia, myelodysplastic syndrome, aplastic anemia, multiple myeloma, high-grade lymphomas and other life threatening hematologic conditions.

Our transplant team, including Dr. Salil Goorha and Dr. Muhammad Raza, are specially trained in hematology and disciplines related to hematopoietic progenitor cell (HPC) therapy. A coordinated team of physicians, nurses, nurse practitioners, pharmacists, nutritionists, social workers, consulting specialists and others address both medical and emotional needs using a multi-disciplinary approach.

Our program provides a range of HPC transplant options for patients across the Mid-South.

- Autologous
- Matched Related Donor
- Mismatched Related Donor or Haplo-identical
- Matched Unrelated Donor
- Reduced-Intensity

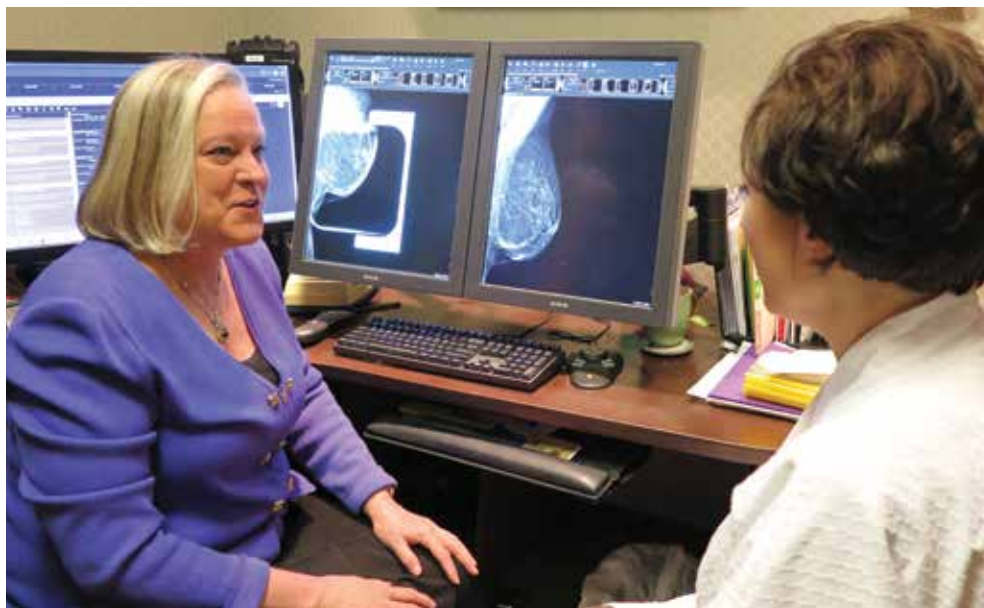
Genetics and ethnicity play a key role when determining a match. Haplo-identical transplant technology has enhanced our ability to provide this life-saving procedure to the ethnically

diverse population in the Mid-south region. Asians and African-Americans are particularly vulnerable when finding a match because the volunteer donor pool for these races is smaller. Our ability to provide mismatched related/haplo-identical transplants has increased the amount of available donors for those who belong to these ethnic groups. With this type of transplant, we can rely on a relative who is only a 50 percent match to the patient.

In 2017, the Center for International Blood and Marrow Transplant Research (CIBMTR) recognized the Baptist Cancer Center's Malignant Hematology & Transplant Program as a high-performing transplant center. We achieved this national recognition for a low-critical field error rate based on data from the past four years. Our data management practices will be shared by CIBMTR during the Clinical Research Professional/Data Management conference at the BMT Tandem Meetings in February 2018.

Locally, our program growth continues. In 2017, the BCC MHT Program began moving ahead with plans to establish weekend clinic operations. This initiative strives to keep patients out of the hospital by offering chemotherapy and supportive care seven days a week, with additional goals to decrease costs, improve outcomes and foster patient satisfaction.

Evelyn Gayden, MD, a breast radiologist at Baptist Women's Health Center, has practiced for 31 years. Her early vision led to the creation of an imaging center dedicated solely to women. Today, her team of diagnostic radiologists help thousands of women each year get the breast care they need.



WOMEN'S HEALTH CENTER 2017 TOTAL

(INCLUDING THE MOBILE
MAMMOGRAPHY UNIT)

45,400 Total breast
exams

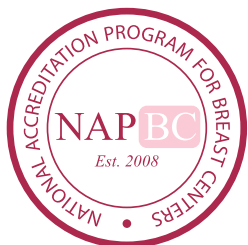
31 Years of Comprehensive Breast Care

Ranked in the top 5% nationally for accredited quality breast care, the Comprehensive Breast Program at Baptist Women's Health Center reaches women of all ages across the Mid-South. The program holds particular distinction through the dual accreditation from the Breast Imaging Center of Excellence (BICOE) American College of Radiology (ACR) and the National Accreditation Program for Breast Centers (NAPBC).

Beginning in 1986, Dr. Evelyn Gayden laid the foundation for creating the first women's imaging center in Memphis. Thirty-one years later, these services are offered across the Baptist Memorial Health Care system, with the Women's Health Center recognized as the flagship location. In addition to the Women's Health Center, Baptist offers breast care services at other metro locations like Baptist Memorial Hospital-DeSoto and Baptist Memorial Hospital-Collierville, as well as across the region from Jackson, Miss. to Jonesboro, Ark.

The multidisciplinary breast care team provides exceptional breast care focused on the early detection, diagnosis, and effective treatment of breast cancer. The women's diagnostic group at Baptist Women's Health Center has nearly 150 combined years of breast radiology experience and expertise.

In 2017, the Baptist Women's Health Center team performed a total of 45,400 breast exams through mammography and breast diagnostics. Our advanced screening technology, the Automated Breast Ultrasound System (ABUS) is the only one offered in Mid-South and helps increase chances for detecting breast cancer early.



EXPANDED MOBILE MAMMOGRAPHY

Baptist Women's Health Center continues to grow access to screenings especially for those women located in specific zip codes with a higher incidence of breast cancer deaths and documented disparities. Baptist's signature pink mobile mammography unit has brought care to patients since 1987.

Through the ongoing grant funding from Susan G. Komen Memphis-MidSouth Mississippi, Baptist has greater ability to offer mammograms and ultrasounds at no cost to qualified patients. This year, Baptist received \$104,000 from Komen for breast care, with another \$43,000 from the Breast Cancer Eradication Initiative.

LEADING SURGICAL TECHNOLOGY

At Baptist Memorial Hospital for Women, innovative technology allows for improved patient experience and enhanced comfort for breast cancer patients. Launched in 2016, the radioactive seed localization program at Baptist, the first in the Mid-South, is designed to minimize pain and discomfort during breast surgery. In 2017, the hospital acquired the region's first SpyElite machine. This technology allows breast and plastic surgeons to assess the blood flow and health of the skin during a mastectomy, helping to minimize reconstructive complications.

SURGICAL EXPERTISE

Baptist Medical Group-Memphis Breast Care providers, Alyssa Throckmorton, MD, Lindi VanderWalde, MD and Marcia Kirby, NP, deliver highly specialized and expert care for diseases of the breast. Both Drs. Throckmorton and VanderWalde are fellowship-trained in surgical breast oncology and their all female-staffed practice is uniquely positioned to address women's treatment concerns. The surgeons focus on all elements of breast care, including cosmetic results, expediting recovery, and helping facilitate multidisciplinary care. They work in collaboration not only with other physician members of the team but also with genetic counselors, oncology-certified dietitians, social workers and nursing staff. Drs. Throckmorton and VanderWalde are also actively involved with the clinical trials program through the Baptist Cancer Center.

In addition to their busy clinical practice, Drs. Throckmorton and VanderWalde participate in leadership roles on both local and national levels. Dr. Throckmorton is the medical director for the breast oncology program and holds faculty appointments at both Vanderbilt University Medical Center and the University of Tennessee Health Science Center. Dr. VanderWalde is also on the faculty at UT. Both surgeons serve on committees for the American Society of Breast Surgeons. Dr. VanderWalde serves as the American College of Surgeons Cancer Liaison Physician for our Commission on Cancer accredited program at Baptist. Together they have multiple publications in peer-reviewed medical journals.



Alyssa Throckmorton, MD FACS,
breast oncology surgeon



Lindi VanderWalde, MD,
breast oncology surgeon



Raymond Osarogiagbon, MD,
co-director, Multidisciplinary
Thoracic Oncology program

The lung multidisciplinary team meets weekly to review patient cases and determine the best course of treatment.



Saving Lives Through Innovative Lung Programs

The Baptist Cancer Center Thoracic Oncology Program, under the direction of Dr. Raymond Osarogiagbon and Dr. Todd Robbins, includes two integrated programs:

- A clinical program to provide high-quality patient care
- A research program focused on providing evidence to support and improve clinical practice

Clinical care throughout the Baptist Cancer Center system centers around the Thoracic Oncology Multidisciplinary Program and the Incidental Pulmonary Nodule Program.

MULTIDISCIPLINARY THORACIC ONCOLOGY PROGRAM

In the multidisciplinary lung program, oncologists, thoracic surgeons, pulmonologists, radiation oncologists, a pathologist, a radiologist, a nurse navigator and data managers gather in a weekly conference to review each patient's case. This conference includes remote participation by lung cancer providers at Baptist Memorial Hospital-DeSoto and NEA Baptist Memorial Hospital. All discussed cases are prospective, with the goal of influencing care delivery.

Through November 2017, treatment planning for 345 patients (including 292 new cases) was conducted through the multidisciplinary thoracic oncology conference, and 186 new patients were evaluated in the clinic.

The National Comprehensive Cancer Network guidelines are used to develop recommendations of care for each case presented, and each patient treated in the co-located clinics. The historical rate of concordance between national recommendations for care and delivered care in the multidisciplinary clinic stands at 91 percent.

2017 MULTI-D CLINIC RESULTS

345 Patients discussed
by the team

292 New clinic
patients

91% of cases in sync with
conference and
national guideline
recommendations

INCIDENTAL PULMONARY NODULE PROGRAM

In its second year, the Incidental Pulmonary Nodule Program, led by Dr. Todd Robbins and Dr. Jeffrey Wright, continued important systematic follow-up of lung nodule incidental findings from radiographic chest scans (X-rays, CT scans and other imaging) in the metro-Memphis region. This systematic process allows for earlier detection of any potentially malignant lung disease, which can lead to curative-intent treatment before the lung cancer has spread through the body. The successful program, initially funded through a grant provided by the Baptist Memorial Health Care Foundation, is now funded through the health care system budget. Additionally, in 2017 Baptist hosted regional lung cancer surgery symposiums specifically to discuss the lymph node kits and the quality of nodal staging in resected lung cancer.

The Incidental Lung Nodule Clinic meets bi-monthly to review patient cases with relatively high risk lesions to determine treatment paths. This clinic is staffed by a two pulmonologists, Dr. Jeffrey Wright and Dr. Ajay Wagh. Through October 2017, the nodule team has seen 213 patients in the physical clinic location; 56 patients have undergone subsequent lung biopsies; 63 patients have been diagnosed with lung cancer, with 49 referred for surgery, and 59 referred to the Thoracic Multidisciplinary Clinic.

LEADING RESEARCH

Under the leadership of Dr. Osarogiagbon, the Thoracic Oncology Research Group continues innovative work on national and international research fronts.

- The improvement of surgical resection for patients with potentially curable lung cancer (NIH)
- The impact of multidisciplinary care on the processes and outcomes of care delivery for lung cancer patients (PCORI)
- Serving as the lead research group for a national project to develop and test an Optimal Care Coordination Model for lung cancer Medicaid patients (Bristol Myers Squibb Foundation and the Association of Community Cancer Centers - ACCC)

Significant research results have been achieved: significant increase in survival for Mid-South patients with lung cancer; patients have received better care through the multidisciplinary program; and finally, the development of a new lung cancer surgery quality metric for accredited U.S. programs.

RESEARCH OUTPUT

- 11 manuscripts in oncology journals; Abstracts presented at the American Society of Clinical Oncology (ASCO) meeting, American College of Epidemiology Meeting, Multidisciplinary Thoracic Cancers Symposium, IASLC Chicago Multidisciplinary Symposium, World Conference on Lung Cancer in Yokohama, Japan
- Dr. Osarogiagbon accepted multiple invitations for visiting professorships at noted national cancer centers like MD Anderson and Sloan Kettering. Dr. Osarogiagbon was also appointed to chair several key national research committees formed through IASLC, SWOG, and NCI.



Todd Robbins, MD,
chair of the Thoracic Surgery/Pulmonary
Medicine program

2017 INCIDENTAL PULMONARY NODULE PROGRAM RESULTS

213	Patients seen at the clinic
56	Patients received lung biopsies
63	Patients diagnosed with lung cancer
49	Patients referred for surgery
59	Patients referred to the Thoracic Multi-D Clinic

Stephen Behrman, MD, visits with one of his cancer patients following her pancreatic surgery.



Stephen Behrman, MD specializes in pancreatic surgery and research.

Innovative Oncology Research

As the gastrointestinal multidisciplinary program has developed, so has the innovative work and research by Baptist Cancer Center physician leaders. Dr. Aleksander Jankov, MD leads the gastrointestinal malignancy program and moderates Baptist's multidisciplinary gastrointestinal tumor board. A well-respected physician, Dr. Jankov is a sub-investigator committed to raising research to new heights.

Dr. Stephen Behrman is a recognized surgeon and leader in research and the continued development of a gastrointestinal multidisciplinary program. He serves on the National Comprehensive Cancer Network (NCCN) board for pancreatic cancer. The GI multidisciplinary program is designed to offer patients a “one-stop” experience when facing cancer treatment. Baptist participated in a national, multi-institutional randomized controlled study focused on whether drains are necessary following pancreatic surgery to enhance the safety of these complex procedures. Both studies have been published in the highest tier, peer-reviewed surgical journals and were presented at conferences.

“We have published several articles in last two years on pancreas surgery utilizing the database from the American College of Surgeons National Surgical Quality Improvement Program. This is a quality initiative lead by the ACS and our work has focused on making surgery for those with pancreas cancer safer,” said Behrman.

Through the Baptist Institutional Review Board, Dr. Behrman provides tissue from patients with pancreas cancer for the translational research laboratory at University of Tennessee Health Sciences. The focus of this work is on overcoming chemo resistance to commonly used chemotherapy agents and on enhancing drug delivery to the cancer bed. Dr. Behrman and his team have also connected patients to an important clinical trial sponsored by the Southwest Oncology Group which examines the utilization of two top-tier chemotherapeutic regimens in patients with clearly resectable pancreas cancer.



Oncologist Aleksander Jankov, MD, demonstrates how Optune® technology and treatment works for those patients diagnosed with glioblastoma, a particularly aggressive brain cancer.

New Hope for Brain Cancer & Melanoma Patients

In 2017, Dr. Jankov broadened his research on two fronts: brain cancer and melanoma. On May 10, Dr. Jankov became the first Baptist Cancer Center medical oncologist officially certified to prescribe a new treatment for brain cancer. The treatment called Optune®, employs electrodes delivered through a wearable, portable medical device. Patients wear electrodes on the skull and carry a portable battery back that weighs less than three pounds.

Optune creates low-intensity electric fields – called Tumor Treating Fields (TTFields) – which potentially slow or stop cell division leading to cell death. Because TTFields do not enter the bloodstream like a drug, they do not significantly increase TMZ-related side effects for newly diagnosed patients. Dr. Jankov, along with Semmes Murphey colleagues, participated in a certification training. He now evaluates patients who are potential candidates for Optune. After the initial placement, a patient is then equipped to manage the device under medical supervision.

Optune findings from a randomized, multi-center, phase III clinical trial showed early, impressive results. Approximately half of the people who used Optune with TMZ were alive at two years or longer, compared to 32 percent who were on TMZ alone. In a long-term follow-up of 695 people in the same study, the median survivals and median progression-free survivals were consistent. Survival at five years was 13 percent for Optune + TMZ vs 5 percent for TMZ alone.

In other research, Dr. Jankov has completed training to administer a new therapy, Imlygic, designed to help treat melanoma. The therapy is a genetically modified oncolytic for the treatment of unresectable cutaneous, subcutaneous, and nodal lesions in patients with melanoma recurrent after initial surgery.



Aleksander Jankov, MD, leads the gastrointestinal malignancy tumor board, as well as the neuro-oncology tumor conference.

CyberKnife® technology offers a whole new treatment option for cancer patients. This non-invasive procedure delivers targeted radiation to tumors without pain or hospitalization. Patients lie on a table during the procedure and benefit from reduced treatment time.



Treating Patients Through Advanced Radiation Oncology Care

The Baptist Cancer Center radiation oncology team plays a critical role in a patient's treatment path.

"Our care begins with the patient. We keep everything patient focused," said Rameses L. Sroufe, M.D., Medical Director of Radiation Oncology at Baptist Memorial Hospital-Memphis. "Our goal, from the consultation to the end of treatment, is to provide cutting edge, evidence-based care that is extremely efficient and patient-friendly. Cancer is scary; radiation therapy for a lot of patients is scary. Our physicians and staff value creating a nurturing and friendly environment for all of our patients, and empowering them with information to help ease anxiety."

All Baptist Cancer Center radiation oncologists are board-certified doctors. A thorough consultation with the patient, other providers, physicians and family begins the treatment process followed by continuous collaborative, integrated conversations among all providers through multidisciplinary conferences.

Dr. Sroufe specializes in prostate cancer treatment through the use of new radiation technologies like CyberKnife®. Likewise, the radiation oncology team treats many cancers including brain, lung, breast, liver and spinal cord or vertebral body tumors. For skin cancer patients, high dose rate radiation offers an alternative to surgery by treatment via applicators placed directly on the skin, reducing irritation and discomfort.

Baptist was the first to bring CyberKnife® technology to the Mid-South. Patients benefit in many ways from this technology including reduced treatment time, no pain, no hospitalization and quicker recovery time. Non-invasive targeted radiation therapies zero in and target tumors—while reducing exposure to healthy tissue.

Baptist Cancer Center advanced technologies include:

- RapidArc®
- Stereotactic Body Radiation Therapy (SBRT) or Radiosurgery (SRS) using CyberKnife®
- Intensity Modulated Radiation Therapy (IMRT)
- High Dose Rate Brachytherapy including surface brachytherapy for treatment of skin cancer and accelerated partial breast applications

A third of Baptist Cancer Center patients receive radiation therapy as part of their cancer treatment plan. "We treat all stages of cancer, including late stage. In patients with incurable disease, radiation can help ease pain, stop bleeding or treat potentially catastrophic conditions such as brain metastases or cord compression," said Dr. Sroufe.



Palliative medicine offers patients another layer of compassionate care with treatment options to manage pain and symptoms associated with a long-term illness.

The Balance Between Cure & Compassion

Every cancer doctor knows that diagnosis and treatment paths are as different as every patient. At Baptist Cancer Center, delivering compassionate care that results in the greatest quality of life is our focused mission, whether a cancer is completely treatable or in the late stages.

While technologies and expertise in cancer care across the country have given many patients extended life and hope, the reality still exists that some diagnoses will fall outside of a curative path. It is then we ask and answer those critical treatment questions.

CHANGING THE CONVERSATION

Palliative care is specialized medical care focused on helping to identify and relieve symptoms like pain, regardless of the cancer stage. Unlike hospice, a patient has no life-limiting diagnosis or set life expectation. By changing the conversations between doctors and patients regarding care, we can begin managing the disease with less burden to the patient and family. We find palliative care approaches reduce ER visits, hospitalizations and caregiver distress.

In 2017, Baptist Medical Group Palliative Medicine program opened at Baptist Memphis. Our specially trained physicians and palliative care team help patients and families address complex care issues. Through goal setting, psycho-social and spiritual support, symptom control and planning, our providers offer new hope and support during challenging times.

The Baptist Specialty Pharmacy offers cancer patients a helpful alternative when seeking specific cancer medications, infusions and guidance.



Resources, Support And Care

Specialty Pharmacy: Opened in 2017, the specialty pharmacy helps cancer patients with specific medications, infusions and with side effects resulting from cancer treatments. Through our electronic health record, Baptist OneCare® MyChart, managing therapies and treatment includes confidential delivery of specialty medicines right to a patient's door. Patients can also pick up their specialty prescriptions from our retail location in the physician office building next to Baptist Memorial Hospital-Memphis.

Genetics: Cancer treatments and decisions may be influenced by a patient's genetic traits. Baptist's genetics department participates in community and physician outreach programs to raise awareness about hereditary cancer syndromes. Our genetics counselors are available to help identify patients who have hereditary risks.

Social Work: Our oncology-certified social workers help families navigate the complex emotional and practical realities of cancer. Our social work team works closely with the patient, family, physicians and caregivers to find answers, solve problems, and identify resources.

Navigation: Cancer care is often bewildering to patients as they navigate care. Patient navigators work with the patient and the entire care team to help them identify necessary services and resources.

Nutritional Support: Maintaining good nutrition is important for all of our cancer patients. A special nutrition team includes a board-certified specialist in Oncology Nutrition (CSO) who

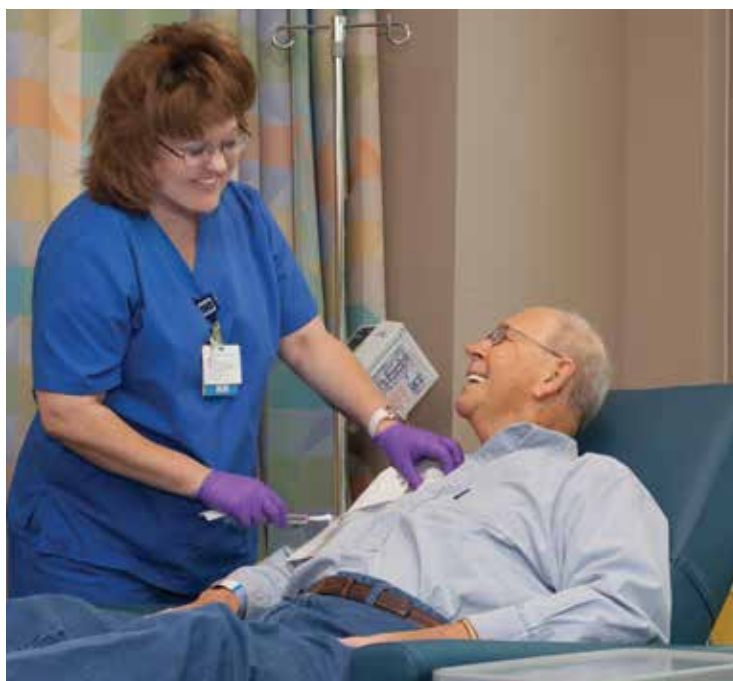
works with outpatient infusion and radiation departments. Patients admitted to our inpatient hematology unit will see a registered dietitian within 72 hours of admission. All hospital oncology patients receive a nutrition screening upon admission.

Rehabilitation: Physical, occupational and speech therapy are tailored to address a wide array of cancer-related indications, including lymphedema, joint and soft tissue restrictions, nerve entrapment or injury, swallowing/aspiration issues, cognitive and communicative disorders, and fatigue and deconditioning that may occur because of a cancer diagnosis or treatment.

Financial Counseling: A cancer diagnosis can result in financial challenges and added stress. Our team of financial counselors and patient assistance coordinators help patients with various financial support.

Hospice Services: An interdisciplinary team provides complete support for patients and families, including bereavement care.

Powell Library, Journey Binder: The Powell Library provides practical support including computer and internet access, faxing, and photocopying. For cancer patients, the "My Personal Baptist Treatment Journey" begins at diagnosis and serves as a way to help patients understand their treatment plan, resources, side effects and contacts. The binder is available online.



Highlights

New treatment for melanoma patients

Oncologist Dr. Aleksander Jankov participated in training with Imlygic™, a new immunotherapy cancer treatment designed to kill melanoma cancer cells in the skin and lymph nodes. Dr. Jankov is the only Baptist Cancer Center oncologist currently trained to administer this new therapy.

Grand opening of the Baptist Specialty Pharmacy

Baptist Specialty Pharmacy opened on the Baptist Memphis campus. Offering specialized pharmacy services for patients, physicians and providers, our patients now have access to specialty drugs to help manage specific conditions or diseases like cancer.

Baptist Cancer Center opens Collierville location

The new Baptist Cancer Center location at Baptist Memorial Hospital-Collierville opened in November 2017 (pictured above left). Providers Drew Dill, MD, Aleksander Jankov, MD and Aaron Harris, NP, practice at the Collierville office offering infusion services.

Multiple sites earn tumor registry awards

Baptist Cancer Center locations in Oxford, Southaven and Columbus, Mississippi earned tumor registry certifications and awards for the high-quality data in cancer registries.

Dr. Raymond Osarogiagbon honored with national award

Dr. Osarogiagbon was honored by the Association of Community Cancer Centers with the annual Clinical Research Award. Given for research that has significantly influenced cancer patients, family and community, the national award recognized Dr. Osarogiagbon's groundbreaking lung cancer research and programs.

Expanding cancer care in Jackson, Mississippi

Through the 2017 merger between Baptist Memorial Health Care and Mississippi Baptist Health System, patients in central Mississippi have access to expanded cancer care at Hederman Cancer Center in Jackson, Miss.

Baptist Memorial Hospital-Crittenden

From the 2016 groundbreaking to the 2017 topping out ceremony (pictured above right), the construction progress on the new hospital has moved at a healthy pace. When finished, the 50,000 square-foot hospital will include cancer services. In addition to diagnostics like MRI and mammography, eight infusion chairs will allow patients to receive cancer treatment locally.

