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Cancer Journal

MEMORIAL HERMANN
Cancer Center

In this issue

Survivorship

Immunotherapy enables skin cancer patient's immune system to fight back

John Hodgson has spent a lot of time in the sun, including on the golf course. The 86-year-old resident of Manvel, Texas, attended Lamar University in Beaumont on a golf scholarship in the 1950s and has been playing golf ever since.

Unfortunately, much of Hodgson's time in the sun occurred before sunscreen. The sun protection factor (SPF) rating wasn't invented until 1962, and the U.S. Food and Drug Administration (FDA) began regulating the sunscreen market in 1978.

Ironically, it was a golf-related incident that led Hodgson to learn he had skin cancer. "I was hit on the forehead by a golf ball and didn't think much of it," he says. "But the bump stayed. Then a couple weeks later, I bumped my head there again–on a two-by-four in the barn while feeding the animals–and the bump got bigger and started moving."

A doctor in Clear Lake, Texas, biopsied the bump and diagnosed Hodgson with squamous cell cancer, the second most common form of skin cancer, most often caused by ultraviolet (UV) exposure from the sun or from using indoor tanning beds. The doctor referred Hodgson to the Texas Medical Center in Houston for further evaluation and treatment.

By the time Hodgson was seen by physicians at Memorial Hermann Cancer Center – Texas Medical Center, the lesion on his head had grown to 7 centimeters and was approaching the bone of his skull.

At the Cancer Center, a multidisciplinary team of specialists evaluated Hodgson and collaborated to create a treatment plan. The team of specialists, all of whom are affiliated with Memorial Hermann, included medical oncologist **Syed Jafri, MBBS**, associate professor in the Division of Oncology at McGovern Medical School at UTHealth Houston, head and neck surgeon **Kunal Jain, MD**, associate professor in the Department of Otorhinolaryngology-Head and Neck Surgery at UTHealth Houston, and radiation oncologist **Angel Blanco, MD**, director of radiation oncology and stereotactic radiosurgery at UTHealth Houston.

"Unlike standard cancer treatments–surgery, radiation or chemotherapy, which are used to target and kill cancer cells–immunotherapy harnesses the patient's immune system to attack the cancer."

- Dr. Syed Jafri, MBBS

Rather than recommending surgical removal of the lesion, which Dr. Jafri says would have yielded a large defect, poor wound healing and the risk of cancer regrowth, the team recommended a relatively new form of treatment, immunotherapy. As Dr. Jafri explains, "Unlike standard cancer treatments–surgery, radiation or chemotherapy, which are used to target and kill cancer cells–immunotherapy harnesses the patient's immune system to attack the cancer."

Every three weeks for the past eight months, Hodgson and his wife of 62 years, Shirley, have traveled from their home in Manvel to the Cancer Center for Hodgson's immunotherapy treatments. Hodgson says each treatment, administered intravenously, lasts about 30 minutes. The treatments are painless, and he has experienced no side effects.

Most important, the treatments are working. “Mr. Hodgson has had a near complete response with almost total resolution of the primary tumor–a very good outcome,” says Dr. Jafri.

The specific immunotherapy treatment Hodgson is undergoing uses an immune checkpoint inhibitor which was recently FDA approved for treating skin and lung cancers. Dr. Jafri says he has used this to treat other skin and lung cancer patients with generally very good results. “Patients typically experience few if any side effects, which can include temporary post-infusion fatigue and pain at the infusion site, which can be treated with Tylenol.”

Immunotherapy was originally introduced in 2011 to treat melanoma. Now, it is being used to fight all major forms of cancer.

Hodgson recently retired from golf when his golf club closed, giving him more time to enjoy his family, including Shirley and their daughter, six grandchildren and 10 great grandchildren. Initially reluctant to try the treatment, he has become a huge advocate for it, saying, “If someone asked me about it today, I’d say, ‘Jump on it!’” ●

73-year-old not slowing down after Retzius-sparing surgery for prostate cancer

Having a 50-year career in sales and marketing, Kriss Woodbury's job is to get messages out to consumers. But it was a message from his physician that stopped him in his tracks–"You have prostate cancer."

Before the diagnosis, Woodbury didn't have any symptoms. But after a visit with his primary care physician (PCP), it was confirmed he had an elevated PSA (Prostate Specific Antigen) level of 4.5, just above the normal range of 4. PSA is a protein produced by both normal and malignant cells of the prostate gland. A PSA test is a blood test that measures the levels of a specific protein produced by cells in the prostate gland. Abnormally high PSA levels can indicate the presence of prostate cancer.

Woodbury knew he was at higher risk because his father was diagnosed with prostate cancer when he was in his 70s. Over the next two years, his levels continued to steadily climb, eventually reaching 5.25. It was time to take action.

His PCP referred him to **David Kent, MD**, a Memorial Hermann Medical Group (MHMG) urologist affiliated with Memorial Hermann Memorial City Medical Center and Memorial Hermann Katy Hospital. Kent ordered a number of diagnostic tests including an MRI, which came back inconclusive, as well as biopsies. The biopsies showed that six of the eleven specimens evaluated were "dirty" or positive for cancer.

Dr. Kent referred Woodbury to Memorial Hermann Medical Group urologist **Paul Smith, MD**, a colleague who specializes in minimally invasive robotic prostate surgery and also is affiliated with Memorial Hermann Memorial City and Memorial Hermann Katy.

After evaluating Woodbury, Dr. Smith confirmed that Woodbury was a good candidate to undergo the Retzius-sparing prostatectomy, a procedure that allows the surgeon to approach the prostate from below, rather than from above the bladder. In the traditional prostatectomy, the most common problem following the surgery is leakage and difficulty passing urine. With the Retzius-sparing prostatectomy, most patients achieve urinary control more quickly, allowing them to get back to their daily lives. Dr. Smith is one of few surgeons locally who are experienced in this new technique, and he has been performing it on his patients for more than a year with great results.

"More than 75% of my patients who undergo this procedure experience immediate continence compared to 25% for patients who underwent the classic approach," Dr. Smith says. "It's a dramatic difference for both urine control and better erectile function. I truly believe this surgical technique is the future for prostate cancer patients."

Woodbury describes Dr. Smith as an incredibly skilled surgeon who takes the time to get to know his patients and makes sure they know exactly what the treatment plan will be.

"I remember being in his office and thinking how hands-on he is with his patients," Woodbury says. "He sat down with me and began drawing pictures to show me exactly what he would do in surgery. This extra step shows the kind of surgeon he is. His bedside manner is the gold standard, and he is truly a gifted surgeon."

On April 6, 2021, Dr. Smith performed a Retzius-sparing prostatectomy on Woodbury. "He had an elevated PSA without symptoms," says Dr. Smith. "He had intermediate

risk prostate cancer, meaning the cancer was confined to the prostate, making him an ideal candidate for surgery."

Before surgery, Woodbury knew he had to do his part by exercising and following a healthy diet. His commitment to being healthy paid off. Despite having six incisions from the surgery, he didn't take any pain medication.

"I knew I wanted to get back to my daily routine quickly, so I made the commitment to be the healthiest patient I could be before undergoing surgery," Woodbury says.

Today, Woodbury is doing incredibly well following his surgery. At 73, he is still working with no plans to retire. His commitment to being healthy is still going strong as he runs most days, rain or shine, to stay in shape. "His prognosis is excellent," Smith says. "His chance of needing postoperative radiation is minimal, because he has no detectable cancer on his pathology, or in his first post-surgical PSA." Among many things, Woodbury says that his cancer experience has taught him not to be afraid.

His advises men to be proactive when it comes to their health and undergo the screenings recommended by their physicians.

"You are in control of your health," Woodbury says. "The worst thing you can do is put something off when you should have acted. I'm so grateful for the compassionate team at Memorial Hermann who took care of me and got me back to work and life."

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Alarming rise in colorectal cancer among younger adults

In February 2022, (then) 38-year-old Kathryn Moseley saw her primary care doctor complaining of stomach problems. "I had reflux," she says, "and 'sensitive tummy'–I constantly felt full despite having chronic diarrhea." Ten months later, the Tomball, Texas, mom was diagnosed with stage III rectal cancer. By that time, there was blood in her stool.

Moseley is one of a growing number of adults ages 54 and younger being diagnosed with colorectal cancer (CRC). According to a 2023 report published by the American Cancer Society (ACS), nearly double the number of adults under the age of 55 are being diagnosed with colorectal cancer now than a decade ago–despite a drop in the incidence of CRC in the general population.

Lifestyle factors play a role

What's behind this alarming trend? Colon and rectal surgeon **Mark. J. Pidala, MD**, assistant professor of surgery at McGovern Medical School at UTHealth Houston, who is affiliated with Memorial Hermann, says, "Although the exact cause is not yet completely understood, experts point to significant changes in U.S. lifestyle over the last 50+ years."

Among the potential culprits are increasingly sedentary lifestyles, the dramatic increase in obesity/metabolic syndrome in the U.S. and the substantial change in diet from more whole and natural foods to fast foods, processed foods and sugars.

Dr. Pidala says that while genetics are involved in CRC, cannot solely be attributed to genetic factors. Moseley's half-sister was diagnosed with colon cancer at age 31, a year and a half before Moseley's diagnosis, yet genetic testing showed that Moseley had no "known" genetic abnormalities that would predispose her to rectal cancer. "Her history–the fact that there are two family members diagnosed with CRC in their 30s–highlights the fact that there are certainly aspects of genetics that we still do not understand," he says.

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Mortality rates linked to later-stage diagnoses

The ACS report also showed that CRC mortality rates are also increasing among individuals younger than 50 years of age, despite a modest decrease in CRC mortality rates in adults ages 50+. This may be due, in part, to the fact that many younger patients are diagnosed later in the progression of the disease, when it's harder to treat. According to the ACS report, stage at diagnosis is the most important factor in survival; overall survival is highest in individuals ages 50-64 years because they are most likely to be diagnosed at a localized stage–35% versus 26% of individuals younger than 50 years of age.

Dr. Pidala says these later diagnoses among younger patients might be attributable to the general lack of CRC screening before the age of 45 (the U.S Preventive Services Task Force recommends screenings begin at age 45; age 40 (if there's a family history of CRC) and/or to younger adults' propensity to ignore symptoms. "Younger patients are not even thinking about the 'C-word' when they develop symptoms, even when they see visible blood in their stool, which they often attribute to 'hemorrhoids,'" he says.

He also cites "the embarrassment factor" ("Younger patients seem more reluctant to see a doctor for bowel, rectal or anal issues out of embarrassment.") and a lack of awareness of these CRC trends among primary care physicians. "Primary care physicians can also attribute symptoms to hemorrhoids in the younger population because they may not be aware of the increasing trends of CRC in younger patients," he says.

Multidisciplinary team approach

Fortunately, Moseley did not ignore her symptoms, nor did her primary care physician, who referred her to a gastroenterologist who performed an endoscopy and colonoscopy. Based on the results of the colonoscopy, he referred Moseley to Dr. Pidala. Her work-up revealed stage III rectal cancer.

Rectal cancer often requires a combination of chemotherapy, radiation and surgery. In addition to Dr. Pidala, Mosely's care team includes medical oncologist **Andrew Jackson, MD**, and radiation oncologist **James Zhu, MD**, both of whom are affiliated with Memorial Hermann The Woodlands Medical Center.

Memorial Hermann The Woodlands is accredited by the American College of Surgeons as a National Accreditation Program for Rectal Cancer (NAPRC). The NAPRC program was developed to improve the care of rectal cancer patients in the U.S. by standardizing care and creating a multidisciplinary approach, both of which have been shown to improve patient outcomes, says Dr. Pidala.

A standard NAPRC practice is for each patient's case to be presented before a multidisciplinary team called a tumor board. Colorectal cases are presented to the tumor board at Memorial Hermann The Woodlands at diagnosis and again post-surgery. The team collaborates to develop an optimum treatment plan for each patient. Moseley's plan included radiation and chemotherapy to shrink the tumor. If all goes as planned, upon completion of Moseley's pre-surgery treatments, Dr. Pidala will perform surgery to remove the cancerous tissue and the surrounding lymph nodes.

Strong support system

Dr. Pidala says Moseley has a great attitude and a strong support system. "Her husband accompanies her to office visits and is very engaged in our discussions," he says. "And she is very optimistic and has a great sense of humor. I believe this positive outlook often affects patients' outcomes in a favorable way."

Education and outreach needed

Despite these concerning trends, there is hope. "CRC is curable with screening and early detection," says Dr. Pidala. "This is why it is imperative to educate not only the community at large but all physicians who may be primary caregivers to these young patients. Bleeding should not be ignored, either by the patient or the physician," he says emphatically.

Moseley concurs: "I'll tell anyone. If you have symptoms, go get checked out, and the sooner the better." ●

Learn more at memorialhermann.org/services/conditions/colon-cancer.

Radiation therapy helps keep 9/11 firefighter's prostate cancer at bay

As a firefighter in New York City during 9/11, Victor Rosario battled the ravages of terrorism to protect the lives of his fellow citizens. Now, as a seven-year Fire Department New York (FDNY) retiree, he's fighting a new battle–against prostate cancer.

The FDNY World Trade Center (WTC) Health Program provides medical monitoring and treatment of WTC-related health conditions for 9/11 responders and providers. In 2021, a Prostate-Specific Antigen (PSA) test during a routine annual physical indicated that Rosario's PSA levels were at the top of the range of what is considered normal. (A PSA test is a blood test that is commonly used to screen for prostate cancer.) He had no symptoms.

Within just a few weeks, his PSA levels steadily increased, and a biopsy showed he had prostate cancer. On his urologist's recommendation, in December 2021, he underwent a prostatectomy–surgical removal of the prostate–to get rid of the cancer. He was 52 years old and the father of three adult children.

In February 2022, Rosario moved to Houston to be with family and continued to take advantage of the yearly physicals provided through the WTC Health Program. A few months later, a PSA test indicated a level outside of the "undetectable" range, and subsequent tests showed his PSA levels were again on the rise. "I knew this shouldn't be happening," says Rosario. "The doctor in New York explained that after my surgery, my PSA levels should be 'undetectable.'"

Rosario, then 54 years old, was referred to radiation oncologist **Angel Blanco, MD**, associate professor in the Vivian L. Smith Department of Neurosurgery and director of radiation oncology and stereotactic radiosurgery at McGovern Medical School at UTHealth Houston, who is affiliated with Memorial Hermann. As Dr. Blanco explains, removal of a cancerous prostate doesn't guarantee a patient's prostate cancer won't come back. "If the margins (edge or border of the non-tumorous tissue around the tumor that has been removed) are positive–meaning some cancer cells were left behind–there's about a 30% chance that the PSA will ultimately rise."

Dr. Blanco created a treatment plan for Rosario that included a combination of radiation therapy and a hormone deprivation drug to kill the remaining cancer cells and stave off recurrence.

In January and February 2023, Rosario underwent 39 radiation treatments with very few side effects. "I went five days a week, and my treatments lasted about 15 to 20 minutes," he says. "All I experienced was slight burning with urination and slight urinary incontinence, all of which has gone away."

He says, overall, it was a "pleasant experience." "Once I got over the initial shock, it was great," he says. "The nurses in

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the radiation oncology clinic were so helpful and friendly."
Rosario is happily getting on with his life. He bought a new house in Conroe, Texas, where he enjoys walking his dog and spending time with his family.

Dr. Blanco commends Rosario for taking advantage of regular prostate cancer surveillance. "If he had just thought, 'Well, I'm done, you know, they took the prostate out, I'm good,' and had never been checked, he might have found himself in trouble down the road."

Rosario credits the FDNY WTC Medical Monitoring program with enabling him to catch his cancer when he did. "I am so grateful for this program," he says. "Were it not for monitoring, I might not have been diagnosed until the cancer was more advanced."

According to the American Cancer Society (ACS), about one man in eight will be diagnosed with prostate cancer during his lifetime. Prostate cancer is the second most common cancer and the second leading cause of cancer death in American men, behind only lung cancer. The average age of men when they are first diagnosed is about 66.

The ACS recommends that men who are at average risk of prostate cancer discuss prostate screening with a health care provider at age 50, earlier if they are at higher-than-average risk.

Learn more at memorialhermann.org/services/conditions/prostate-cancer.

Middle meningeal artery embolization helps nurse overcome complications from acute leukemia

As a nurse, Donna Ford understands the importance of early medical intervention to prevent catastrophic outcomes when something within the body malfunctions. The 52-year-old Livingston, Texas, resident, who works at a nursing home in Trinity, didn't worry too much about herself when she fell at her home last year, landing on her bottom.

"Falling is not uncommon for me," she says, referring to the fact that she previously had her left leg amputated. But she recalls feeling what she referred to as a "charge" that went up into her head when she landed. Later that evening, when she experienced a headache, vision that she described as being "off" and a rushing sound in one of her ears, she asked her husband to take her to the emergency room.

There, doctors used a CT scan of her brain to diagnose her with a subdural hematoma, in which blood collects in the skull, putting pressure on the brain. She was sent home from the hospital and woke up the next day vomiting.

"As a nurse, I knew that was not a good thing," she says.

She returned to the emergency room, and another brain scan found that her hematoma had worsened. They immediately transported her by Memorial Hermann Life Flight® to Memorial Hermann-Texas Medical Center.

Doctors at Memorial Hermann-TMC discovered that Ford's brain bleed was not caused by the fall, but rather by acute promyelocytic leukemia (APL), which affects the bone marrow and inhibits clotting.

According to Ford's doctor, oncologist **Adan Rios, MD**, professor in the Division of Oncology at McGovern Medical School at UTHealth Houston, who is affiliated with Memorial Hermann-TMC, most people who have APL will have mild symptoms that may include bruising easily, heavy menstrual periods, nosebleeds and small red spots under the skin. These people may also experience fatigue, joint pain and loss of appetite.

Dr. Rios says that about 10% of APL patients will have serious bleeding, often in the brain, like Ford experienced. This complication can create challenges to surgery, and Ford needed treatment to stop the bleeding in her brain.

She was admitted to the Neurosurgery Unit for monitoring and quick intervention should her bleed worsen. Doctors from the Neurosurgery intensive

care unit (ICU) discussed with Dr. Rios the option of treating Ford's brain bleed with a procedure commonly used for chronic subdural hematomas that had been successfully performed at a Georgia Hospital on a patient with APL. Dr. Rios agreed, and neurosurgeon **P. Roc Chen, MD**, professor and director of the cerebrovascular and endovascular program at UTHealth Houston, affiliated with Memorial Hermann-TMC, led the procedure.

During the procedure, Dr. Chen threaded a catheter, or tube, into the brain through a blood vessel in the groin. Through the catheter, he deployed microscopic particles to close off, or embolize, the blood vessel feeding the brain bleed. Ford became the second APL patient in the country, according to Dr. Rios, to be treated using this method, known as middle meningeal artery embolization.

"In a matter of 24 to 48 hours, patients are basically back to normal without having to undergo neurosurgical intervention in the brain," Dr. Rios says. "Once the brain bleed was resolved, we could focus on treating Donna's cancer with chemotherapy."

Ford says that following her procedure, she felt no more pain in her head, she stopped vomiting, and her confusion began to clear up.

Luckily for her, about 95% of APL cases are cured, Dr. Rios says. "Once you get the patient over the acute phase, most of these patients will be cured of their leukemia."

Ford underwent four rounds of chemotherapy over eight months and is now considered in remission.

She credits her 15 years of experience as a nurse with keeping her positive throughout her treatment. "It was pretty scary, but in the back of my mind, I knew what was going on, and I knew it could be taken care of," she says. "I knew I was where I needed to be."

Breast cancer survivor receives a guiding hand

When Williadene Brown was diagnosed with cancer, she had plenty of questions. She just couldn't think of the words to ask them.

"It was like a numbness," she recalls. "I couldn't talk to my family. I could barely talk to my pastor. I just couldn't talk. I remember sitting on the side of my bed, thinking, 'OK, God, what do I do now?'"

Brown, 61, discovered she had cancer in October 2021 following a routine mammogram, which led to an ultrasound, then a biopsy. "It came back that it was breast cancer. Stage IIB. And it was aggressive," she says.

The timing couldn't have been worse. Brown's brother had died from cancer the month before, and her daughter was diagnosed with a different form of cancer around the same time. "With all that going on, I couldn't function. I couldn't think," Brown says. "It was too much." That was when she got a call from **Shernette Sherrill, RN**, an oncology nurse navigator at Memorial Hermann Northeast Hospital. "She told me all about what to expect, what I'd be going through and how she could help me," Brown says. "She's been with me the whole way, advocating for me and supporting me. I could hardly talk at the time, but Shernette was there to talk for me."

Nurse navigators are registered nurses who help patients access the care and resources they need throughout treatment. While they often work with cancer patients, as Sherrill does, they are becoming more prevalent in other specialties as well.

"It's a way to make sure no patients fall through the cracks," Sherrill explains. "This way, they have one person who

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can answer their questions and make sense of this whole confusing process. And if there are scheduling problems or other barriers to treatment, I can help with that, too."

The biggest barriers Sherrill typically sees are financial. "I get quite a few patients who don't have insurance, so I'll help find a way for them to receive affordable care," she says. "Transportation is another need–just getting to and from appointments can be a huge hurdle for patients. Another big part of my job is providing education regarding the patient's diagnosis and treatment plan. As a nurse navigator, you want to make sure they understand what the doctors are telling them and what treatment options they have."

But perhaps the most essential part of her job is offering compassion, encouragement and support. "I don't want any patient to be alone when they're going through treatments," Sherrill says. "It's hard because I've encountered patients who don't have a support system, and a lot of them don't know if they're going to get through it. I tell them, I'm here for you. Treating each patient like a family member and giving them that encouragement is so important. The reward is seeing that patient ringing the bell when they're done with their treatment and seeing the joy in their face. It's like: 'Gosh, I made it.'"

For Brown, that support was vital. "I didn't want to burden my family, who were already dealing with so much. Shernette promised she would be there for me–she would walk with me through this journey," Brown says. "And she was. She was there to tell me exactly, step by step, what was going on and what I needed to do. I had many questions, many doubts. She assured me everything would be OK. There were times I didn't understand some of the paperwork–I didn't understand the verbiage. She would answer my calls anytime, day or evening. Up to this day, she's been there. It's amazing."

Brown's journey through cancer treatment was not an easy one. She endured 25 rounds of chemotherapy before undergoing a lumpectomy to remove the tumor. A week and a half after her surgery, her husband fell ill and had to be taken to the ER by ambulance. "I called Shernette and said, 'Greg is at the hospital.' The first thing she said was, 'What can I do?'" Brown says. "Every day he was in the hospital, she called several times a day. I thought that was very special. It doesn't feel like she's just doing her job; you feel like you're the only one she's paying attention to. She's not rushing–she's spending as much time as you need. Even though I'm sure she has many other patients as well."

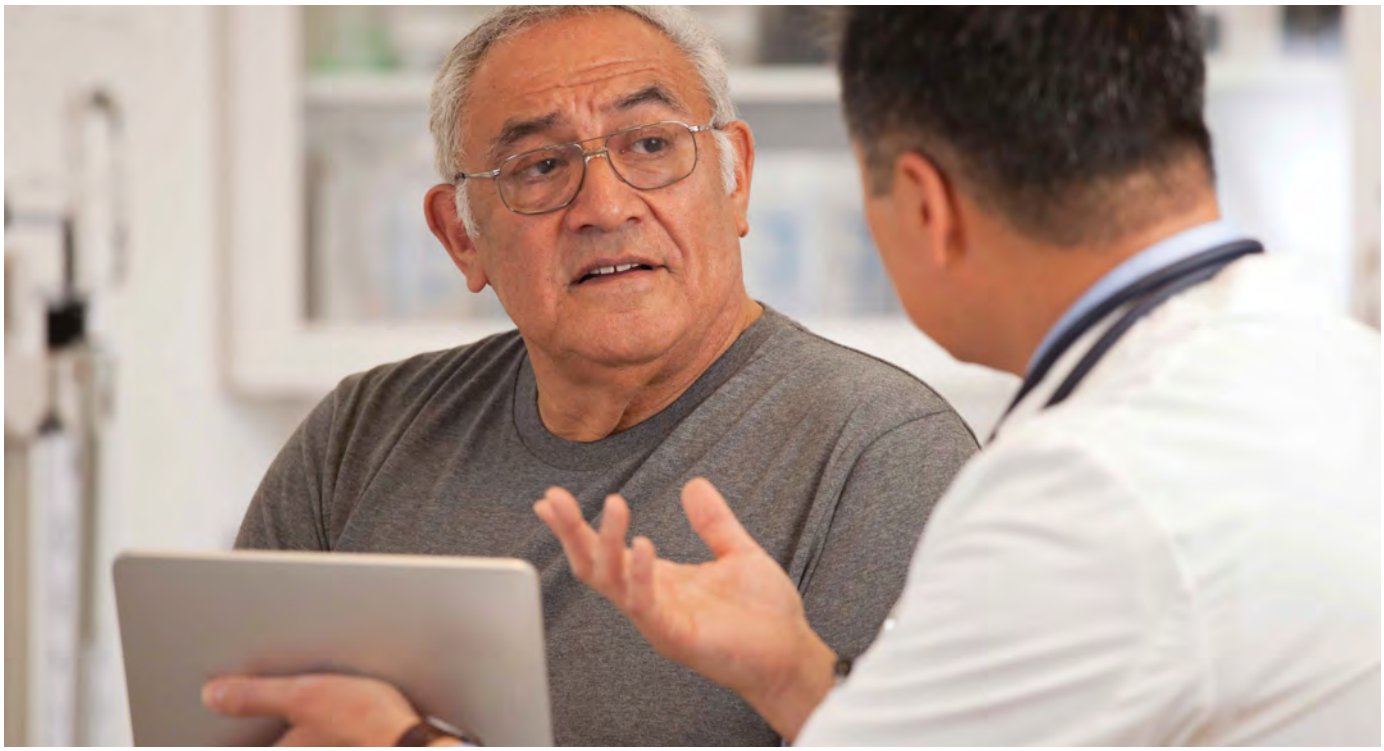
Sherrill actively manages between 10 and 15 patients a day. In her two years at Memorial Hermann, she's already worked with roughly 1,000 people. She's still in touch with many of them–and with their families. "We're not just here for the patient; we're here for the family members as well," she says. "We want to make sure the family members are following up with their own health appointments. To take care of their loved one, they also have to take care of themselves."

Brown's husband is doing better now, and in March, Brown completed her final radiation session, marking the end of 30 rounds of post-surgery radiation treatment. Sherrill was there with her when she rang the bell. But a follow-up scan revealed something unusual in Brown's neck–and now she's awaiting more testing to determine whether that, too, could be cancer. The possibility of having to start treatment again is daunting, but she is grateful to have Sherrill in her corner.

"I didn't really want to call and follow up after that, but Shernette did it for me. No matter how busy she is, she's right there on it," Brown says. "I was like, 'Oh no, not another needle. Not another test.' But Shernette said, 'It's going to be OK.' She's still helping me. She and the entire Memorial Hermann staff have been so loving and kind and prayerful. It's very comforting."

Sherrill is happy to help. "Oncology nurse navigation is the most humbling, meaningful and rewarding specialty to work in," she says. "I love giving back to patients and being there for them. I always have a smile on my face, even with my mask on. It brings me joy to bring them joy." ●

For more information, visit memorialhermann.org/oncology-nurse-navigators.



Supporting survivors for life

Surviving cancer takes more than advanced therapies and treatments; it takes emotional, spiritual, mental and physical strength. And, it takes a community.

Memorial Hermann offers a wide range of resources, education, tools and support to cancer survivors and their caregivers and families throughout their cancer journeys. These offerings are available to everyone, free of charge, although some require advance registration.

Oncology nurse navigators - Specialized oncology nurses and patient advocates who assist patients and their families during their entire course of treatment and throughout their survivorship journey.

Virtual cancer support group - Memorial Hermann invites cancer survivors who have completed active treatment to join a monthly virtual cancer survivor support group. Held the last Wednesday of every month from noon to 1 p.m., these web-based, interactive sessions enable survivors to connect virtually, share words of hope and encouragement and learn about helpful resources. See sidebar story for additional virtual and in-person support groups offered at Canopy Survivorship Center at Memorial Hermann The Woodlands Medical Center. *For more information or to register, contact the survivorship program manager at 713.262.8437 or email sarah.brown@memorialhermann.org.*

Breast Prosthesis program - Memorial Hermann offers free breast prostheses and two mastectomy bras, fitted by specially trained prosthesis fitters, to anyone, regardless of where they were treated, at multiple Memorial Hermann Cancer Centers and Canopy at Memorial Hermann The Woodlands.
To learn more or to schedule an appointment, visit memorialhermann.org/cancer.

Cancer mentoring - Memorial Hermann and its partner CanCare believe no one should face cancer alone. CanCare matches people diagnosed with cancer and cancer caregivers with someone who has gone through a similar experience. Matches are based on diagnosis, type of treatment and life stage.
Learn more at CanCare.org.

Monthly virtual survivorship classes are offered to patients, caregivers and loved ones virtually the third Wednesday of every month from from 5 to 6 p.m. Memorial Hermann cancer specialists guide partici-

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Canopy Survivorship Center

Nestled among the lush pines on the campus of Memorial Hermann The Woodlands Medical Center is Canopy, a caring community of hope, healing and empowerment for cancer survivors and their caregivers and families.

Canopy offers a broad range of programs and activities designed to address the emotional, social and physical needs of those affected by cancer, regardless of where they're treated or their insurance status. The following are just a few of nearly 40 services and activities offered in Canopy's beautiful, homelike setting:

- Onsite oncology nurse navigator and licensed oncology social worker
- Individual and family counseling and counseling for children and teens of parents diagnosed with cancer (by appointment)
- Therapeutic activities, such as art and drama therapy
- Educational resources including library, classes, lectures and workshops on topics ranging from oncology to Spanish and estate planning
- Nutrition education, cooking classes and demonstrations
- Makeup and skin care services as well as wig and prosthesis fittings (by appointment)
- Gentle exercise classes including chair yoga, meditation and Tai Chi.
- Social activities including Bible study, book club, men's group, needlework class, pet therapy and more
- Support groups including dedicated groups for widows and widowers, individuals with advanced stage cancer, breast cancer survivors, caregivers and others

Canopy hosts nearly 1,000 virtual and in-person guest interactions every month. All of this support wouldn't exist without Canopy's community partners, donors and over 50 dedicated volunteers, each of whom has personally been impacted by cancer.

"Canopy was built for our community, by our community, and it's the community that makes Canopy what it is," says Canopy manager **Marcella Herrera**. One guest, upon her first visit to Canopy, said, "This has been the best day since I was diagnosed." ●

To find out more about the services offered at Canopy, view a monthly calendar of activities and/or to sign up for Canopy's weekly newsletter, visit ***woodlandscanopy.org****.*

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pants through topics such as post-treatment rehabilitation and reconditioning; the importance of good nutrition and exercise after cancer treatment; ways to improve mental, emotional and spiritual health; and more.
To learn more or to register, email sarah.brown@memorialhermann.org.

Cancer Transitions® - Memorial Hermann is piloting Cancer Transitions, a virtual four-week workshop designed to help cancer survivors transition from active treatment to post-treatment care. The curriculum, developed by Cancer Support Community, includes sessions on Getting Back to Wellness, Emotional Health, Eating Well and Staying Active and Medical Management Beyond Cancer.
For more information, call 713.262.8437 or email sarah.brown@memorialhermann.org.

Nutrition Education - The Lindig Family Cancer Resource Center at Memorial Hermann Cancer Center Memorial City (currently closed to in-person visitors) offers a virtual **registered dietitian-led nutrition class** the second Wednesday of every month from 1 to 2 p.m. Open to everyone, the class is designed to help cancer survivors maintain their health during and after cancer treatment. The Lindig Center also offers one-on-one **virtual oncology nutrition education appointments** with a registered dietitian on Wednesdays by appointment. (These sessions are only for general nutrition education and are **not** meant to serve as dietitian consults or medical nutrition therapy.) ●
For more information or to register, email Lindig@memorialhermann.org.

Note: Additional survivorship services and activities are offered at Canopy Survivorship Center at Memorial Hermann The Woodlands. See Canopy story, left.

A note from leadership

As we enter the fall season, cancer prevention is on my mind, and I ask you to pause and reflect on your wellness. Taking good care of ourselves is the first step in caring for our families, friends, neighbors and co-workers.

September is Prostate Cancer Awareness month, and I ask you to consider the men ages 50 or older whom you love. Encourage them to have a prostate cancer screening as part of their annual wellness visit.

October is Breast Cancer Awareness month, and of course Memorial Hermann will lead in outreach and awareness events related to getting your annual mammogram. Many of us have family and friends who turn 40 this year. Ask them to begin annual mammogram screenings to start their journey to breast health wellness.

November is Lung Cancer Awareness month. Educate yourself about the importance of having a low-dose CT (computed tomography) cancer screening. This test assesses lung health by scanning for any suspicious nodules in the lung. It only takes a few minutes and is key to early detection of lung cancer. Finding lung cancer early is so important for the very best chance of survival. Ask your primary care provider today if lung cancer screening is indicated for your health.

Many cancers have no screening exam and are not detected until a patient experiences symptoms of the disease. Take full advantage of the cancer screening exams that we know save lives. Our team is here to support you and assist with your care journey. Remember, at Memorial Hermann, no one faces cancer alone.

Sandra Miller, MHSM, RN, NE-BC

Vice President, Memorial Hermann Oncology Service Line

The past few years have brought changes to the way we practice medicine, but the one thing that will never change is Memorial Hermann's commitment to ensuring that every patient's experience, from diagnosis through treatment and survivorship, leads to the best possible outcome.

One way we have done this is through the formation of our Cancer Accountable Care Organization (ACO), which currently has more than 120 participating providers. The Cancer ACO program was designed to improve quality and drive value for patients, families and providers treated at Memorial Hermann facilities.

We believe that health care providers should be accountable for the care they deliver. That's why every day, our multidisciplinary care teams work together to ensure that each patient has an individual plan of care based on their needs. Through the Cancer ACO structure, we have been able to decrease unplanned readmissions, thereby keeping our community healthier and giving individuals the gift of time to spend with the ones who are most important to them.

In 2021, nearly 15,000 new cancers were diagnosed across Memorial Hermann and in UT physician clinics, and more than 25,000 cancers were seen across Memorial Hermann Health System. We know how important cancer screenings are to staying healthy, and during that time we performed over 150,000 mammograms, nearly 14,000 colonoscopies and about 3,000 lung cancer screenings. This is a true testament to how the community trusts us to care for them. We are so grateful for this trust.

As we continue to expand our cancer services and our footprint in the community, we want you to know that we are here for you from the moment you walk through our doors. It is my personal commitment and the commitment of all of the providers in the ACO program and in Memorial Hermann's physician network that you can count on us every step of the way. Thank you for giving us the privilege to care for you and your family.

I hope this edition of Memorial Hermann Cancer Journal continues to fuel your trust in our caregivers for their skill and dedication to providing quality, compassionate care. We look forward to the challenges the next year will bring, and we will continue to strive to achieve even better outcomes by providing an enhanced experience that makes patients think of us first when it comes to cancer care.

In good health,

Ron J. Karni, MD

Associate Professor, Department of Otorhinolaryngology–Head & Neck Surgery, and Chief, Division of Head and Neck Surgical Oncology, McGovern Medical School at UTHealth Houston,
Chair, Oncology Clinical Program Committee (CPC), Memorial Hermann Physicians Network
Affiliated with Memorial Hermann

2022 Annual Report
Memorial Hermann Cancer Centers

As chairman of the Memorial Hermann Integrated Network Cancer Committee (INCC), I am pleased to present our 2022 Annual Report outlining the performance of our eight hospitals accredited by the American College of Surgeons (ACoS) Commission on Cancer® (CoC), our breast center accredited by the ACoS National Accreditation Program for Breast Centers (NAPBC) and our three rectal cancer programs accredited by the National Accreditation Program for Rectal Cancer (NAPRC).

The year 2021 was another productive and successful one for our program. Nearly 15,000 new cancer cases were diagnosed at Memorial Hermann, up from about 11,000 in 2019. In total, over 25,000 cancers were seen across Memorial Hermann Health System in 2021, a dramatic increase over the 16,500 cancers seen in 2019. In 2021, our oncology nurse navigators assisted 9,425 cancer patients and held more than 25,000 patient visits, doubling patient visits from just two years prior. In addition, we enrolled over 3,000 patients in clinical trials and presented over 4,000 cases at our over 700 tumor boards.

In 2022, the Prostate Center of Excellence established quality metrics specifically for National Comprehensive Cancer Network (NCCN) risk stratification. The metrics focused on the utilization of oncology nurse navigator services, increased prostate cancer case presentation at cancer conferences, prostate MRI for diagnosis, screening and staging across the Memorial Hermann system as well as monitoring turnaround time for prostate core needle biopsy.

Our Lung Center of Excellence created a Lung Cancer Quality Council with milestones and goals for the program. These included increasing lung cancer screening for early detection, compliance with nodal staging and synoptic operative report completion as well as facilitating the identification of lung cancer specialists for referring physicians.

We established a new High Risk Breast Program at Memorial Hermann Cypress Hospital featuring a physician-led breast care team dedicated to the care of women who are at increased risk for developing breast cancer. Our survivorship programs offer patient and caregiver support groups. The program continues to offer free breast prosthetics and fittings for all breast cancer patients, regardless of where they were treated.

Looking ahead, we will continue to explore new ways to prevent, treat and cure cancer and to support all cancer survivors at every stage of their journey.

I would like to thank our cancer committee, administration, nurses, social workers, genetic counselors and cancer registry staff for their dedication to delivering high-quality cancer care to each patient, every day.

Sincerely,

Emily Robinson, MD, FACS

Professor, Department of Surgery, Division of Medical Oncology and Director, Division of Breast and Endocrine Surgery, McGovern Medical School at UTHealth Houston, Memorial Hermann Chair
Chair, Memorial Hermann Integrated Network Cancer Committee
Affiliated with Memorial Hermann

2021 Memorial Hermann cancer incidence as a percentage of cancer patient population vs. American Cancer Society estimates

Estimated new cases

Male	MHHS	ACS
Prostate	18%	26%
Lung & Bronchus	12%	12%
Colon & Rectum	12%	8%
Urinary Bladder	5%	7%
Kidney & Renal Pelvis	6%	5%
Non-Hodgkin Lymphoma	4%	5%
Oral Cavity & Pharynx	6%	4%
Leukemia	4%	4%
Pancreas	4%	3%%

Female	MHHS	ACS
Breast	37%	30%
Lung & Bronchus	9%	13%
Colon & Rectum	8%	8%
Uterine Corpus	6%	7%
Non-Hodgkin Lymphoma	3%	4%
Pancreas	3%	3%
Kidney & Renal Pelvis	3%	3%
Leukemia	2%	3%

Reference: https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2020/cancer-facts-and-figures-2020.pdf

2021 By the Numbers

14,595
Newly diagnosed cancers at Memorial Hermann

25,414
Cancers seen in the Memorial Hermann Health System

709
Tumor boards held

4,026
Cases presented

9,425
Cancer patients navigated

2,817
Low-dose computed tomography (LDCT) lung screenings performed

25,570
Patient visits held by oncology nurse navigators

13,688
Diagnostic and screening colonoscopies

163 studies
Clinical trials available

151,056
Screening and diagnostic mammograms

3,419
Patients enrolled in clinical trials

46
Screening/prevention activities held

Letter from the Cancer Liason Physician

As the cancer liaison physician (CLP) for Memorial Hermann's Integrated Network Cancer Committee (INCC) and Memorial Hermann Greater Heights Hospital, my role is to monitor, interpret and provide updated reports of the program's performance with regard to the quality of oncology care. In addition, as the quality leader of the cancer program, I oversee quality improvement and accountability, and surveillance of patient care.

In 2020, the American College of Surgeons (ACoS) Commission on Cancer (CoC) published new accreditation operative standards with surgical operative notes for breast, colon, melanoma and lung surgeries. This was an important step toward improving oncologic outcomes, and Memorial Hermann has been diligently implementing synoptic operative reporting in compliance with these new requirements.

Among our many program accomplishments in 2022, our three rectal cancer programs accredited by the National Accreditation Program for Rectal Cancer continue to meet compliance of all standards.

Each year, the Memorial Hermann system-wide cancer committee undertakes studies and evaluations of a particular area of cancer treatment to find ways to improve the care we provide to our patients. In 2022, we conducted a quality improvement study focused on improving florescence in-situ hybridization (FISH) test turnaround time for patients undergoing breast core/stereotactic biopsy. This led to more efficient and expedited care for our patients.

As the physician quality leader, I am proud of the Memorial Hermann oncology program's many successes, and I look forward to our continued successes in the months and years to come.

Sincerely,

Mike Ratliff, MD

CLP, Memorial Hermann Integrated Network Cancer Committee
CLP, Memorial Hermann Greater Heights Hospital
Affiliated with Memorial Hermann

Updates to National Cancer Database quality measures

The National Cancer Database (NCDB) is the clinical oncology database sourced from hospital registry data collected in more than 1,500 Commission on Cancer (CoC)-accredited facilities across the U.S.

In addition to using this data to measure cancer care quality and to monitor treatment patterns and outcomes, the CoC sets quality standards, conducts compliance surveys and develops educational interventions to improve prevention and outcomes.

The CoC, under the guidance of the Quality Assurance and Data Committee (QADC), annually reviews and periodically recommends clinical changes to the portfolio of quality measures reported in the Rapid Cancer Reporting System (RCRS). The QADC updates the portfolio to ensure all measures are consistent with current best practices and maximized measures are retired to make way for new measures.

In January 2023, the CoC announced the **retirement of the following four quality measures**, due to high compliance among accredited facilities:

- HT: Tamoxifen or third generation aromatase inhibitor is recommended or administered within one year (365 days) of diagnosis for women with AJCC T1cN0M0, or stage IB - III hormone receptor-positive breast cancer.
- MASTRT: Radiation therapy is recommended or administered following any mastectomy within one year (365 days) of diagnosis of breast cancer for women with greater than or equal to four positive regional lymph nodes.
- LNoSurg: Surgery is not the first course of treatment for cN2, M0 lung cases.
- nBx: Image or palpation-guided needle biopsy to the primary site is performed to establish diagnosis of breast cancer.

In July 2023, the CoC announced **clinical updates to the following quality measures**:

- LCT: **Clinical definition of the lung LCT measure selection criteria changed from:** Systemic chemotherapy is administered within four months to day preoperatively or day of surgery to six months postoperatively, or it is recommended for surgically resected cases with pathologic, lymph node-positive (pN1) and (pN2) NSCLC **to new definition**: Systemic chemotherapy, immunotherapy or targeted therapy is administered or recommended within three months preoperatively or three months postoperatively for surgically resected cases with pathologic T2 greater than 4cm or T greater than or equal to 3, or N greater than or equal to 1 NSCLC G15RLN: At least 15 regional lymph nodes are removed and pathologically examined for resected gastric cancer.
- BCSRT: **Clinical definition of the breast BCSRT measure selection criteria changed from**: Radiation therapy is administered within one year (365 days) of diagnosis for women under age 70 receiving breast conserving surgery for breast cancer **to new definition:** Radiation therapy, when administered, is initiated less than or equal to 60 days of definitive surgery for patients receiving breast conserving surgery for stage I-III breast cancer who do not undergo adjuvant chemo or immuno-therapy.
- G16RLN: **The name of the G15RLN measure has changed to G16RLN. Clinical definition of the new gastric G16RLN measure selection criteria changed from:** At least 15 regional lymph nodes are removed and pathologically examined for resected gastric cancer **to new definition**: At least 16 regional lymph nodes are removed and pathologically examined for patients with surgically resected gastric adenocarcinoma undergoing curative intent therapy.

Questions on quality measure updates may be submitted to NCDB@facs.org.

Excellence in Cancer Care

Memorial Hermann Greater Heights Hospital achieves national accreditation for breast care for third time

Memorial Hermann Imaging & Breast Care Center at Memorial Hermann Greater Heights Hospital has earned reaccreditation by the National Accreditation Program for Breast Centers (NAPBC), a consortium of national, professional organizations dedicated to the quality of care of patients with diseases of the breast.

As an NAPBC-accredited center, Memorial Hermann Imaging & Breast Care Center - Greater Heights has achieved and maintained levels of excellence in the delivery of comprehensive, multidisciplinary care, resulting in quality care for patients with breast disease. Patients also have access to information about clinical trials and new treatment options, genetic counseling and patient-centered offerings, such as psychosocial support, rehabilitation services and survivorship care.

This is the third such accreditation in nine years for Memorial Herman Greater Heights, which welcomes a site visit by the NAPBC every three years.

"Memorial Hermann Greater Heights continues to demonstrate its dedication to outstanding, comprehensive care for breast cancer patients," says general surgeon **Mike Ratliff, MD**, director of the breast cancer program at Memorial Hermann Greater Heights. "We volunteer to go through this vigorous accreditation process to ensure we're providing evidence-based, quality care and so our patients can feel confident they are receiving high quality breast cancer care."

"We're proud of the multidisciplinary approach to diagnosing and treating breast cancer at this center," says **Ajanta Patra, MD**, a breast radiologist affiliated with Memorial Hermann Greater Heights. "With the collaboration of all the specialists–radiologists, breast surgeons, medical oncologists, radiation oncologists and oncology nurse navigators–and rising to the level of this coveted accreditation, our patients benefit immensely."

"Patients look for that reassurance that they're getting high-quality care," says **Angela Sisk, RN,** an oncology nurse navigator at Memorial Hermann Greater Heights. "This accreditation puts that stamp of approval on our center so that our patients can focus on their health rather than on searching for optimal care."

"We apply for this accreditation and evaluation of our program not as a feather in our cap," says **Maria Tran**, director of System Cancer Registry at Memorial Hermann Healthcare System, "but to set the standard for breast care in our community. This accreditation validates that we're following the latest guidance and quality initiatives directed toward breast health and breast cancer management." ●

Nurse navigators guide patients through their cancer care

The thought of having cancer sparks fear in most people, and a confirmed cancer diagnosis sends some reeling into overwhelming desperation and isolation as they wonder how they're going to get through treatment and everything else that comes with it. Yet a specialized nursing role has emerged over the last two decades to help patients traverse the complicated landscape of cancer, and Memorial Hermann's oncology nurse navigators stand ready to assist patients with the many facets of cancer care.

"No patient should have to fight cancer alone," says **Mandy Owens, RN**, manager of clinical oncology nurse navigation for Memorial Hermann System Services. That's why every patient with a cancer diagnosis has the opportunity to be paired with an oncology nurse navigator.

Owens and 21 of her oncology nurse navigator colleagues work throughout 10 Memorial Hermann facilities to ensure that cancer patients receive the care they need in a timely, efficient and compassionate manner. Each navigator is a registered nurse, certified in oncology and is experienced with caring for cancer patients at the bedside. In the last full fiscal year, which ended in June 2023, Memorial Hermann's oncology nurse navigators managed 10,392 patients.

"We provide support across the continuum of care," she says. "From educating about the importance of cancer prevention and early screening, to diagnosis, treatment, surveillance, survivorship and end-of-life care, we are committed to supporting our patients throughout their cancer journey." They answer patients' questions, explain upcoming tests and treatments, check in on medications and help connect them with appropriate providers. Memorial Hermann has had oncology nurse navigators for more than 10 years and doesn't charge patients for this service.

Owens says a large part of navigators' responsibility is tracking patients' treatment to ensure that they keep all their appointments and don't encounter obstacles, or barriers to care that could prevent them from accessing the care they need. They also serve as liaisons to care teams and advocates for patients.

"We participate in interdisciplinary tumor boards," she says. These are regular meetings among cancer care providers to discuss patients' cases, appropriate therapies and any barriers to care. "Here, we advocate on the patients' behalf and ensure that we understand the treatment recommendations and treatment options." Additionally, the navigators serve as liaisons, reporting any potential complications that patients are experiencing, as often patients may not know to report these to their providers.

"In this way, we enhance the patient experience and improve patient outcomes, while also providing the

patient with one point of contact whom they trust," Owens says.

While clinical care is paramount to what oncology nurse navigators offer their patients, they also help patients with the psychosocial aspects of cancer, Owens says. "We help patients get fitted for wigs and prosthetics and serve as facilitators for support groups to help connect patients with each other." Oncology nurse navigators also regularly assess their patients' mental health and link them with community resources, such as financial and transportation services, as well as living accommodations, when needed. "We want to be sure that nothing is keeping these patients from receiving quality care in a safe and timely manner," Owens says.

Owens and the other oncology nurse navigators managed nearly 25,000 patient encounters over the last fiscal year, which may seem daunting to people outside of their line of work. Owens says that oncology nurse navigation is rewarding for her and her colleagues, and she would want a navigator to help her loved ones through a cancer diagnosis. "Nurses don't fall into oncology," she says. "It's a passion, and its impact can't be measured. As an oncology nurse navigator, it's such a blessing and an honor to have the opportunity to serve others throughout their cancer journey. It's also very rewarding to know that each day we have the opportunity to make a difference in our patients' lives." ●

Memorial Hermann receives Commission on Cancer reaccreditation

All eight Memorial Hermann Cancer Centers are accredited by the American College of Surgeons (ACoS) Commission on Cancer (CoC), functioning as an integrated network cancer program. The CoC is a collaborative group of professional organizations dedicated to improving survival and quality of life for cancer patients through the establishment of comprehensive care standards with a focus on prevention, research, education and continuous improvement of care quality.

For Memorial Hermann, this reaccreditation means that each center meets national standards in the delivery of cancer care. Accreditation is granted only after a rigorous onsite evaluation and performance review of the program, where surveyors determine a commitment by providers and staff to deliver high-quality cancer care. Only 25% of hospitals and health systems across the country have earned this special recognition.

"For patients, CoC accreditation translates into greater access to comprehensive care under the supervision of a multidisciplinary team who employs the most advanced equipment and latest treatment options, including clinical trials, and focuses on also providing education and support through diagnosis, treatment and into survivorship," says **Sandy Miller, RN**, vice president of Oncology Service Line for Memorial Hermann Health System.

Accreditation also provides a pathway for contributing important data through cancer registries that are used to improve quality, clinical surveillance activities, early detection programs and overall outcomes, according to **Maria Tran**, director of System Cancer Registry at Memorial Hermann Health System. "In this elite group of cancer centers, we not only supply our data, but we also draw from it to ensure that we're meeting or exceeding national benchmarks achieved by other CoC-accredited organizations," she says.

Emily Robinson, MD, professor in the Department of Surgery, Division of Medical Oncology, and director of the Division of Breast and Endocrine Surgery at McGovern Medical School at UTHealth Houston, as well as a general surgeon affiliated with Memorial Hermann Health System, Memorial Hermann chair and chair of Memorial Hermann's Integrated Network Cancer Committee, credits the CoC for helping to establish high-quality cancer care at the Cancer Centers. "The standards laid out by the Commission on Cancer have, no doubt, elevated the work performed within Memorial Hermann's oncology program," she says. "As a result of the rigorous surveys by the CoC, we are exceeding our targets for quality cancer care and formulating ambitious goals for our future. We are committed to our mission–that at Memorial Hermann, you will never fight cancer alone." ●

Multidisciplinary approach improves gastrointestinal cancer outcomes

In the past decade, concerning trends in the incidence of gastrointestinal cancers have occurred, as younger patients are being diagnosed, often with more advanced disease. With an eye on this reality and a resulting spike in deaths from colorectal cancer among the younger age groups, physicians affiliated with Memorial Hermann from multiple specialties decided to form Memorial Hermann Health System's first Gastrointestinal (GI) Cancer Accountable Care Organization (ACO).

ACO's, a concept endorsed by the Centers for Medicare & Medicaid Services, or CMS, lower costs by reducing duplication of services and improve care by encouraging providers to work together to care for patients.

Nirav Thosani, MD, MHA, professor and director of the Center for Interventional Gastroenterology at McGovern Medical School at UTHealth Houston, the Atilla Ertan MD Endowed Chair in Gastroenterology, Hepatology and Nutrition at the school, and an interventional gastroenterologist affiliated with Memorial Hermann-Texas Medical Center and Memorial Hermann Greater Heights Hospital, envisioned a multidisciplinary collaboration of providers to standardize care and improve quality and outcomes for patients diagnosed with gastrointestinal cancers.

"There are multiple pathways for patients to be diagnosed with gastrointestinal cancers," Dr. Thosani, who serves as the physician director of the ACO, says. "Gastroenterologists, general surgeons and colorectal surgeons each play a role in diagnosing GI cancers, and each may have a different approach to getting patients to the next step in their treatment. We historically did not work together, leading to significant variation in patient care."

Dr. Thosani also saw value in collaborating with other specialists such as medical oncologists, surgical oncologists, radiation oncologists, primary care physicians and oncology nurse navigators, all of whom contribute to helping patients get the appropriate treatment.

He began talking to his colleagues and each desired to find a solution that would strengthen collaboration and enhance patient care and outcomes. He took the idea to the administrators at Memorial Hermann Health System, and the GI ACO launched in January 2023.

Since the concept took root around 2021, more than 50 doctors from across Memorial Hermann have joined the ACO and are positively impacting cancer care.

G.S. Ramesh, MD, president of Digestive Health Associates in Houston and a gastroenterologist affiliated with Memorial Hermann Memorial City Medical Center, was quick to partner with Dr. Thosani and help get the ACO established.

"Follow up is most important with these patients," he says, "as we can catch a recurrence early on."

He says that having all the players working together, including nurse navigators and cancer registry staff who help track quality metrics, national guidelines and patient outcomes, ultimately helps deliver high-quality patient care. "As a result of the ACO, we're taking better care of patients," he says.

That is evident in the weekly conferences the ACO holds to discuss patient cases among Memorial Hermann Medical Group physicians, UTHealth Houston specialists, private-practice doctors like Dr. Ramesh, nurse navigators and oncology providers. During these conferences, treatment options are discussed and barriers to care are resolved so everyone knows what care patients need, and in what timeframe, to ensure swift treatment.
Dr. Thosani says that in the first six months of its existence, the ACO has increased the diagnosis of Barrett's esophagus–a known risk factor for developing esophageal cancer–improved the standardization of clinical

documentation and developed specific criteria for and streamlined the process for open-access colorectal cancer screening to improve patient access to these potentially life-saving examinations. The ACO has also significantly reduced the time from diagnosis to surgery or the beginning of treatment from several weeks to about a week.

"Time is of the essence for these patients," Dr. Ramesh says. "If they must wait for treatment, their cancer could spread. Each of us within this ACO has a shared goal of getting these patients the appropriate treatment in the appropriate timeframe."

Dr. Thosani credits the support of Memorial Hermann administrators and the collaborative spirit of the members of the ACO with its enthusiastic adoption and extraordinary impact on patient care in such a short time. "We're pleased that we've seen such early and promising results," he says. "The GI ACO at Memorial Hermann stands to serve as a model for GI cancer care across the country, and the people of Houston are the beneficiaries of this collaboration." ●

Colorectal cancer screenings save lives

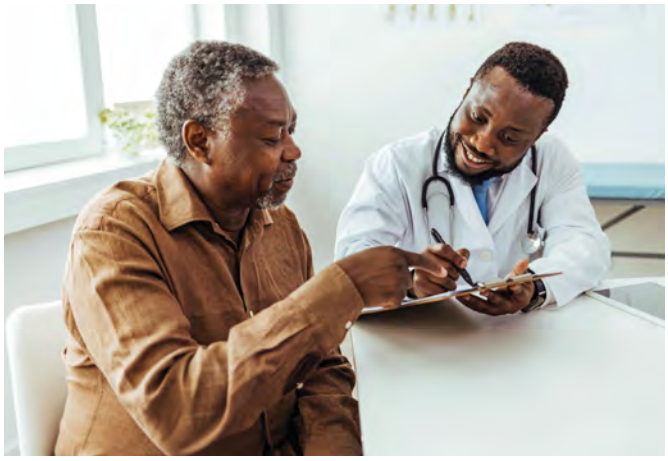
The American Cancer Society estimated the number of colorectal cancer cases in the United States for 2022 would reach approximately 151,000, leading to more than 53,000 deaths.

Aakash Gajjar, MD, a colorectal surgeon affiliated with Memorial Hermann Sugar Land Hospital, has witnessed an increased incidence of colorectal cancer among people younger than 50 and urges colorectal screening at age 45 for most people. "As much as 31% of those eligible for screening aren't getting screened for various reasons, including fear or embarrassment," he said.

While colonoscopy remains the gold standard for screening, there are other screening options available. These include fecal immunochemical tests (FITs) that can detect blood in the stool or stool DNA tests that detect blood and abnormal cells. For tests performed at home, any positive results, Dr. Gajjar says, must be evaluated with a colonoscopy. CT (computed tomography) colonography of the colon has also proven effective in finding abnormalities but must also be followed by a colonoscopy when abnormalities are detected.

Dr. Gajjar advises reporting the following symptoms to your doctor:

- Bright-red or dark, tarry stools



- Changes in the frequency of bowel movements or the consistency of stools, especially if "pencil-like"
- Abdominal pain
- Unexplained weight loss

"Early detection of colorectal cancer can be lifesaving," Dr. Gajjar said.

Memorial Hermann The Woodlands Medical Center, Memorial Hermann Southeast Hospital and Memorial Hermann Northeast Hospital are accredited by the National Accreditation Program for Rectal Cancer. Additionally, Memorial Hermannn oncology nurse navigators help guide patients with rectal cancer through their care journey. ●

For more information, visit memorialhermann.org/services/colonoscopy.

Memorial Hermann expands surgical oncology program

People who receive a cancer diagnosis in the Greater Houston area now have more treatment options, thanks to the expansion of Memorial Hermann's surgical oncology program.

"In the last year and a half, we have solidified the surgical oncology program to reach cancer patients needing surgery throughout Houston," says surgical oncologist **Casey Duncan, MD, MS, FACS**, assistant professor of surgery at McGovern Medical School at UTHealth Houston, who is affiliated with Memorial Hermann. Dr. Duncan, who specializes in skin and soft tissue cancer, says prior to this, patients often had to have their surgery at Memorial Hermann-Texas Medical Center.

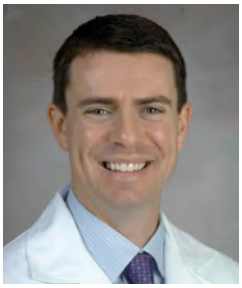
Dr. Duncan emphasizes that patients at Memorial Hermann's community hospitals can expect the same level of specialized, quality care as is provided at larger institutions but with a more personal feel. "Patients will get the quality, comprehensive care of a tertiary facility like Memorial Hermann-TMC but in the comfort of their own neighborhood," she says.

"Patients prefer to have their surgery closer to home," says **Nicole Villafañe Ferriol, MD**, who is board-certified in both general surgery and complex surgical oncology and performs most of her surgical cases to treat liver, pancreas and bile duct cancers at Memorial Hermann Southeast Hospital. "With our program, patients receive high-quality cancer care, with the convenience of being closer to their loved ones," she says.

Dr. Villafañe Ferriol also notes that tumor boards, which are regular meetings among various cancer specialists, support the patient-centered care that stands out to patients and that fuels better treatment outcomes. "Our tumor boards allow us to discuss cases with input from medical oncologists, radiation oncologists and other providers, such as gastroenterologists, all of whom provide their unique perspectives and expertise," she says.

Curtis Wray, MD, MS, professor in the Department of Surgery at McGovern Medical School, a surgical oncologist who specializes in the treatment of gastrointestinal cancers and is affiliated with Memorial Hermann, says that a three-fold rise in the incidence of pancreatic cancer over the past two decades has forced the need for expansion to treat complex cancer cases away from the traditional academic medical centers and specialty hospitals. "With the increase in complex cancers that we're seeing, it's necessary for us to move complex care into the community hospital setting," he says. "Memorial Hermann, with the development of its surgical oncology program, is able to adapt more quickly to emerging technology and the expanding knowledge of surgical cancer treatment."

Dr. Wray, who is trained in complex hepatobiliary surgery, performed the first robot-assisted Whipple procedure at Memorial Hermann Sugar Land Hospital last fall. This complex procedure involves removing the head of the pancreas and rerouting the body's digestive system, so it continues to function. The robotic surgery platform, controlled by the surgeon using a console in the operating room, helps surgeons better visualize patients' anatomy to perform these difficult surgeries. "Just a few short years ago, Whipple procedures wouldn't have been done in a community hospital setting," says Dr. Wray.



Ryan Hall, MD, associate professor of surgery at McGovern Medical School and a board-certified general surgeon affiliated with Memorial Hermann, says that Memorial Hermann's model of surgical oncology promotes professional collaboration and patient-centered care. "The physician community within Memorial Hermann is close-knit and allows for great communication and coordination of care," he says. "In addition to providing leading-edge, evidence-based care, the providers' relationships and collaboration lead to efficient care that may be difficult to obtain in larger facilities." ●

Advances in Cancer Treatment

Ushering in a "new era" of prostate cancer therapy

In April 2023, urological surgeon **Steven E. Canfield, MD**, became the first surgeon in Houston to perform irreversible electroporation (IRE) focal ablation for prostate cancer. Dr. Canfield is professor and chair of the Division of Urology at McGovern Medical School at UTHealth Houston and is the chief of Urology at Memorial Hermann-Texas Medical Center. Dr. Canfield performed the procedure at Memorial Hermann-TMC using the NanoKnife® IRE System.

Traditional treatment approaches to prostate cancer involve either surgically removing the entire prostate (radical prostatectomy) or administering radiation therapy to the whole prostate, both of which can lead to unwanted side effects, such as urinary or erectile dysfunction.

"There's a new era of what we call focal therapy–targeted therapies designed to treat the tumor while leaving surrounding structures intact, minimizing side effects," explains Dr. Canfield. "Focal therapy for prostate cancer is something that's been long overdue. Men deserve it and have been demanding something like this for decades."

He points out that it is important for patients who have undergone any type of focal therapy to be monitored for cancer recurrence.

IRE "more effective, less harmful"

Unlike other focal therapies for treating prostate cancer, such as thermal energy ablation or cryoablation, IRE is a non-thermal technique that uses high-frequency electrical pulses to kill cancer cells. "IRE doesn't use any heat. It doesn't use any cold. It simply uses electrical impulses," he says. "And in that way, it's much more effective and less harmful to surrounding structures, such as the nerves that control erections or the urinary sphincters."

An additional benefit of IRE is that its use doesn't preclude a patient from having radical treatments afterwards. "Some of these ablative technologies can cause so much inflammation or scar tissue that a subsequent surgery or radiation might not be as effective, or might lead to worse side effects," he says. "If IRE therapy doesn't work, or if the cancer comes back, the patient can still undergo radical treatment. So, with IRE, you haven't lost anything by trying, and most of the time you win."

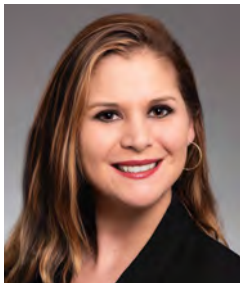
Results

Dr. Canfield says the procedure has proven to be very effective. "The results have been really impressive–over 95% cancer-free rates in treated areas in recent clinical trials, with minimal reports of side effects. Patients typically experience complete recovery of preexisting functions within six months."

IRE is indicated for patients with localized low- or intermediate-risk prostate cancer. "Unfortunately, more men than we would like present with advanced cancer before it is found in time. And for them, we have exciting new options and more on the way; we're getting better at taking care of prostate cancer at all stages. But for men who were screened early and whose cancer was found early enough, IRE is a potential option," he says. ●

"There's a new era of what we call focal therapy–targeted therapies designed to treat the tumor while leaving surrounding structures intact, minimizing side effects."

Research on the "in between" garners White House attention



Breast oncologist **Jessica T. Jones, MD**, believes there is a huge, missed opportunity to support and educate breast cancer patients between doctor appointments. "A patient typically has only about 15 minutes with their doctor, then it may be a few weeks until their next appointment. And in that 'in between' time," she says, "there are a lot of opportunities to answer a patient's questions."

Clinical trial studies digital health coaching

Dr. Jones, assistant professor of oncology at McGovern Medical School at UTHealth Houston who is affiliated with Memorial Hermann-TMC, serves as UTHealth Houston's co-principal investigator for a national, randomized clinical trial exploring if and how digital health coaching may be used to enhance outcomes for individuals following completion of primary cancer therapy.

Memorial Hermann is one of five clinical sites across the U.S. enrolling participants for the study, entitled Comprehensive Outcomes for After Cancer Health (COACH) (NCT05349227). Study participants must have completed primary treatment for ovarian, breast, lung or gastric cancer and must be within one year of diagnosis. An additional cohort will focus on survivorship. Memorial Hermann is providing a cohort of metastatic breast cancer patients for the study.

Participants in the intervention group will receive six months of digital coaching in the form of weekly calls plus delivery of evidence-based content (regarding nutrition, exercise, physical, emotional and financial health) up to four times weekly via text, email or mobile app. Coaching intervention will be followed by six months of ongoing monitoring.

At the conclusion of the 12 months, researchers will measure the acceptability and feasibility of coaching intervention and the change in participants' self-c onfidence in managing their chronic disease.

"We're in the running as one of the leading sites being considered for future funding,"

Cancer Moonshot

Earlier this year, Dr. Jones was invited to present a proposal to the White House for future Cancer Moonshot funding.

Cancer Moonshot is a White House initiative launched in 2016 to bring renewed leadership to the fight against cancer. It was reignited by President Biden in 2022 with an ambitious goal of cutting the cancer death rate in half within 25 years and improving the lives of people with cancer and cancer survivors.

"We're in the running as one of the leading sites being considered for future funding," says Dr. Jones.

Focus on prevention and equity

Dr. Jones is part of a national team hoping to elevate the importance of cancer prevention outreach across the country and erase racial and socioeconomic disparities in care.

"Through our participation in the COACH study, we hope to identify and address the social determinants of health and the disparities that lie in our very unique and diverse patient population," she says. "It's so critical."

And she says she hopes through participating in the study to be able to "look at the biology, not just of cancer, but of what our patients might have been exposed to, to help us better understand what might have caused the cancer."

She believes one of the appeals of Memorial Hermann to researchers is the diversity of the population Memorial Hermann serves. "It's so exciting–the work that we've been doing with our cancer patients, specifically with Memorial Hermann and our ability to reach and touch so many different women of different ethnicities, of different walks of life, and in a time where cancer is happening to younger and younger women," she says. "We're improving how we cure women, how we take care of them, and how we're enriching the many years that they're going to live after diagnosis." ●

Memorial Hermann pilots new cancer care at home program

Memorial Hermann is partnering with in-home cancer care provider Reimagine Care to pilot a new program that promises to help oncology care teams better manage the symptoms of their cancer patients undergoing chemotherapy, in the comfort of patients' homes.

Chemotherapy is considered an indispensable part of the cancer treatment regimen, and global demand for first-line chemotherapy is predicted to increase by more than 50% by 2040. While chemotherapy can save lives, it can also produce side effects which must be managed. And many outpatient oncology clinics are already stretched thin.

"Whereas we (providers) were once able to provide the full spectrum of care–chemo and ongoing management of patients' side effects–in the outpatient clinic setting, it's becoming harder to do so. Everyone is busting at the seams," says affiliated breast oncologist **Jessica Jones, MD**, assistant professor of oncology at McGovern Medical School at UTHealth Houston, who is leading the pilot. "Through this new program, we can make sure that all patients get the care they need and in a form of delivery that improves their life."

24/7 support

Up to 200 of Dr. Jones' breast cancer and sarcoma patients undergoing chemotherapy will participate in the pilot. Participants will have 24/7 access to experienced oncology advanced practice providers (APPs) who can help manage their chemo-related symptoms. These APPs, all credentialed with Memorial Hermann, will monitor patients' symptoms and orchestrate at-home care, in conjunction with the patient's oncology care team.

Patients will receive two check-in texts a week and a weekly symptom survey inquiring about their symptoms (type and severity). Based on a patient's response, the patient may receive additional support ranging from an automated text with additional information to a personal text or phone call from an APP to provide personalized guidance and support. Patients and their caregivers can also reach program clinicians at any time via phone or text.

Depending on the type and severity of a patient's symptoms, a telehealth visit, urgent care services or emergency medical services may be required. If the patient requires routine medical services, such as IV hydration, antibiotics or lab work, Reimagine Care will arrange for an in-home urgent care visit via DispatchHealth, a leading provider of in-home urgent care. If emergency services are required, Reimagine Care will direct the patient to the appropriate emergency care facility.

Virtual care services are provided to patients free of charge. If urgent care services are required, Reimagine Care will bill the patient's insurance company.

Gathering data to improve care

Dr. Jones says that during the pilot, data will be gathered to inform program development. "Our goal is to make our patients' lives better, and we hope to gather information that will enable us to provide them with even better and more convenient care in the future."

Lung Cancer Program offers low-dose CT lung screenings

Memorial Hermann's Lung Cancer Program offers a comprehensive approach to the prevention, diagnosis and treatment of lung cancer. The program offers low-dose computed tomography (LDCT) lung screenings to patients at high risk for developing lung cancer. These screenings, conducted at more than 20 locations throughout Greater Houston, scan the lungs for hidden tumors, nodules or other signs of cancer.

"LDCT screenings are important because they can detect lung cancer at an early stage, before symptoms have begun to develop." says Priscilla Rodriguez, MHA, RN, OCN, Lung Program coordinator. "Our program is committed to ensuring every patient receives high-quality care throughout their journey, including being connected to a nurse navigator who acts as a liaison throughout the continuum of care."

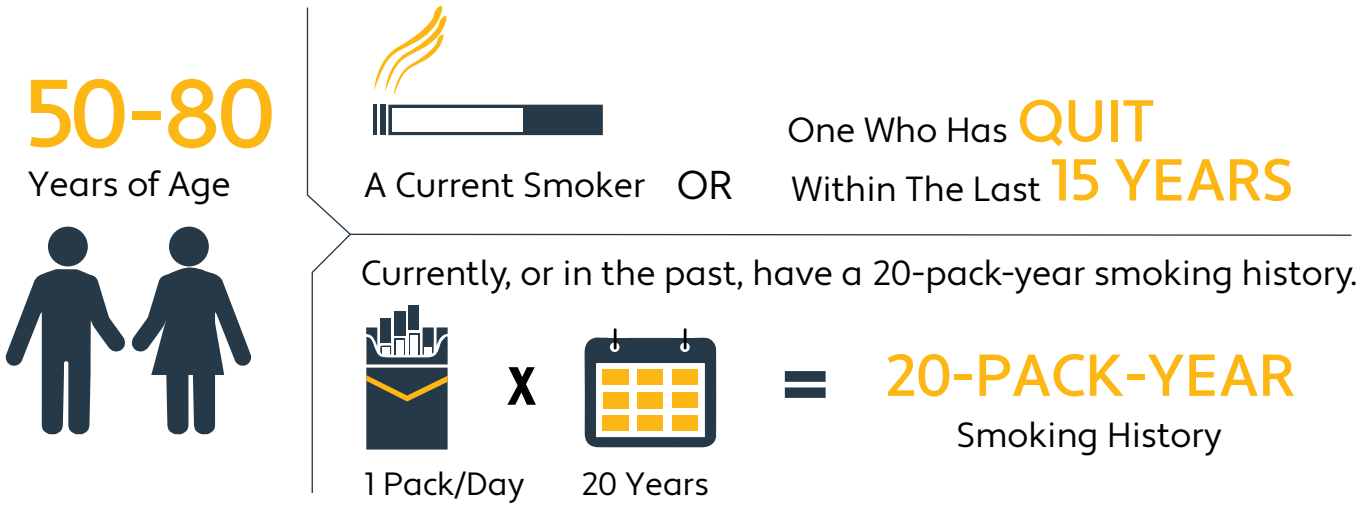
To qualify for an LDCT screening, individuals must meet the following criteria and have a physician's order:

- No current symptoms
- Ages 50 to 80 years old
- A current smoker who has smoked one pack of cigarettes a day for the past 20 years
- Someone who has quit smoking within the last 15 years but had smoked one pack of cigarettes a day for the past 20 years

If a screening indicates an abnormality, further imaging studies and/or a biopsy will be scheduled for determination of the composition of the abnormality by a pathologist.

Patients who are diagnosed with a lung nodule or lung cancer will have their imaging studies and/or biopsy reviewed by a multidisciplinary tumor board, made up of pulmonologists, thoracic surgeons and oncology nurse navigators, to determine the best treatment options. Oncology nurse navigators also help guide patients through the diagnosis and treatment process and provide smoking-cessation resources and other educational resources to patients and their families. ●

To qualify for LDCT lung screening, patients must be:



Farewell

Memorial Hermann bids a fond farewell to medical oncologist T.F. "Ted" Tenczynski, MD

In July 2023, **Dr. Ted Tenczynski** retired from an impressive 47-year professional career, first as a medical oncologist affiliated with Memorial Hermann then as a certified tumor registrar (CTR) working in the Memorial Hermann Health System Cancer Registry.

Were it not for a certain pediatrician, Dr. Tenczynski might have chosen a different career path, to the detriment of thousands of Houston-area cancer patients who benefited from his expertise and compassionate care as well as hundreds of colleagues with whom he collaborated to advance his field.

One such colleague is Memorial Hermann-affiliated general surgeon **Mike Ratliff, MD**, who serves as the cancer liaison physician for Memorial Hermann Greater Heights Hospital on the Integrated Network Cancer Committee, who says, "Ted Tenczynski was utterly dedicated to his craft. He gave detailed attention and care to his patients over a career spanning decades. He kept continually abreast of advancements in medical oncology and thereby consistently contributed to the education of colleagues privileged to work with him, including myself. He will be sorely missed."

Looking back, Dr. Tenczynski pinpoints the exact moment, at about age 5, when he became fascinated by medicine. "I was home sick–I had a fever or something–and my mom called the pediatrician, Dr. Simone. He came to our house and looked at me, gave me a shot (which I didn't like), and he had this little black bag. And I remember thinking, *What a terrific thing. This guy goes around and makes sick people feel better."*

In high school, a career aptitude test indicated that Tenczynski would do well as a forest ranger, advice he fortunately chose to ignore. "Growing up in Brooklyn, I thought it was sort of funny," he says.

Having grown up in a "blue collar" household, he was grateful to have been awarded multiple scholarships to Fordham University in The Bronx, N.Y., a prestigious school to which his family could not have otherwise afforded to send him. Once enrolled, he began thinking about what he wanted to do after college. *"Again, I thought, What a great way to spend a life–treating sick people and improving the health of the community and the nation–so I enrolled in the pre-med program."*

In his third year at the College of Medicine of New Jersey (now known as Rutgers Medical School) in Newark, N.J., Tenczynski met the second physician who would leave an indelible impression on him–medical oncologist **Fred Cohen, MD**. "In the 1960s, medical oncology was rather primitive," says Dr. Tenczynski. "Dr. Cohen was such a go-getter. He took me under his wing and showed me how exciting it could be to take care of a cancer patient. It was because of Dr. Cohen that I had absolutely no doubt in my mind that I wanted to be a medical oncologist."

Dr. Tenczynski completed his residency at Maimonides Medical Center in Brooklyn in 1974 and set his sights on a fellowship at renowned Memorial Sloan Kettering Cancer Center in New York. Upon learning that he was accepted but would have to wait an additional year for a spot, he boldly wrote to MD Anderson Hospital in Houston, saying, "I would like you to consider me for fellowship, and I need you to decide within a couple weeks because I need to decide if I am signing up for a second year of residency (awaiting a fellowship at Memorial Sloan Kettering) or coming down to MD Anderson."

MD Anderson gave him the nod, and Dr. Tenczynski's plan was to do his fellowship in Houston and then return to New York to practice medicine. He came to Houston and never left.

Fifteen months after he began his fellowship, MD Anderson made him a staff member and moved him to Hermann Hospital (now Memorial Hermann-Texas

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Medical Center) to recruit patients to enroll in MD Anderson research studies. From 1976 to 1978, he served as clinical assistant professor at The University of Texas Medical School at Houston (now McGovern Medical School at UTHealth Houston) and chief of the Oncology Section at Hermann Hospital. He says he thoroughly enjoyed it. "Here I was, just starting my career, in charge of a service, and I had a whole entourage following me–residents, interns, students, probably 15 to 20 people," he says. "It was truly exciting."

But what he really wanted to do was take care of patients as a community oncologist. "I wanted to take what MD Anderson and other leading cancer research institutions were doing and apply it directly at the bedside." In 1978, he began practicing at the Durham Clinic in the Heights in Houston and also seeing patients at Memorial Hermann Northwest Hospital (now Memorial Hermann Greater Heights Hospital).

Thirteen years later, he received a long-awaited call from the (then) CEO of the hospital, inviting him to open his own practice in the hospital's professional building. "I hung up the phone and was over there in 15 minutes," he says, adding that designing his clinic and building his own practice was a career highlight.

Despite running 23 marathons in the 1980s, in the 1990s he neglected his health. In 1999, he was diagnosed with coronary artery disease and underwent triple bypass surgery. ("I was on the verge of having what they call a 'widow maker'," he says.) He says being a patient gave him a deeper understanding of–and empathy for–the patient experience, and from that moment on, he was a more compassionate doctor to his patients. "Anything, even delivering difficult news to a patient, can get routine," he says. "To tell somebody your cancer has progressed may not be that big a thing to you, but it is an awfully big thing to the patient and the family who's listening to it on the other side. You have to balance between caring for the patient and feeling for the patient, and also doing what is medically and scientifically right."

Coincidentally, right before his heart surgery, he was named Memorial Hermann Northwest's Physician of the Year. Another career highlight was being instrumental in Memorial Hermann Greater Heights' accreditation as an accredited Breast Care Center by the National Accreditation Program for Breast Centers (NAPBC) in 2001. The hospital is the only NAPBC-accredited hospital in Memorial Hermann Health System and has since been reaccredited three times. He was also instrumental in developing a program whereby every breast cancer patient is initially evaluated by a surgeon, an oncologist and a radiation oncologist, all of whom collaborate to create the most appropriate care plan for each patient.

In 2008, Dr. Tenczynski merged his practice with Oncology Consultants and continued to see patients at Memorial Hermann. Six years later, he became certified as a CTR and was hired by Memorial Hermann Health System to serve as a liaison between the registrars and the medical staff. He also contributed to the tumor board at Memorial Hermann Greater Heights and was a member of the Memorial Hermann Health System Cancer Committee, performing quality review studies.

Angela Sisk, oncology nurse navigator at Memorial Hermann Greater Heights, says, "I worked closely with Dr. T for many years, first while he was practicing as a medical oncologist and then in his role as a cancer registrar. Dr. T is a highly respected doctor, cancer registrar, mentor and leader. He taught me so much and was always supportive of me and my role as an oncology nurse navigator. I admire his hard work and dedication to his patients, to his colleagues and to making our cancer program the best it could be."

Newly retired, Dr. Tenczynski is becoming an avid vegetable gardener and walker and is enjoying spending more time with his wife and eight grandkids. And while he will no longer practice medicine, he plans to stay on top of medical oncology by attending online lectures, tumor boards and conferences.

When asked what he wants his legacy to be, he replies, "I would hope that doctors would say that this guy was as straight an arrow as you can get. That he never thought of anybody but the patient first all the time. And that he was very demanding of his colleagues, which I was. And I would hope that patients would say, 'This guy cared about me as an individual. He was always concerned about how I felt.'" ●

Research

Promising breast cancer research taking place in Houston

Collaboration between Memorial Hermann and Texas Oncology, a statewide physician-led oncology practice, is bringing next-generation cancer treatments closer to where patients live and work.

Comprised of more than 500 physicians in 280 locations across Texas, including in Memorial City, Texas Oncology aims to increase cancer survivorship in the state with innovative treatments discovered through cutting-edge clinical research, some of which is conducted at Memorial Hermann hospitals. In the study of breast cancer treatments, **Michelina Cairo, MD**, a medical oncologist from Texas Oncology and affiliated with Memorial Hermann, focuses on creating more breast cancer survival stories.

"We're eager to increase the number of breast cancer survivors by targeting treatments and improving outcomes," Dr. Cairo says.

Dr. Cairo is currently involved with research to test new medications that may improve the quality of life and chance of survival in breast cancer patients with a high risk of disease recurrence or metastases.

Tropion-Breast03 study

One study, Tropion-Breast03, is testing an antibody drug conjugate, which targets triple-negative breast cancer cells that have escaped chemotherapy, surgical removal of tumors and radiation therapy, but aren't visible through imaging. Triple-negative breast cancer, Dr. Cairo says, makes up about 10% to 15% of all breast cancers and impacts men as well as women.

"Traditionally, triple-negative breast cancer has a reputation for being aggressive and resistant to existing treatments, with a high risk of recurrence and metastasis," she says. "In this study, we're testing how the antibody plus chemotherapy conjugate datopotamab deruxtecan (Dato-DXd) can be used in combination with the immunotherapy agent durvalumab to effectively guide the chemotherapy directly to the escaped cancer cells." The immunotherapy activates the immune system and, along with the chemotherapy, attacks and destroys the cancer cells.

This study is currently enrolling patients at multiple centers worldwide, including Memorial Hermann, and is expected to complete enrollment in 2024.

CAMBRIA-1 study

Dr. Cairo is also helping to investigate the use of camizestrant, an orally administered selective estrogen receptor degrader (SERD) to reduce the risk of recurrence or metastasis in estrogen-receptor positive (ER+) and HER2-negative breast cancer, following the standard two years of anti-hormone therapy paired with a CDK4/6 inhibitor.

"While estrogen-receptor positive breast cancer is more common than triple-negative breast cancer and the prognosis is usually good, we want to try to cure all the cancer, and some patients have an elevated risk of recurrence," Dr. Cairo says. "This Phase III study aims to improve our current standard-of-care treatment available for this type of cancer, making it more tolerable and accessible for patients."

Dr. Cairo explains that the traditional SERD is an injection that must be administered with two injections into the buttocks once a month. The therapy being tested by the CAMBRIA-1 study is, instead, a pill taken daily.

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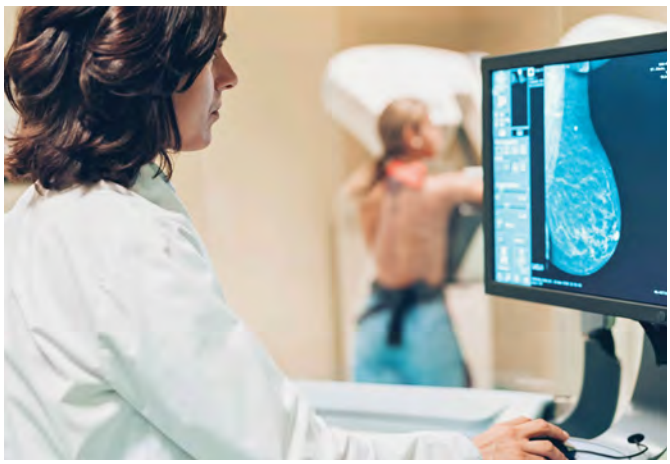

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Patients are currently being enrolled in this multi-center international study, which is expected to complete enrollment in 2026.

"In addition to being better tolerated and easier for patients to comply with treatment," she says, "Camizestrant also appears, from earlier studies conducted, to reduce the chance of developing a mutation that helps this type of cancer spread. Other studies are underway to test its effectiveness in slowing down metastasis."

Advanced treatments close to home

Dr. Cairo's passion for research stems from being able to offer patients throughout Greater Houston the latest cancer treatments close to home in a timely manner.

"The research we're involved with alongside Memorial Hermann is fine-tuning treatment for patients, while moving cancer care forward," she says. "Both of these studies are providing options to extend survival, as we know the time to cure cancer is before it comes back." ●

Clinical trial tests effectiveness of heat on pancreatic tumors

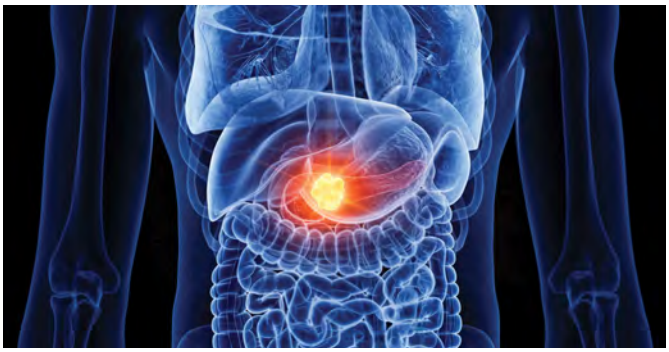
Like the 64,050 adults in the United States that the National Cancer Institute estimates will be diagnosed this year, Dean McMahon's doctor told the Houston resident several years ago that he had pancreatic cancer.

"Pancreatic cancer has such a low survival rate," McMahon says. "Within days you have to start chemo, so you have to process all that very quickly."

According to the latest statistics from the Surveillance, Epidemiology, and End Results (SEER) database, maintained by the National Cancer Institute, the five-year relative survival rate for combined stages of pancreatic cancer was 12.5 percent between 2013 and 2019.

McMahon was fortunate, though, to qualify to be part of a clinical trial being conducted by UTHealth Houston at Memorial Hermann-Texas Medical Center to test a new tool that may be used in the future to treat pancreatic cancer.

The trial, led at UTHealth by **Nirav Thosani, MD**, associate professor and director of the Center for Interventional Gastroenterology at McGovern Medical School at UTHealth Houston and a gastroenterologist affiliated with Memorial Hermann-TMC, involves targeting pancreatic tumors with heat. During this treatment, known as endoscopic ultrasound-guided radiofrequency ablation (EUS-RFA), a needle, guided visually by ultrasound, is threaded into the tumor, and extreme heat is delivered directly to the cancer cells to burn, or ablate, them, causing them to die. Meanwhile, surrounding tissue remains unharmed. The radiofrequency ablation is paired with chemotherapy to optimize survivability in patients with pancreatic cancer.



Dr. Thosani and his co-investigator recently received a $3.3 million grant from the National Cancer Institute to continue this study over the next five years. Through this important research, they hope to incorporate this treatment into clinical care for pancreatic cancer.

"With this treatment, we've also seen that while destroying the cancer cells in the tumor, we also activate the body's immune system to seek out and kill any remaining cancer cells," Dr. Thosani says.

He credits the technology that allows doctors to deliver high doses of thermal energy, or heat, directly into the tumor with advancing pancreatic cancer treatment options.

"While this treatment is still under clinical trial, we have treated many patients with very, very good results," he says.

McMahon, who was one of the first patients enrolled in this trial at Memorial Hermann-TMC, has responded so well to this innovative treatment that doctors removed his chemotherapy port, used to administer medicine to keep his cancer from spreading elsewhere in the body. That's a positive sign that his life can return to normal.

"They normally expect the cancer to come back," McMahon says emotionally. "I am a pancreatic cancer survivor without a port." ●

Advancing colorectal cancer treatment in the laboratory

From Memorial Hermann's operating rooms, vital cancer research specimens are being collected and sent to researchers at McGovern Medical School at UTHealth Houston to test potential treatments to stop colorectal cancer recurrence and metastasis.

Julie Rowe, MD, associate professor of oncology at McGovern Medical School and a hematologist and oncologist affiliated with Memorial Hermann-TMC, serves as the principal investigator for research to create xenograft mouse models that are used to test agents that target and destroy specific cells that function like stem cells and cause colorectal cancer to grow and spread.

"Skilled researchers at UTHealth Houston are transplanting tumor specimens from patients with colorectal cancer into immunocompromised laboratory mice to grow tumors that we can use to test treatments," Dr. Rowe says.

As Dr. Rowe explains, these xenograft mouse models, which allow tumors to grow in a way that mimics the human body versus growing them in a laboratory environment, are helping to advance the prevention of metastatic colorectal cancer. It also provides the opportunity for the evaluation and validation of biomarkers used to predict prognosis and patients' responses to therapy.

Amit Agarwal, MD, associate professor of surgery at McGovern Medical School and a colon and rectal surgeon affiliated with Memorial Hermann-Texas Medical Center and Memorial Hermann Sugar Land Hospital, is also involved in the research. He identifies patients that fit certain criteria and obtains consent from them for their tumors to be part of the research study. In the operating room, the tumors removed from these patients are sent to the UTHealth Houston laboratory where collaborating researchers transplant the tumors into the study mice.

"Identifying the right patients for this research is imperative," Dr. Agarwal says. "We have to be sure that the tumor is large enough to get the number of cells that the researchers need, and the tumors can't have been treated with chemotherapy or radiation. I work collaboratively with Dr. Rowe and the UTHealth Houston researchers to ensure we're giving them optimal study specimens."

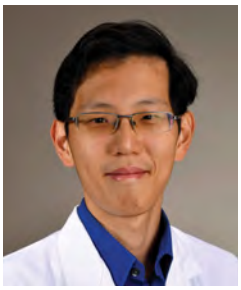
The transplanted tumor cells grow in the mice for several weeks and are then cultured, creating three-dimensional "organoids," which Dr. Rowe says are used to test promising anti-cancer agents.

In April 2023, the *British Journal of Cancer* highlighted the research being conducted at UTHealth Houston and Memorial Hermann since 2020. According to Drs. Rowe and Agarwal, this research has led other researchers to build upon their findings. With continued success, Dr. Rowe hopes this research will lead to a phase 1 trial to test the safety of this therapy in humans.

Clinical trials benefit patients with novel treatments

Memorial Hermann closely collaborates with McGovern Medical School at UTHealth Houston through Memorial Hermann's Clinical Innovation & Research Institute (CIRI) to conduct quality research that advances patient care, especially for individuals living in Greater Houston.

Currently, 174 active clinical trials are being conducted throughout Memorial Hermann sites. This information can be found on ClinicalTrials.gov by filtering for active trials at Memorial Hermann.



Nuclear radiologist **Bo Chen, MD**, assistant professor in the Department of Diagnostic and Interventional Imaging at McGovern Medical School at UTHealth Houston, affiliated with Memorial Hermann-Texas Medical Center, says that the research partnership with Memorial Hermann benefits researchers, physicians and patients.

"Memorial Hermann has the top personnel with the expertise, advanced equipment and the culture to embrace research," Dr. Chen says. This helps foster collaboration among physicians who may not otherwise work together and cultivates an understanding of how specialties are inherently intertwined. Successful research, Dr. Chen says, relies on various areas of specialization coming together to offer their respective input.

He has worked alongside **Neha Maithel, MD**, assistant professor of oncology at McGovern Medical School, a hematologist/oncologist affiliated with Memorial Hermann-Texas Medical Center and Memorial Hermann Northeast Hospital.

"For our research, we are paired with another specialist from the UTHealth Houston-Memorial Hermann partnership," Dr. Chen says. "This helps facilitate the enrollment of patients in appropriate clinical trials, as the physicians who care for patients in their clinics best understand who might qualify for specific trials."

Clinical trials often begin with a trial sponsor. Sponsors can be an individual or an organization, such as a medical school, a hospital or a pharmaceutical company. Often these sponsors approach researchers at national meetings or through existing relationships to find study sites and a principal investigator, the person responsible for leading the clinical trial. The trial sponsor is responsible for securing the funding, which covers the costs of the study, including those incurred by patients outside of their normal health care.

Research at Memorial Hermann is overseen by Institutional Review Boards, or IRBs, under the guidance of the trial sponsor, Principal Investigator, and the CIRI to ensure that all technical and regulatory aspects of the trials are met. IRBs also maintain safety oversight of the

research to ensure that risks to patients are minimized. When potential study patients are recruited, the risks and benefits of the study are explained so that patients may make an informed decision about whether to participate in the study.

In the clinical trial that Dr. Maithel has partnered with Dr. Chen to conduct, Dr. Maithel has helped enroll patients. "I see these patients in my clinic and know who may be a prime candidate for certain trials, based on their age, gender, disease status and other qualifying factors," she says. "I talk to them about the trial, explain their rights and risks as volunteer participants and prescreen them for inclusion, provided that they give their informed consent for participation."

Once patients consent to participate in a clinical trial, Dr. Chen says, they are closely monitored and have more direct access to providers involved with or overseeing the study. "They are not expected to navigate through their care alone," he says. "We help them navigate, and we advocate on their behalf. Clinical care comes before clinical trials, so these patients can withdraw from the trial at any time."

Clinical trials are conducted in phases, according to the National Institutes of Health.

- Phase I trials test a drug or treatment in a small group of people to determine its safety and identify side effects.
- Phase II trials are conducted in a larger group of people, usually between 100 and 300 individuals, to determine the effectiveness of a drug or treatment and to further study its safety.
- Phase III trials confirm the efficacy of a drug or treatment, monitor side effects and compare results to those of standard or similar treatments in 1,000 to 3,000 individuals. These trials also capture information that will allow the drug or treatment to be used safely.
- Phase IV trials, or post-market trials, track the safety of FDA-approved drugs or treatments in the general population to best understand the benefits, long-term side effects and optimal use.

Most of the trials conducted by UTHealth Houston at Memorial Hermann sites fall into the Phase III or Phase IV categories.

"Clinical trials benefit patients by bringing the latest treatments to them," Dr. Chen says. "Despite the hope for their condition to be cured, what I hear most from patients who participate in clinical trials is their desire to help future patients. They are helping us find better ways to manage disease and extend the forefront of science." ●

Ongoing Clinical Trials

Memorial Hermann offers cancer patients access to a wide range of clinical trials. Included in this issue are select clinical trials being undertaken by Memorial Hermann partners McGovern Medical School at UTHealth Houston, Texas Oncology (Gulf Coast Region) and Oncology Consultants.

Breast Cancer · Oncology Consultants	
Trastuzumab Deruxtecan (T-DXd) With/Without Pertuzumab Versus Taxane, Trastuzumab and Pertuzumab in HER2-positive Metastatic Breast Cancer **ClinicalTrials.gov Identifier:** NCT04784715	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Trastuzumab Deruxtecan (T-DXd) Alone or in Sequence With THP, Versus Standard Treatment (ddAC-THP), in HER2-positive Early Breast Cancer **ClinicalTrials.gov Identifier:** NCT05113251	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Evexomostat Plus Alpelisib and Fulvestrant in Postmenopausal Women at Risk for Hyperglycemia With Breast Cancer **ClinicalTrials.gov Identifier:** NCT05455619	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
AZD9833 Plus Palbociclib Vs Anastrozole + Palbociclib in Patients With ER-Positive HER2 Negative Breast Cancer Who Have Not Received Any Systemic Treatment for Advanced Disease **ClinicalTrials.gov Identifier:** NCT04711252	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Study to Assess AZD9833 + CDK4/6 Inhibitor in HR+/HER2-MBC With Detectable ESR1m Before Progression **ClinicalTrials.gov Identifier:** NCT04964934	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Gedatolisib + Fulvestrant With/Without Palbociclib vs Standard-of-Care for the Treatment of Patients With Advanced or Metastatic BC **ClinicalTrials.gov Identifier:** NCT05501886	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Study in Metastatic Breast Cancer Patients Receiving Eftilagimod Alpha or Placebo in Combination With Paclitaxel Chemotherapy **ClinicalTrials.gov Identifier:** NCT05747794	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Sacituzumab Govitecan-hziy Vs Treatment of Physician's Choice in Patients With Previously Untreated Metastatic Triple-Negative Breast Cancer **ClinicalTrials.gov Identifier:** NCT05382299	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913

Breast Cancer · Oncology Consultants

Sacituzumab Govitecan-hziy + Pembrolizumab Vs Treatment of Physician's Choice + Pembrolizumab in Patients With Previously Untreated, LABC Inoperable or Metastatic TNBC **ClinicalTrials.gov Identifier**: NCT05382286	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Phase III, randomised, open-label, 2 arm, multicentre, international study assessing the efficacy and safety of Dato-DXd compared with ICC in participants with locally recurrent inoperable or metastatic TNBC who are not candidates for PD-1/ PD-L1 inhibitor therapy **ClinicalTrials.gov Identifier:** NCT05374512	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913

Breast Cancer · Texas Oncology

MammaPrint, BluePrint, and Full-genome Data Linked with Clinical Data to Evaluate New Gene EXpression Profiles: An Adaptable Registry (FLEX Registry) **Texas Oncology Study #:** 17079	**Contact:** Texas Oncology-Houston (Gessner): Angie Recitas or Ginger Butterworth, 713.343.2551
Breast Cancer Index (BCI) Registry Study (BTX-BCI-016-PRT) **Texas Oncology Study #:** 20210	**Contact:** Texas Oncology-Beaumont: Alana Brown, 409.236.4909
A Phase 3, Single Arm, Open-Label Study Evaluating Ovarian Suppression Following Three-Month Leuprolide Acetate For Injectable Suspension (TOL2506) in Combination with Endocrine Therapy in Premenopausal Subjects with Hormone-Receptor-Positive (HR+), Human Epidermal Growth Factor Receptor 2 (HER2)-Negative Breast Cancer (TOL2506A; OVELIA) **Texas Oncology Study #:** 20326	**Contact:** Texas Oncology-Webster: Vanessa Johnson, 281.316.4912
A Phase III Study of Trastuzumab Deruxtecan (T-DXd) with or without Pertuzumab versus Taxane, Trastuzumab and Pertuzumab in HER2-positive, First-line Metastatic Breast Cancer (DESTINY-Breast09)(D967UC00001) **Texas Oncology Study #:** 20396	**Contact:** Texas Oncology-The Woodlands: Christina Genthon or Sandra Thornton, 832.616.5101

A Phase 3, double-blind, randomized study to assess the efficacy and safety of switching to AZD9833 (an oral SERD) + CDK4/6 inhibitors (palbociclib or abemaciclib) vs continuing aromatase inhibitor + CDK4/6 inhibitors in patients with acquired ESR1 mutation without radiological progression during 1L treatment with AI + CDK4/6i for HR+/HER2- mBC-ctDNA guided early switch study (SERENA 6) (D8534C00001) **Texas Oncology Study #:** 21173	**Contact:** Texas Oncology-Houston (Gessner): Angie Recitas or Ginger Butterworth, 713.343.2551
EMBER-3: A Phase 3, Randomized, Open-Label, Study of Imlunestrant, Investigators Choice of Endocrine Therapy, and Imlunestrant plus Abemaciclib in Patients with Estrogen Receptor Positive, HER2 Negative Locally Advanced or Metastatic Breast Cancer Previously Treated with Endocrine Therapy (J2J-OX-JZLC) **Texas Oncology Study #:** 21183	**Contact:** Texas Oncology-The Woodlands: Christina Genthon or Sandra Thornton, 832.616.5101
A Randomized, Multicenter, Placebo-controlled, Phase 3 study to Evaluate the Efficacy and Safety of HER2/neu Peptide GLSI-100 (GP2 + GM-CSF) in HER2/neu Positive Subjects with Residual Disease or High-Risk PCR after both Neoadjuvant and Postoperative Adjuvant Trastuzumab-based Therapy (FLAMINGO-01) (GLSI-21-01) **Texas Oncology Study #:** 21642	**Contact:** Texas Oncology-Sugar Land: Melissa Howell, 713.343.2551
EMBER-4: A Randomized, Open-Label, Phase 3 Study of Adjuvant Imlunestrant vs Standard Adjuvant Endocrine Therapy in Patients who have Previously Received 2 to 5 years of Adjuvant Endocrine Therapy for ER+, HER2- Early Breast Cancer with an Increased Risk of Recurrence (J2J-MC-JZLH) **Texas Oncology Study #:** 22101	**Contact:** Texas Oncology-Webster: Vanessa Johnson, 281.316.4912
A Phase 3, Open-Label, Randomized, Two-Part Study Comparing Gedatolisib in Combination with Palbociclib and Fulvestrant to Standard-of-Care Therapies in Patients with HR-Positive, HER2-Negative Advanced Breast Cancer Previously Treated with a CDK4/6 Inhibitor in Combination with Non-Steroidal Aromatase Inhibitor Therapy (VIKTORIA-1) (CELC-G-301) **Texas Oncology Study #:** 22159	**Contact:** Texas Oncology-Sugar Land: Melissa Howell, 713.343.2551

Colorectal Cancer · Oncology Consultants

MRTX849 With Cetuximab vs Chemotherapy in Patients With Advanced Colorectal Cancer With KRAS G12C Mutation

ClinicalTrials.gov Identifier: NCT03597581

Contact:
ResearchTeam@OncologyConsultants.com,
713.600.0913

MRTX849 With Cetuximab vs Chemotherapy in Patients With Advanced Colorectal Cancer With KRAS G12C Mutation

ClinicalTrials.gov Identifier: NCT04793958

Contact:
ResearchTeam@OncologyConsultants.com,
713.600.0913

Lung Cancer · UTHealth Houston

Protocol EA5181: Testing the Addition of an Antibody to Standard Chemoradiation Followed by the Antibody for One Year to Standard Chemoradiation Followed by One Year of the Antibody in Patients With Unresectable Stage III Non-Small Cell Lung Cancer

Sponsor: National Cancer Institute

ClinicalTrials.gov Identifier: NCT04092283

Lead Physician: Syed Jafri, MD

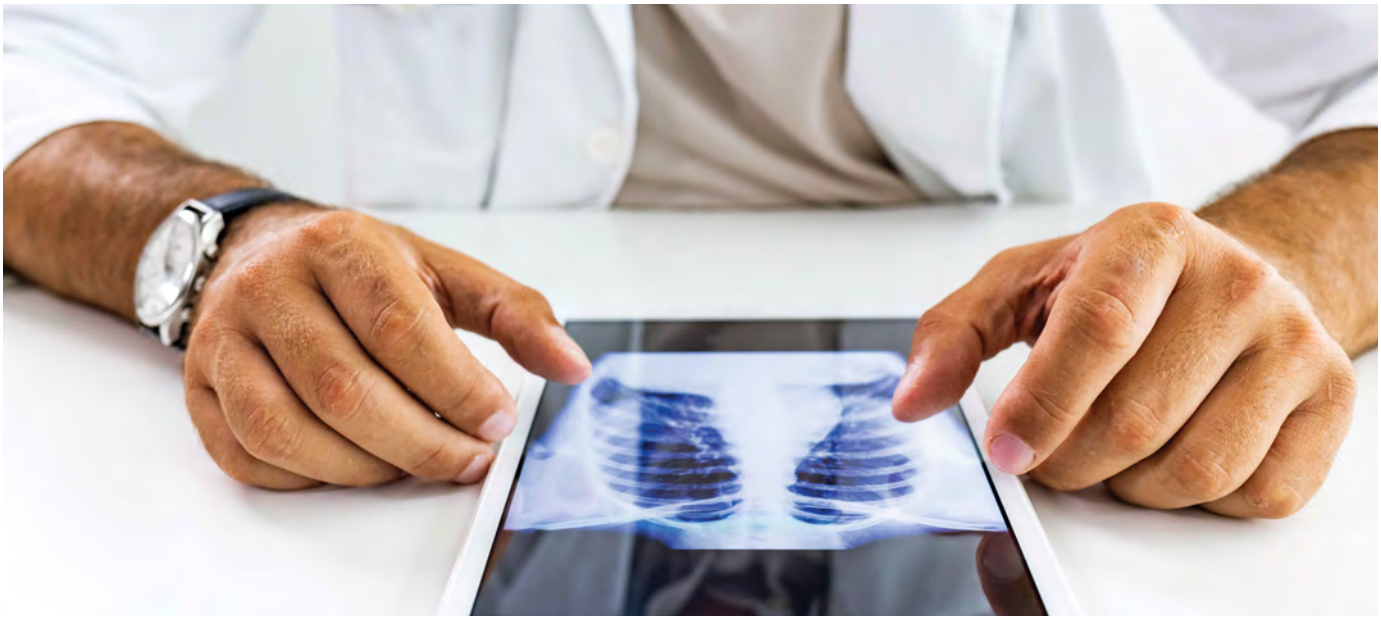
Contact: 713.704.3961,
ms.oncology.research@uth.tmc.edu

Biomarkers of Cancer Cachexia: A Prospective Translational Observational Study (Protocol No. T-19-101) Grant Title: Identification of Key Tumor Cell-Released Factors That Induce Cachexia

The purpose of this study is to find out if Hsp70 and Hsp90 are biomarkers of cancer cachexia. This information could eventually lead to extend the lifespan and improve the quality of life for cancer patients, and new treatments for this hard-to-treat and often fatal condition.

Lead Physician: Syed Jafri, MD

Contact: 713.704.3961,
ms.oncology.research@uth.tmc.edu



Lung Cancer · Oncology Consultants

A Phase 2 Trial of Combination Therapies With Adagrasib in Patients With Advanced Non-Small Cell Lung Cancer With KRAS G12C Mutation **ClinicalTrials.gov Identifier:** NCT05609578	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Amivantamab + Lazertinib + Platinum-Based Chemotherapy Vs Platinum-Based Chemotherapy in Patients With EGFR-Mutated Locally Advanced or Metastatic NSCLC After Osimertinib Failure **ClinicalTrials.gov Identifier:** NCT04988295	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Cobolimab + Dostarlimab + Docetaxel Vs Dostarlimab + Docetaxel Vs Docetaxel Alone in Participants With Advanced NSCLC, Progressed on Prior Anti- PD-[L]1 and Chemotherapy **ClinicalTrials.gov Identifier:** NCT04655976	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Study of BGB-A425 and LBL-007 in Combination With Tislelizumab in Advanced Solid Tumors **ClinicalTrials.gov Identifier:** NCT03744468	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Durvalumab vs Placebo With Stereotactic Body Radiation Therapy in Early Stage Unresected Non-small Cell Lung Cancer (NSCLC) Patients / Osimertinib Following SBRT in Patients With Early Stage Unresected NSCLC Harboring an EGFR Mutation **ClinicalTrials.gov Identifier:** NCT03833154	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
MRTX849 Monotherapy and in Combination With Pembrolizumab and a Phase 3 Trial of Adagrasib in Combination in Patients KRAS G12C Mutation **ClinicalTrials.gov Identifier:** NCT04613596	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Trastuzumab Deruxtecan as the First Treatment Option for Unresectable, Locally Advanced/Metastatic NSCLC With HER2 Mutations **ClinicalTrials.gov Identifier:** NCT05048797	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913
Amivantamab in Participants With Advanced or Metastatic Solid Tumors Including Epidermal Growth Factor Receptor (EGFR)-Mutated NSCLC **ClinicalTrials.gov Identifier:** NCT05498428	**Contact:** ResearchTeam@OncologyConsultants.com, 713.600.0913

Lung Cancer · Oncology Consultants

Lazertinib With Subcutaneous Amivantamab Compared With Intravenous Amivantamab in Participants With EGFR Mutated Advanced or Metastatic NSCLC

ClinicalTrials.gov Identifier: NCT05388669

Contact:
ResearchTeam@OncologyConsultants.com, 713.600.0913

Lung Cancer · Texas Oncology

Randomized Phase II/III Trial Of Consolidation Radiation + Immunotherapy for ES-SCLC: RAPTOR trial (NRG-LU007)

Texas Oncology Study #: 22005

Contact:
Texas Oncology-The Woodlands:
Christina Genthon or Sandra Thornton, 832.616.5101

Prostate Cancer · Oncology Consultants

Capivasertib+Abiraterone as Treatment for Patients With Metastatic Hormone-sensitive Prostate Cancer and PTEN Deficiency

NCT04493853

Contact:
ResearchTeam@OncologyConsultants.com, 713.600.0913

Niraparib + Abiraterone Acetate + Prednisone Vs Abiraterone Acetate + Prednisone for Participants With Deleterious Germline or Somatic Homologous Recombination Repair (HRR) Gene-Mutated Metastatic Castration-Sensitive Prostate Cancer

ClinicalTrials.gov Identifier: NCT04497844

Contact:
ResearchTeam@OncologyConsultants.com, 713.600.0913

Prostate Cancer · Texas Oncology

CYCLONE 3: A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study of Abemaciclib in Combination with Abiraterone plus Prednisone in Men with High-Risk Metastatic Hormone-Sensitive Prostate Cancer (I3Y-MC-JPEG)

Texas Oncology Study #: 21358

Contact:
Texas Oncology-Sugar Land:
Melissa Howell, 713.343.2551

Prostate Cancer · Texas Oncology

CYCLONE 3: A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study of Abemaciclib in Combination with Abiraterone plus Prednisone in Men with High-Risk Metastatic Hormone-Sensitive Prostate Cancer (I3Y-MC-JPEG)

Texas Oncology Study #: 21358

Contact:
Texas Oncology-Sugar Land:
Melissa Howell, 713.343.2551

Additional Clinical Trials – UTHealth Houston

Development of a Patient-Derived Xenograft Mouse Model of Solid Tumors The purpose of this research study is to create patient-derived xenograft (PDX) mouse models and patient- derived organoids (PDO). PDX/PDO tumor models are created using a small portion of a patient's left- over tumor tissue. In this study, researchers want to look at and compare the genetic changes of the tumor models with drug response and/or resistance. **Eligibility Criteria:** Patients must be age 18 years and older, with solid tumors, undergoing cancer treatment at UTHealth/Memorial Hermann Hospital-Texas Medical Center, and able to provide a solid tumor sample (from a standard of care biopsy/surgery).	**Lead Physician:** Julie Rowe, MD **Contact:** : Betty Arceneaux at 713.704.3186 or ms.oncology.research@uth.tmc.edu
"Creating Functional Three-Dimensional Cell Cultures of Pathological Specimens from Uncommon Cancer Patients" The purpose of this study is to use left-over tumor tissue taken from a standard of care biopsy or surgery to create an organoid for each study participant. Researchers will use these models to test the effectiveness of anti-cancer drugs. Because these models are designed to be a very accurate copy of the original cancer, they have the potential to predict how patients will respond to anti-cancer drugs. **Eligibility Criteria:** Patients must be age 18 years and older, diagnosed with sarcoma or uncommon malignancies such as not but not limited to hepatocellular carcinoma or biliary tract tumors, undergoing cancer treatment at UTHealth/Memorial Hermann Hospital-Texas Medical Center or Memorial Hermann Orthopedic Spine Hospital (MHOSH), and able to provide a tumor sample from a standard of care biopsy/surgery.	**Lead Physician:** Jessica Jones, MD **Contact:** : 713.704.3186 or ms.oncology.research@uth.tmc.edu
A Phase II/III Randomized Study of Maintenance Nivolumab versus Observation in Patients with Locally Advanced, Intermediate Risk HPV Positive OPCA (Protocol No. EA3161) The purpose of this study is to compare the usual treatment (the care that most people get for HPV positive oropharynx cancer) alone (radiation and chemotherapy) to adding maintenance nivolumab to the usual treatment. **Sponsor:** National Cancer Institute (NCI)/ECOG- ACRIN and Bristol-Myers Squibb **ClinicalTrials.gov Identifier:** NCT0381101	**Lead Physician:** Syed Jafri, MD **Contact:** : Khola Khan at 713.500.6919 or Khola.Khan@uth.tmc.edu

Additional Clinical Trials – UTHealth Houston

Immunotherapy With Nivolumab and Ipilimumab Followed by Nivolumab or Nivolumab With Cabozantinib for Patients With Advanced Kidney Cancer, The PDIGREE Study This phase III trial compares the usual treatment (ipilimumab and nivolumab followed by nivolumab alone) to treatment with ipilimumab and nivolumab, followed by nivolumab with cabozantinib in patients with untreated renal cell carcinoma that has spread to other parts of the body. **Sponsor:** National Cancer Institute (NCI) **ClinicalTrials.gov Identifier:** NCT03793166	**Lead Physician:** Neha Maithel, MD **Contact:** : 713.704.3961 or ms.oncology.research@uth.tmc.edu
Protocol: Comprehensive Outcomes for After Cancer Health (COACH) COACH is a study currently being conducted across the country to learn more about the health and well-being of individuals who have completed their primary cancer therapy. This study also evaluates if and how a digital coaching intervention may help support individuals and improve their outcomes. **Sponsor:** Pack Health, A Quest Diagnostics Company **ClinicalTrials.gov Identifier:** NCT05349227	**Lead Physician:** Jessica Jones, MD **Contact:** Kaukab Jafry at 832.325.6537 or Kaukab.I.Jafry@uth.tmc.edu

Community Outreach

Educating the community to help prevent and fight cancer

Educating the community about cancer prevention, early screenings, diagnosis, the latest treatments, support and survivorship care is a hallmark of the mission of Memorial Hermann's cancer program. Oncology nurse navigators, who are registered nurses certified in oncology and who help Memorial Hermann cancer patients progress through cancer care, partner with several community organizations each year to provide people living and working within the Greater Houston area a better understanding of the complexities of cancer.

"We participate in community outreach events that have the potential to reach the greatest number of individuals at risk for developing cancer," says Mandy Owens, RN, manager of clinical oncology nurse navigation for Memorial Hermann. "The outreach takes aim at raising awareness about cancer prevention and care, but also helps to equalize disparities in cancer care." This year, the oncology nurse navigators and other employees from Memorial Hermann supported cancer education in the community by participating in more than 40 events, including the following:

- **Big Climb for the Leukemia & Lymphoma Society: Saturday, April 1, Three Allen Center.**
  A team from Memorial Hermann climbed 50 flights of stairs at Three Allen Center in downtown Houston, raising money pledged by donors to the team's efforts. Additionally, the oncology nurse navigators provided participants of the event with information about the importance of screenings and early detection.

- **The American Lung Association's Fight for Air Climb: Saturday, May 23, Rice University.**
  Participants climbed more than 1,000 steps in the Rice University Stadium bleachers to raise money toward defeating lung cancer, improving air quality, reducing the burden of lung disease and eliminating tobacco use and tobacco-related illnesses. Memorial Hermann's oncology nurse navigators provided participants with information about smoking cessation programs and the availability of low-dose CT screenings for the early detection of lung cancer among qualifying smokers or former smokers.

- **Prostate cancer screening event: Thursday, July 13, Outreach Missionary Baptist Church.**
  Physicians donated their time to screen black men for prostate cancer at a Houston-area church. Memorial Hermann's oncology nurse navigators offered education about the higher risk of prostate cancer among the black community and about ways of better accessing potentially lifesaving screenings.

- **Indian American Cancer Network (IACAN) Speaking Engagement: Saturday, Feb. 11, Jain Society of Houston.**
  Memorial Hermann collaborated with the Jain Society of Houston to host a colorectal screening awareness event where Memorial Hermann oncology nurse navigators provided education and information about the colon cancer risks that impact the Indian American population. Dr. Amit Agarwal, colorectal surgeon, was the speaker.

- **Zero Prostate Walk/Run: Saturday, Sept. 9, MacGregor Park.**
  A team from Memorial Hermann joined the Houston community in a walk/run and a kid's dash to raise awareness and funds for prostate cancer.

- **"Face to Face Shoulder to Shoulder, Let's Talk About Prostate Cancer": Saturday, Sept. 16, New Hope Progressive Baptist Church.**
  Memorial Hermann collaborated with Texas Southern University for an event to educate about prostate cancer and screening options. Dr. Olubayo Tojuola, urologist, Memorial Hermann Greater Heights, served as the panel expert.

- **Mobile Mammography Breast Cancer Screening Event: Monday, Sept. 18, Blessed Hope Baptist Church.**
  Memorial Hermann partnered with Texas Southern University to offer breast cancer education and mobile mammography to the public.

- **Breast Cancer Screening Day: Saturday, Oct. 14, Memorial Hermann Northeast Hospital 8 a.m. – 2 p.m.**
  Memorial Hermann and New Day Deliverance Holiness Church hosted a breast cancer screening event for the local community.

- **"We Roar Against Breast Cancer": Friday, Oct. 20, Texas Southern University, 11 a.m. – 3 p.m.**
  Memorial Hermann and Texas Southern University hosted a breast cancer education event that will also offer mobile mammography. Shelita Anderson, RN, served as the panel expert.

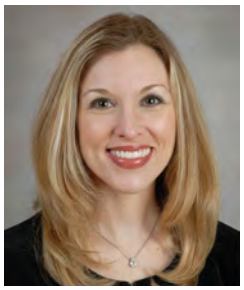
- **Breast Cancer Screening Day: Saturday, Oct. 28, Memorial Hermann Northeast Hospital, 8 a.m. - 2 p.m.**
  Memorial Hermann and Bread of Life Baptist Church hosted a breast cancer screening event for the local community.

Owens says that at each of these events, participants are given a survey with a QR code to help Memorial Hermann assess the impact and effectiveness of these programs on community health to ensure equitable access to care.

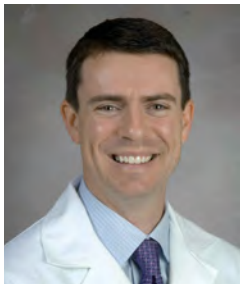
"These programs are so rewarding both clinically–helping people get the care they need–and to us as healthcare professionals," she says. "You go home from these events feeling like you've made a difference in the lives you may not otherwise touch." ●

Memorial Hermann welcomes

Melita Benning, RN, is an oncology nurse navigator for Memorial Hermann Southeast Hospital. She earned her bachelor's degree in nursing from Texas Woman's University and her MBA from Our Lady of the Lake University. She has more than 32 years of nursing experience, which includes being a clinical nurse navigator, an operating room nurse, a post-anesthesia care unit (PACU) nurse, a nurse manager and a charge nurse. Her desire to advocate for patients led her to become an oncology nurse navigator, where she can help answer questions and resolve challenges for patients and their family members. She is an active member of the Association of Operating Room Nurses and of the Alpha Kappa Alpha Sorority.



Christi Lynn Blakkolb, MD, FACS, is associate professor of plastic surgery at McGovern Medical School at UTHealth Houston and is board certified in both general and plastic surgery. She is a plastic surgeon affiliated with Memorial Hermann-Texas Medical Center, Memorial Hermann Memorial City Medical Center, Memorial Hermann | Rockets Orthopedic Hospital, Memorial Hermann Southwest Hospital and Children's Memorial Hermann Hospital. She earned her medical degree from Loyola University Chicago Stritch School of Medicine and completed both her internship and general surgery residency at UTHealth Houston. She then completed a residency in plastic and reconstructive surgery at the University of Alabama Birmingham. Today, she teaches plastic surgery residents as part of her responsibilities at UTHealth Houston. Her clinical interests include reconstructive surgery following cancer surgery of the breast and skin, and she serves on the Memorial Hermann-TMC and the Memorial Hermann Memorial City breast tumor boards, discussing cases with multiple specialists to ensure the best clinical and aesthetic outcomes. She is a fellow of the American College of Surgeons and a member of the American Society of Plastic Surgeons and the Association of Women Surgeons. She is a member of the Texas Medical Association, the Harris County Medical Association, the Texas Society of Plastic Surgery and the Houston Society of Plastic Surgery. Dr. Blakkolb has published abstracts and journal articles in peer-reviewed publications to further the understanding of the importance of plastic surgery in the continuum of care for cancer patients. In 2021 and in 2023, she was listed as a Top Doctor for plastic and reconstructive surgery by *Houstonia Magazine*. She has a passion for promoting women surgeons and serves as a mentor to female medical students interested in surgery and plastic surgery.



D. Ryan Hall, MD, is an associate professor of surgery at McGovern Medical School at UTHealth Houston and an affiliated, board-certified general surgeon with Memorial Hermann-Texas Medical Center, Memorial Hermann Southeast Hospital, Memorial Hermann Sugar Land Hospital and Memorial Hermann Greater Heights Hospital. He earned his medical degree from the University of Oklahoma College of Medicine in Oklahoma City. He completed a general surgery residency at East Tennessee State University in Johnson City, Tenn., and an organ transplant surgery fellowship at the University of Tennessee College of Medicine in Memphis, Tenn. He served as a multi-organ transplant surgeon at the Transplant Center at Memorial Hermann-TMC before transitioning his practice, in 2022, to hepatobiliary surgical oncology. His clinical interests include minimally invasive surgery of the liver, bile ducts and pancreas, and he is experienced and skilled with using robotic-assisted surgery, when indicated, to remove complex hepatobiliary malignancies. He is a member of the Americas Hepato-Pancreato-Biliary Association (AHPBA) and the American College of Surgeons (ACS).

Makenzie Hancock, RN, an oncology nurse navigator for Memorial Hermann-Texas Medical Center, was inspired to pursue a career in oncology after seeing many of her family members undergo cancer treatment. She earned her Bachelor of Science in Nursing

from The University of Texas at Tyler and was accepted into the New Graduate Nurse Program at Memorial Hermann-TMC in the medical oncology unit. During her tenure there, she has worked as a preceptor nurse, charge nurse, infusion nurse and chemotherapy resource nurse. She strives to ease the worries of her patients by providing resources, education and support to each of them.

John Hardaway, MD, PhD, is a double board-certified general surgeon and surgical oncologist affiliated with Memorial Hermann The Woodlands Medical Center. He earned his Doctor of Philosophy degree from the University of Missouri School of Medicine in Columbia, Mo., focusing on cellular immunology before also earning his medical degree there. He completed his internship in general surgery at the University of Washington in Seattle and his residency at Michigan State University in East Lansing, Mich. before completing a fellowship in complex general surgical oncology through the Boston University School of Medicine at Roger Williams Medical Center in Providence, R.I. His clinical practice focuses on gastrointestinal cancers and diseases of the esophagus, stomach, liver and pancreas, and he performs minimally invasive robotic surgical procedures, when appropriate. He also treats patients with thyroid, breast, skin and soft tissue cancers. He continues to work in the realm of clinical immunotherapy, developing clinical trials to treat solid tumors in the liver and pancreas. He has authored or co-authored nearly 30 peer-reviewed publications, a book chapter on cellular immunotherapy and several oral and poster presentations related to surgical oncology and immunotherapy. He is a fellow of the American College of Surgeons and currently serves as a reviewer for its journal. He is a member of the Society for Immunotherapy and Cancer, the Society of Surgical Oncology, the Society of American Gastrointestinal and Endoscopic Surgeons, the American Association of Immunologists and the Americas/International Hepato-Pancreato-Biliary Association.

Lisa Jordan, RN, is an oncology nurse navigator at Memorial Hermann Memorial City Medical Center. She earned her bachelor's degree in nursing from Indiana University and her master's degree in nursing from Saint Xavier University in Chicago. She also received a bachelor's degree in speech language pathology from Northern Illinois University. She began her career as a chemotherapy infusion nurse but has also worked as a nurse educator and oncology clinical nurse leader as well as a hospice and home health nurse case manager. She chose to become an oncology nurse navigator to help patients overcome barriers to healthcare and make a difference in cancer patients' lives. Her abstract with data about patient education and safety was published for the Oncology Nursing Society Congress in 2023, and she is a member of Chi Eta Phi, a non-profit professional service organization for registered nurses.

Sunil Krishnan, MD, is professor of radiation oncology at McGovern Medical School at UTHealth Houston and a radiation oncologist affiliated with Memorial Hermann-Texas Medical Center, Memorial Hermann Memorial City Medical Center and Memorial Hermann Northeast Hospital. He earned his medical degree from Christian Medical College in Vellore, India, and completed two residencies–one in internal medicine at Penn State Geisinger Medical Center in Danville, Pa., and another in radiation oncology at Mayo Clinic in Rochester, Minn.–before becoming a professor of radiation oncology and the Director of the Center for Radiation Oncology Research at MD Anderson Cancer Center in Houston. He then joined Mayo Clinic Florida as a professor of radiation oncology and director of the Office of Clinical Trials. His current research in Houston involves sensitizing tumors to radiation therapy and protecting normal tissues from radiation injury. At Memorial Hermann hospitals, he treats patients with hepatobiliary, pancreatic and rectal tumors. He has authored or co-authored more than 300 peer-reviewed manuscripts and 20 book chapters, co-edited three textbooks and multiple scientific journals, including serving as editor-in-chief of Cancer Nanotechnology, and has been awarded five patents, with six more pending.

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Alpa Nick, MD, is a board-certified gynecologic oncologist affiliated with Memorial Hermann Katy Hospital, Memorial Hermann Memorial City Medical Center, Memorial Hermann Northeast Hospital, Memorial Hermann Pearland Hospital, Memorial Hermann Southeast Hospital and Memorial Hermann The Woodlands Medical Center. She earned her medical degree from Louisiana State University School of Medicine in Shreveport, La., and completed her clinical residency at Vanderbilt University Medical Center in Nashville, Tenn. She also completed her fellowship training in gynecologic oncology at The University of Texas MD Anderson Cancer Center in Houston and obtained her master's degree in cancer biology from The University of Texas. She has served as the principal investigator for research on ovarian cancer, holds a patent for cancer detection through the breath and has authored nearly 100 published articles, book chapters about ovarian cancer and more than 150 abstracts related to gynecologic cancers. She also serves as a journal reviewer for *Gynecologic Oncology*. She is a fellow of the American Congress of Obstetricians and Gynecologists and a member of both the American Society of Clinical Oncology and the Society of Gynecologic Oncologists.

Melissa Pickett, RN, an oncology nurse navigator at Memorial Hermann-Texas Medical Center, began her career as a social worker, earning her bachelor's degree in social work from Eastern Michigan University. After her grandmother passed away from thyroid cancer, she decided to pursue a nursing career and earned her nursing degree from Monroe Community College. She began her nursing career working with cardiac patients and has served as a leader in her roles as charge nurse, wound care nurse and infection control nurse in a long-term, acute specialty hospital. She also has leadership experience in interventional radiology. Working with pancreatic cancer patients in Michigan prompted her to pursue nurse navigation to support oncology patients with their various, and sometimes complex, needs.

Bhuvana Sagar, MD, is a board-certified oncologist affiliated with Memorial Hermann Cypress Hospital and Memorial Hermann Northeast Hospital. She earned her medical degree from Government Kilpauk Medical College in Chennai, India, and completed her internship and residency at St. Luke's-Roosevelt Hospital/Columbia Presbyterian University, now Mount Sinai West, in New York City. She also completed a fellowship in hematology/oncology from The University of Texas Medical Branch at Galveston before moving to Houston and starting her oncology practice. With experience in the oversight and development of value-based cancer programs at the community level, she actively collaborates with the American Society of Clinical Oncology and the National Comprehensive Cancer Network on various quality initiatives in cancer care. She also speaks at health care and public forums, calling attention to the importance of addressing disparities in cancer care and educating the public to make informed decisions about their care. She is passionate about providing emotional support and professional guidance to her patients and their families and strives to combine her population health management experience with the latest available technologies so patients may achieve overall physical, mental and spiritual health.

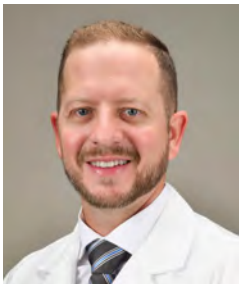
Tamara Saunders, MD, FACS, is associate professor of surgery at McGovern Medical School at UTHealth Houston and a breast surgeon affiliated with Memorial Herman Katy Hospital and Memorial Hermann-Texas Medical Center who treats breast cancer and benign breast diseases. She earned her medical degree from UT Health San Antonio School of Medicine, and as a native Houstonian, completed both her surgical internship and residency at UTHealth Houston. Board-certified in surgery, a fellow of the American College of Surgeons and a member of the American Society of Breast Surgeons, her clinical interests include providing individualized multidisciplinary treatments, managing high-risk pathology, surveilling high-risk patients based on standard screening protocols and uncovering genetic mutations. She uses oncoplastic techniques to achieve optimal oncologic and cosmetic outcomes and

performs nipple-sparing mastectomies and axillary preservation procedures, when possible, to maintain patients' quality of life. She also is a member of the Association of Women Surgeons, the Society of Surgical Oncology, the Association of Academic Surgeons and serves as a quality improvement leader in the hospitals with which she is affiliated and with the residents she educates. She has received numerous teaching awards from the surgical residents and from the dean of UTHealth Houston.

Michelle Shen, MD, is assistant professor of surgery at McGovern Medical School at UTHealth Houston and a breast surgical oncologist affiliated with Memorial Hermann Sugar Land Hospital. She received her medical degree from UT Health San Antonio School of Medicine and completed her residency in general surgery at UTHealth Houston, followed by a breast surgical oncology fellowship at MD Anderson Cancer Center in Houston. She is board-certified in surgery by the American Board of Surgery and is a fellow of the American College of Surgeons. Her clinical interests include both benign and malignant breast-related diseases and conditions. She uses evidence-based practices to care for patients of all age groups and is a proponent of screening and surveillance of high-risk patients to reduce breast cancer occurrence and mortality.

Cassandra Thornton, RN, is an oncology nurse navigator at Memorial Hermann Northeast Hospital. She earned her bachelor's degree in nursing from The University of Texas Medical Branch at Galveston. She began her career as a research nurse before working as a radiation nurse navigator, a bone marrow transplant research nurse and transplant coordinator, and a pediatric home health nurse. She has experience in medical oncology, radiation oncology, pediatrics, heart and kidney transplant care, hematology and nephrology. She ultimately chose oncology nursing because of her desire to contribute to the research and development of drugs for cancer. Her patients inspire her to provide specialized education about their particular cancers and to offer resources and tools to address the physical, social and emotional effects of cancer.

Jamie Ureste, RN, is an oncology nurse navigator for Memorial Hermann Katy Hospital. She graduated from Texas A&M University with a bachelor's degree in kinesiology before earning a bachelor's degree with honors in nursing from Cizik School of Nursing at UTHealth Houston. She then achieved certification in oncology nursing. Putting her education to use, she began working in a medical oncology and hematology unit, where her responsibilities included administering chemotherapy. She believes working with cancer patients is her true calling, and she says she loves having the opportunity to care for and guide patients from diagnosis to treatment while connecting them with helpful information that enables them to make informed decisions about their care.



Jeffrey Van Eps, MD, assistant professor within the Department of Surgery at McGovern Medical School at UTHealth Houston and a colon and rectal surgeon affiliated with Memorial Hermann, treats adults for gastrointestinal (GI) conditions, including colorectal cancer. He earned his medical degree from Saint Louis University School of Medicine in St. Louis, Mo., and completed his internship and residency in surgery from Houston Methodist Hospital before finishing a residency in colon and rectal surgery from the University of Minnesota in Minneapolis. He combines evidence-based medicine with minimally invasive approaches, such as robotic and laparoscopic surgery, bolstered by enhanced recovery after surgery (ERAS) protocols to promote short hospital stays, smooth recovery and excellent outcomes for surgical patients. He is a key contributor for multidisciplinary tumor boards that guide GI cancer care at multiple Memorial Hermann hospitals and helped initiate a surveillance program for rectal cancer cases that respond completely to pre-surgery treatments. He is also an accomplished academic researcher and completed a three-year research fellowship focusing on advanced surgical biomaterials and nanomedicine for regenerative medicine applications. He has authored more than 40 peer-reviewed scientific publications and book chapters and serves as a reviewer and editor for multiple medical

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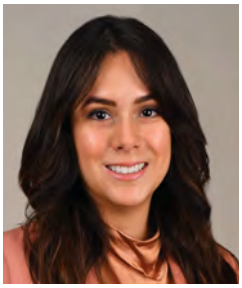
journals. His current research at UTHealth Houston is centered around clinical and translational research, including multiple clinical trials to test wound healing for complex anal fistula repair. He is a member of the Association for Academic Surgery, a fellow of the American College of Surgeons and a member of the American Society of Colon and Rectal Surgeons.



Nicole Villafañe Ferriol, MD, is a surgeon who is board-certified in both general surgery and complex surgical oncology and is affiliated with Memorial Hermann. She earned her medical degree from the University of Puerto Rico School of Medicine in San Juan. She completed her general surgery internship, residency and two additional years in research at Baylor College of Medicine in Houston. She also completed a fellowship in complex general surgical oncology at the Fox Chase Cancer Center-Temple University in Philadelphia. She performs both open and minimally invasive surgery, and her clinical interests include colorectal-liver metastases, gastric cancer and surgery to treat liver, pancreas and biliary cancers. Her practice philosophy focuses on providing empathetic, patient-centered, evidence-based and multidisciplinary cancer care. She also has a research interest in identifying and overcoming cancer-related health care disparities. She is a member of the American College of Surgeons, the Society of Surgical Oncology, the Association for Academic Surgery and the Michael E. DeBakey International Surgical Society. ●

About Memorial Hermann Cancer Care

Memorial Hermann offers the entire continuum of cancer care–education, prevention, screening, diagnosis, treatment, survivorship and rehabilitation. We do more than provide trusted medical care; we are helping patients navigate their entire cancer journey by caring for their physical, social, emotional and spiritual needs. Patients can take advantage of cancer services in their own neighborhood through our convenient network, which includes eight Cancer Centers, more than 20 breast care locations, 17* hospitals and numerous specialty programs and services located throughout the Greater Houston area.

Through partnerships and affiliations with community oncology providers, McGovern Medical School at UTHealth Houston, Mischer Neuroscience Institute at Memorial Hermann-TMC and TIRR Memorial Hermann, patients can be confident that oncology specialists are working together to ensure the best possible outcome for their cancer treatment.

At Memorial Hermann, we provide patients with the tools and resources needed to fight cancer close to home when home is where they want to be. All Memorial Hermann Cancer Centers are accredited by the American College of Surgeons Commission on Cancer, and the Breast Care Center at Memorial Hermann Greater Heights Hospital has been granted full, 3-year accreditation by the National Accreditation Program for Breast Centers.

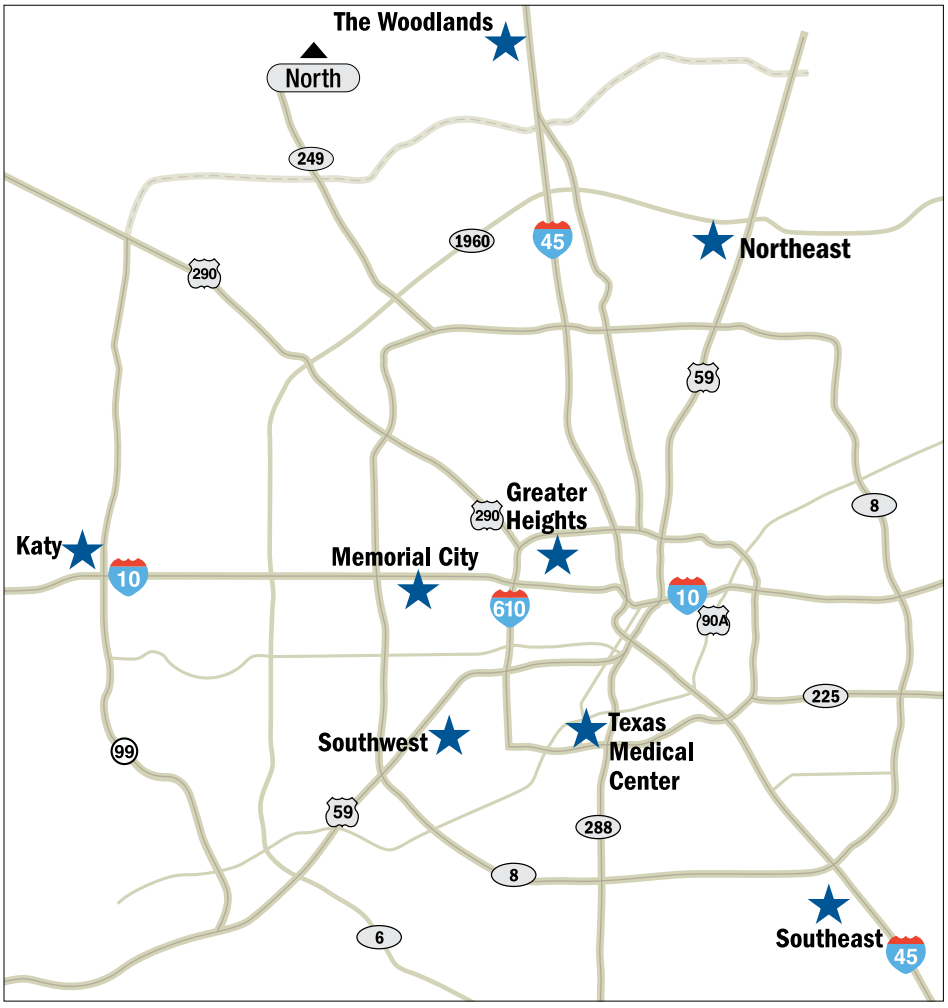
To refer a patient or to be connected to support services, contact a Memorial Hermann Oncology Nurse Navigator at 833.770.7771.

**Memorial Hermann Health System owns and operates 14 hospitals and has joint ventures with three other hospital facilities, including Memorial Hermann Surgical Hospital First Colony, Memorial Hermann Surgical Hospital Kingwood and Memorial Hermann Rehabilitation Hospital-Katy.*

Memorial Hermann Health System
MEMORIAL HERMANN
Cancer Center

929 Gessner Road
Houston, TX 77024
cancer.memorialhermann.org

Memorial Hermann Cancer Center Locations



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925 Gessner Rd.
Houston, TX 77024
866.338.1150

Northeast
18960 Memorial North
Humble, TX 77338
855.537.0016

Greater Heights
1635 North Loop West
Houston, TX 77008
855.537.0019

Katy
23900 Katy Fwy.
Katy, TX 77494
281.644.7000

Southeast
11920 Astoria Blvd.
Suite 100
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855.537.0017

Southwest
7600 Beechnut St.
Houston, TX 77074
713.456.4028

Texas Medical Center
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