

Cancer Awareness & Prevention



How the Pandemic has Impacted Cancer Screenings

New findings led by researchers at the American Cancer Society (ACS) show the number of women in the United States who reported having a recent (in the past year) breast cancer or cervical cancer screening dropped by 2.13 million (6%) and 4.47 million (11%) respectively in 2020 compared to 2018. The study is the first of its kind to evaluate the impact of the COVID-19 pandemic on cancer screenings nationally using population-based data. The results are published this month in the *Journal of the American Medical Association (JAMA) Open Network*.

“The COVID-19 pandemic had an immediate impact in March and April of 2020, as screenings initially dropped by close to 80%,” said Dr. Ahmedin Jemal, senior vice president, surveillance & health equity science at the American Cancer Society and senior author of the study. “Many people caught up on screenings later in 2020, but overall, the COVID-19 pandemic kept screenings down over the course of the entire year. As we move forward, it’s crucial to get people back into their doctor’s offices to get screened.”

The study also found that between 2018 and 2020 colonoscopies for colorectal cancer detection in the past year dropped by 16% for both men and women but was offset by an increase in stool testing of 7%. This showed the promise of at-home test-

ing to maintain population-wide screening rates during a major healthcare disruption.

In other study findings:

- Hispanic and lower-income people experienced sharper drops in past-year breast and cervical cancer screening, reflecting newly emerging barriers and exacerbation of long-standing barriers to cancer screening.
- Asian/Pacific Islander women had a 27% drop in past-year breast cancer screening, the largest drop for any race.
- Hispanic women had a 17% drop in past-year cervical cancer screening.
- The drop in screening in the past year nearly doubled for non-high school graduates compared to college graduates. Non-high school graduates dropped by 11% for breast cancer screening and 17.7% for cervical cancer screening, compared to 6.1% and 9.5% respectively for college graduates.

“The impact of these drops on stage at diagnosis and survival is not yet known, but it is something we need to monitor closely,” said Dr. Jemal. “It is imperative that we understand the impact of lower screening rates on cancer outcomes among people of color and people of lower socioeconomic standing and also work to improve access to health care and cancer screen-

ings for everyone.”

“Regular screening for cancer can help save lives. This important study is further evidence of how critical it is to get people back on track with their regular screening tests following COVID-19,” said Dr. William Dahut, chief scientific officer at the American Cancer Society. “Screening campaigns like our Get Screened campaign continue to aim to increase cancer screening rates by raising awareness about the need for recommended screenings for breast, cervical, colorectal, prostate, and lung cancers.”

Dr. Dahut added, “Screening is safe, effective, and accessible. Facilities that offer screening services have COVID-19 safety precautions in place. Many states have low or reduced-cost screening programs to help ensure that everyone has access, even people who don’t have insurance or a primary care doctor.”

The American Cancer Society is on a mission to free the world from cancer. The organization invests in lifesaving research, provides 24/7 information and support, and works to ensure that individuals in every community have access to cancer prevention, detection, and treatment.

For more information, visit [cancer.org](https://www.cancer.org).

CANCER AWARENESS & PREVENTION

Schedule Your Mammogram Today, Embrace Tomorrow

If you've been putting off getting a mammogram, here are six reasons to schedule and keep your mammogram appointment today.

By LISA WANG, MD

Are you overdue for a mammogram? Getting this lifesaving breast cancer screening every year helps your doctor spot signs of cancer long before you may notice any changes in your breasts.

One in eight women will be diagnosed with breast cancer in their lifetime. The American College of Radiology states that mammography screenings have assisted in the reduction of deaths due to breast cancer in the United States by 1/3 since 1990. Regular mammography screenings are the best way to screen for breast cancer. Mammograms can detect the cancer at an early stage, which can lead to early treatment, a wider range of treatment options, and better chances of cure and survival.

If it's been a while since you had a mammogram, these six reasons just may convince you to pick up the phone and make an appointment today:

1. You may have breast cancer even if you haven't felt a lump. You may not be able to feel a lump if the cancer is small or deep inside your breast. Mammograms can show masses and other changes in the breasts that can be caused by cancer before they're otherwise felt. The screenings use low dose X-rays that give doctors a look at the inside of your breasts.

2. The sooner cancer is caught, the better. Your chance of surviving breast cancer is much better if the cancer is found early. The five-year survival rate is 99% if the cancer is found before it spreads outside the breast, according to the National Breast Cancer Foundation. If found early, your doctor may only need to remove the cancer instead of the entire breast. Follow your doctor's recommendations to help detect breast cancer early—when it is easiest to treat.

3. You may be more likely to get breast cancer if family members had it. Your chance of getting breast cancer could be higher if someone else in your family had the cancer. If your mother, daughter or sister had breast cancer, your risk could be nearly double. Keep in mind, however, that you can also get breast cancer even if no one in your family has ever had it.

4. The older you are, the higher your risk of breast cancer. You can get breast cancer at any age, but it's more likely to happen as you get older. The Centers for Disease Control and Prevention (CDC) reports that most breast cancers happen in women over 50. The American College of Radiology recommends starting yearly breast cancer screenings at age 40. Women at elevated risk for breast cancer may need to start earlier or supplement with breast magnetic resonance imaging (MRI).

5. Besides age and family history, there are other things that may increase your risk for breast cancer. According to the CDC, factors that may raise your risk of breast cancer are dense breasts, being overweight or having obesity after menopause, having breast cancer in the past, radiation treatment to the chest at a young age, taking certain hormones, starting your period before age 12 or starting menopause after age 55. Talk to your doctor about your risk factors.

6. Mammograms are quick and easy. Getting a mammogram usually takes only 30 minutes or less. Most places that provide screenings offer a choice of appointment times so you can select a time that's most convenient for you. You might be able to get a screening during



PIH Health Breast Health Center Downey

your lunch hour, before or after work, or on the weekend.

For comprehensive cancer prevention, detection and treatment, PIH Health is here for you.

PIH Health has mammography centers in Downey and Whittier where you can expect state-of-the-art, accurate and timely breast imaging services from a team that follows the highest standards for safety and quality. We offer 3D digital mammography (tomosynthesis), breast MRI, breast ultrasound, and ultrasound, stereotactic, and MRI-guided breast biopsy. PIH Health Breast Center Whittier is a Breast Imaging Center of Excellence, and is also accredited by the National Accreditation Program for Breast Centers, a recognition given to breast centers that provide exceptional care and demonstrate a firm commitment to offering patients significant advantages in their battle against the disease.

When you choose PIH Health for your screening mammogram, you'll receive a clearer, more accurate picture of your breast, so there's less chance you'll need additional tests. That's because we offer 3D mammograms to all patients. Your care team will take low-dose X-rays of your breast, then use a computer to create a 3D picture. PIH Health also offers convenient digital access to your images through a secure online portal, so you can download, view, and share your images from your computer at any time.

We know early detection of breast cancer offers our patients the greatest chances for survival, so we employ an outstanding team of highly trained, dedicated physicians, technologists, and nurses who are experts in detecting breast cancers and knowledgeable in all aspects of breast health. To schedule your mammogram today at PIH Health Breast Health Center Downey or Whittier, visit PIHHealth.org/Mammogram or call (562) 906-5692.

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PIH HEALTH'S CANCER PROGRAM

PIH Health also offers coordinated breast cancer treatment and care. The PIH Health Cancer Program is comprised of a compassionate team of experts who work together to provide excellent care and treatment for all types of cancer. Our care teams provide patients with access to a broad range of clinical and support services, latest technologies and research at hospitals, oncology offices and treatment centers within the PIH Health network. We offer personalized treatment plans tailored specific to each patient to address and meet their long-term healthcare needs.

Our care teams stay up to date with the latest advancements in chemotherapy and targeted therapies, and use cutting-edge, effective radiation therapy. Patients also have access to an expanded offering of oncological clinical research trials, including the newest treatments and therapies not yet widely available to provide additional options for patients in their battle with cancer. Our wide range of support services, including palliative care, behavioral health resources, nurse navigators, support groups and more are available to help our patients feel better physically and emotionally, and offer guidance and encouragement throughout their cancer journey.



Lisa Wang, MD, medical director, PIH Health Cancer Program

Lisa Wang, MD is medical director of the PIH Health Cancer Program. To learn more about cancer care at PIH Health, visit PIHHealth.org/Cancer. To find a PIH Health Physician near you, visit PIHHealth.org/Find-a-Doctor.

PIONEERING

NEW

CANCER

TREATMENTS

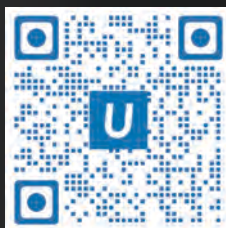
UCLA Health Jonsson Comprehensive Cancer Center was one of the earliest centers to offer immunotherapy for advanced melanoma.

Through clinical trials led by Dr. Antoni Ribas, UCLA Health was one of the first to study the efficacy of pembrolizumab in patients with advanced melanoma, and in reporting why some patients respond or are resistant to this therapy. The FDA approved pembrolizumab for the treatment of advanced melanoma in Dec. 2015, based on results showing significantly improved overall survival compared to prior therapies.

Antoni Ribas, MD,
Revolutionizing Immunotherapy

UCLA Health

Jonsson Comprehensive
Cancer Center



defeatcancer.uclahealth.org

CANCER AWARENESS & PREVENTION

Building on a History of Success Developing Novel Immunotherapies to Treat Cancer

Cell-based therapies and immunotherapies are revolutionizing the fight against cancer and are being used in clinical settings to successfully treat patients with solid tumors as well as blood cancers.

UCLA Health's cancer researchers are leading that charge — and have been for more than two decades.

Their groundbreaking research ushered the U.S. Food and Drug Administration's approval of an immune checkpoint inhibitor as a first-line treatment for metastatic melanoma and non-small lung cancer. The drug now is being used globally, alone and in combinations with other drugs, to treat nearly two dozen types of cancer.

UCLA-led research also resulted in FDA approval of the first chimeric antigen receptor (CAR) T-cell therapy to treat resistant blood cancers. UCLA Health is one of the few hospitals in the U.S. to offer all five therapies.

"Now we have immunotherapy as a valid option for many patients with cancer," said Antoni Ribas, MD, PhD, director of the Tumor Immunology Program at UCLA's Jonsson Comprehensive Cancer Center and a member of the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA. "It effectively has given a fourth pillar of cancer therapy besides surgery, radiation therapy and chemical therapy."

He noted many of today's treatments stem

from seminal discoveries made by researchers at UCLA in the mid-1990s — a time when generally accepted belief was that an immune response couldn't be induced in cancer.

UCLA has long been a leader in bringing groundbreaking immunotherapies to market, such as with the 2014 approval of pembrolizumab (Keytruda) for metastatic melanoma, led and co-developed by Dr. Ribas.

Pembrolizumab works by blocking a protein called PD-1 that sits on the surface of immune cells and keeps them from recognizing and attacking cancer cells. This was the first class of PD-1 antibodies to receive FDA approval for the treatment of any cancer, ushering in a leading-edge approach that has proven to be game-changing in treating many different cancers.

Dr. Ribas' work with immunotherapy didn't end there; in 2017, he launched a first-of-its-kind clinical trial involving the use of genetically engineered blood stem cells to produce cancer-fighting T cells (the immune killer cells) to treat metastasized cancers that have a specific tumor marker, NY-ESO-1 — a protein produced by tumor cells such as melanoma and sarcoma. NY-ESO-1 is found in 10% to 20% of cancers.

One of Dr. Ribas' current focuses is studying molecular imaging techniques, such as PET scans, to understand how novel immunotherapies work on a molecular level.

'Now we have immunotherapy as a valid option for many patients with cancer. It effectively has given a fourth pillar of cancer therapy besides surgery, radiation therapy and chemical therapy.'

—ANTONI RIBAS, MD, PhD.

One of the more exciting breakthroughs in cancer treatments in the past five years has been in CAR T-cell therapies, which work by training a person's immune system to fight cancer cells by genetically modifying their T cells to recognize and attack the cancer.

One of the first CAR T-cell therapies, axicabtagene ciloleucel (Yescarta), was approved in October 2017 to treat adults with relapsed or refractory diffuse large B-cell lymphoma. Arie Beldegrun, MD, director of the UCLA Institute of Urologic Oncology, was instrumental in commercially developing Yescarta. As founder and CEO of Kite Pharma, Dr. Beldegrun conducted the trials that led to the drug's

approval. UCLA Health was among the few hospitals to offer this therapy to patients.

Since then, UCLA has participated in clinical trials that have led to approval of additional CAR T-cell therapies, including brexucabtagene autoleucel (Tecartus), a CD19-directed therapy approved in 2020 to treat relapsed or refractory mantle cell lymphoma.

Trial co-investigator John Timmerman, MD, a professor of hematology/oncology in the David Geffen School of Medicine at UCLA, in April 2020 noted that after a year of follow-up, 61% of patients remained in remission.

Currently, five CAR T-cell therapies have been approved by the FDA to treat blood cancers — four types of lymphomas as well as multiple myeloma.

"CAR T-cell therapies have caused improvements in survival not seen in other therapies and truly raised the bar in the development of novel therapies," said Sarah Larson, MD, assistant professor of hematology/oncology at the David Geffen School of Medicine at UCLA and the UCLA Jonsson Comprehensive Cancer Center.

Dr. Larson said while physicians now feel comfortable using the therapies, their goal moving forward is to find ways to improve them.

Learn more about UCLA Health at UCLAHealth.org.

High-Fiber Diet May Improve Melanoma Patient Response to Immunotherapy

A diet rich in fiber may help some people being treated for melanoma respond to immunotherapy treatment by influencing the gut microbiome, according to a new study led by researchers at the Center for Cancer Research at the National Cancer Institute (NCI), part of the National Institutes of Health, and the University of Texas MD Anderson Cancer Center. Results from the study, which analyzed both people with melanoma and mouse models of the disease, were published late last year in *Science*.

Among patients with advanced melanoma who underwent immunotherapy with immune checkpoint blockers, those who consumed at least 20 grams a day of dietary fiber survived the longest without their disease progressing. In contrast, use of probiotic supplements appeared to lessen somewhat the effectiveness of immune checkpoint blocker regimens. Probiotics are live microorganisms typically consumed as a supplement to improve gut health.

"The data suggest that one can target the composition of the gut microbiota and affect the ability of the patient to respond to immunotherapy," said Giorgio Trinchieri, M.D., chief of the Laboratory of Integrative Cancer Immunology in NCI's Center for Cancer Research, one of the study's co-leaders. "Consuming a diet rich in fiber, like fruits, vegetables, and legumes, could improve your ability to respond to immunotherapy."

Immunotherapy with immune checkpoint blockers helps restore the immune system's natural ability to recognize and kill tumor

cells. These drugs have been transformative in melanoma, improving how long some people with advanced disease live, sometimes by years. However, for many patients, immune checkpoint blockers fail to stop their tumors from growing. Several studies have suggested that the composition of the bacteria in the gut may influence the response to immunotherapy.

"The question is," said Dr. Trinchieri, "can we change the composition of the type of bacteria in the gut and improve the ability of the patient to respond?"

In a previous study, Dr. Trinchieri and a different group of collaborators showed that some people with melanoma who initially did not respond to treatment with an immune checkpoint blocker did respond after receiving a fecal transplant from a patient who had responded to the drug. The fecal transplant, they concluded, had introduced different gut bacteria that helped make it easier for immune cells to invade and kill their tumors.

"Dietary fiber intake and use of probiotic supplements have also been shown to affect the composition of gut bacteria. More cancer patients are taking probiotic supplements in an effort to improve their gut health, but little is known about how probiotics—which basically change the ecology of the gut bacteria—impact immunotherapy response," said Dr. Trinchieri.

Among the 128 patients whose dietary fiber intake was known, those who reported consuming at least 20 grams of dietary fiber per day (an amount the researchers designated as "sufficient" for the purposes of this study) lived



longer without their cancer progressing than those who consumed less dietary fiber. Every 5-gram increase in daily dietary fiber intake corresponded to a 30% lower risk of progression of the disease.

Dr. Trinchieri noted that one possible mechanism through which dietary fiber exerts its beneficial effect is by increasing the types of bacteria in the gut, such as Ruminococcaceae, that produce high levels of certain short-chain

fatty acids that have an antitumor effect.

"We did see an increase in one of these short-chain fatty acids, propionate, in mice that were fed a high-fiber diet," Dr. Trinchieri said. "Moreover, patients whose cancer responded to immunotherapy had a greater abundance of Ruminococcaceae bacteria in their gut microbiota compared with those who did not respond to therapy."

In the human study, nearly one-third of the patients reported they had taken a probiotic supplement within the past month. Although the researchers noted that the small sample size and variety of probiotics used by the patients made it difficult to draw definitive conclusions about the association between probiotic use and response to immune checkpoint blockers, they did observe that patients who consumed the highest levels of dietary fiber with no probiotic use survived the longest.

"The impact of dietary fiber and probiotics on the gut microbiota is only part of the bigger picture," Dr. Trinchieri cautioned. "Many factors can affect the ability of a patient with melanoma to respond to immunotherapy. However, from these data, the microbiota seems to be one of the dominant factors. The data also suggest that it's probably better for people with cancer receiving immunotherapy not to use commercially available probiotics."

He noted that larger studies are warranted and should include cancers other than melanoma.

For more information about the Center for Cancer Research and its programs, visit ccr.cancer.gov.

Preventive health care, Your first line of defense



Providence

We see the life in you.

At first the symptoms were vague - some upper respiratory symptoms and shortness of breath treated with over-the-counter medicine. But when they developed into classic symptoms of a heart attack, this middle-aged man was rushed to Providence Saint John's Health Center where he underwent surgery within hours for a life-threatening impending aortic dissection.

"The patient's aorta was more than three times the normal size," said Rigved Tadwalkar, MD, a cardiologist with the Pacific Heart Institute at Providence Saint John's. "He was lucky. After surgery and a complex, but successful hospital course, he's doing fine now."

Dr. Tadwalkar describes an emerging trend - "higher level preventive heart care" - likely could save patients from a similar emergency. He's seeing patients as young as their late 20s who want to identify any issues before they develop into serious heart disease. He recommends young adults with a significant family history of heart disease - a parent's early death from a cardiovascular event, for example - to have their risk factors assessed to "see where they stand on the spectrum of heart disease."

"I often tell my patients that we can diagnose and treat almost anything that can happen with the heart," he said. "For those who have been fortunate to not yet develop overt heart disease, medical advances in the past couple decades have allowed us to offer the type of preventative care that can meaningfully change the trajectory of their health."

Dr. Sarah Ahmed, a primary care physician with Facey Medical Group in the San Fernando Valley, is finding a similar focus on staying healthy, especially among patients who delayed regular check-ups during the past two years. If there's a silver lining to the pandemic, it's that it opened some eyes to the importance of health care.

"People are being reminded of how important it is to prioritize their health, including preventive care," Dr. Ahmed said. "And many people who normally would not have established care with a primary care physician are coming in, often for the first time ever in their lives or in years, which means underlying diseases are being caught earlier."

"Many of us might avoid going to the doctor until we have that severe headache, chest pain or life-threatening illness that brings us into the emergency department. At that point, quantity and, more importantly quality, of life may be adversely affected," Dr. Ahmed said.

At Providence, we're committed to keeping you healthy. We encourage our patients to get regular check-ups, bloodwork and health screenings so our doctors can detect disease in its earliest stage, before potentially serious conditions have a chance to develop. In general, the cancer screening tests such as mammograms for breast cancer, pap smears for cervical cancer, colonoscopy or stool-based testing for colon cancer and lung cancer CT scans for certain at-risk patients are among the most important.

Your primary care physician will tell you when you need these screenings based on your risk, but generally:

Colonoscopy - The new recommendation is age 45, subsequent tests per doctor's direction

Lung screening - If you smoke or otherwise are at high risk for lung cancer

Mammogram - Every year, starting at age 40

PAP - Every three years, starting in young adulthood

Prostate - Every two to three years starting at age 50

Oncologist Johnny K. Chang, MD, on staff at Providence Cedars-Sinai Tarzana Medical Center and medical director of an oncology practice in Tarzana, said he and his colleagues saw a decline in patients in the early days of the pandemic but toward the end of 2020 "patients were coming in with various cancers that were not detected early because the patients delayed proper screenings.

"They didn't think much of it and now they have cancer," he said. "We saw a surge of patients with cancers found much later than we would hope. This is the message we continue to tell people: 'Don't forget to take care of the things you have to do to prevent cancer.'

"Early detection leads to very successful early-stage treatment. If you look at stats, 80% of early-stage breast cancers are going to be cured."

As COVID-19 cases ebb and flow, Dr. Chang understands patients' hesitancy to make timely appointments for regular screenings but assures them hospitals, surgery centers and physician offices are safer than ever.

"I don't blame these patients for being afraid, for not wanting to come in," he said. "Patients need to understand we have invested a lot to ensure their safety. They have to trust that a lot goes into making them safe."

He also cautions those who delay screenings because they have no family history of cancer or no high-risk factors such as a history of smoking.

"The majority of cancer I see, we don't know where it came from," he said.

Dr. Ahmed urges those who have put off their regular doctors' appointments to schedule them - even if they're a little ashamed for neglecting their health.

"There is nothing to be embarrassed about!" she said. "Our job as physicians is to educate and guide patients to lead healthier lives, not to chastise or place blame. A good doctor-patient relationship is based on mutual trust and respect, allowing for a space in which patients are comfortable to share their concerns without fear of being judged."

Providence is focused on simplifying health visits from making that first appointment to checking test results and paying bills online. The new Providence app guides users to same day care, including in-person clinics and on-line visits through Providence ExpressCare Virtual. It also features information on the latest developments in treatments for a range of conditions and other features. And it includes access to MyChart, where patients can interact with care team members and see their medications, test results, upcoming appointments, medical bills and follow-up notes from their providers.

[Providence.org/SoCalLife](https://www.providence.org/SoCalLife)



BRANDED CONTENT



Complete Cancer Care Under One Roof

The MemorialCare Todd Cancer Institute (TCI) at Long Beach Medical Center offers comprehensive care, advanced technologies, nationally recognized physicians and innovative treatments to cancer patients in a warm and caring environment. TCI provides custom and targeted integrated medicine and healing for each patient, empowering patients to achieve the best quality of life by promoting wellness in mind, body and spirit.

Multi-disciplinary Treatment Planning – So You Get the Best Outcomes

Through multi-disciplinary treatment planning conferences, TCI specialists review new or difficult cases and develop treatment plans suited to the specific needs of each patient. These conferences include an experienced team of medical oncologists, radiation oncologists radiologists, pathologists and surgeons who decide together what the best course of treatment is for each individual. This results in a personalized care plan for each patient leading to better outcomes.

The Future of Cancer Care is Here

TCI blends the most advanced technologies and breakthrough therapies under one roof led by experienced fellowship trained high-volume specialists. TCI's capabilities include:

Minimally Invasive Surgery Options

TCI specialists use minimally invasive techniques including robotic-assisted surgery for a variety of cancers. TCI has the latest da Vinci Xi Surgical System providing breakthrough minimally invasive surgical capabilities that minimizes risk and has fewer complications resulting in shorter hospital stays and faster recoveries.

Personalized Medicine & Access to Clinical Trials

TCI offers robust precision medicine therapies specifically targeted to a person's environment, genetics and lifestyle. TCI provides patients with quick access to clinical trials tailored to their unique molecular characteristics. This includes:

- Immunotherapy Biologics
- Hormone Therapy
- Tempus TIME trials

Most Advanced Radiation Oncology & Therapy

- The Thomas & Dorothy Leavey Radiation Oncology Center's advanced treatment modalities offer minimal radiation exposure to precisely target the tumor and spare healthy surrounding tissue and vital organs. These therapies include:
 - Long Beach Medical Center is the only hospital in the region to offer the Varian Edge and AlignRT - a radiation therapy guidance system to reduce radiation exposure to the heart while patients are being treated for left breast cancer. The Varian Edge can be used to treat brain tumors and other brain disorders, that can't be treated with standard surgery. It can also help treat brain, pancreas, lung, prostate and spine cancers.
 - Tomotherapy is a form of image-guided radiation therapy that is a radiation delivery system and CT scanner, that provides 3D images for hard to reach tumors, or tumors near vital organs. With this technology, experts can match radiation intensity to tumor shapes, sparing more healthy tissue.
 - High Dose Rate Brachytherapy is delivered using computer-controlled movements of tiny radioactive seeds which is made to dwell in an applicator placed directly inside the tumor. The applicator's position and timing of source placement are precisely controlled allowing the physician to shape the radiation dose to the target.
 - Hyperthermia is a specialized therapy that involves heating selected tumors to 106-108 degrees Fahrenheit for up to one hour. Hyperthermia enhances the effects of radiation and helps in eliminating tumors.
 - Intraoperative radiation therapy (IORT) is used for early stage breast cancer treatment where a low energy therapeutic X-ray system delivers a concentrated dose of radiation therapy in the operating room to a tumor bed right after a lumpectomy. This eliminates the need for radiation therapy follow-up after surgery. Treatment is complete in one surgery.

Leading Diagnostic & Therapeutic Technology

TCI specialists have access to the latest technologies on the market to ensure that cancer is caught early and in the most treatable stages. This includes:

- 320 slice CT scanner
- 3D Mammography

- Electromagnetic navigational bronchoscopy
- Endobronchial ultrasound
- Endoscopic ultrasound

Lung Program

TCI offers a low-dose CT scan to detect lung cancer in its earliest stages for high risk patients. A dedicated lung nurse navigator guides patients through the screening process and treatment options if cancer is detected. To help reduce the risk of lung cancer, TCI also offers a virtual smoking cessation program. People interested in quitting nicotine can learn more by contacting stopsmoking@memorialcare.org.

Interventional Oncology Program

The Interventional Oncology Program uses the most advanced image-guided techniques providing a wide-array of minimally invasive non-surgical procedures to treat many types of benign and malignant tumors. These approaches offer non-invasive treatments for cancer where tiny catheters deliver precisely targeted treatment anywhere inside the body – without the need for open surgery or damaging healthy tissue.

Research-Driven Patient Focused

TCI participates in national cooperative groups and novel pharmaceutical trials giving patients access to many research protocols. Drugs and biologics are being developed and introduced as the new standard of care at an unprecedented rate. A cancer research program helps physicians stay at the forefront of new therapeutic discovery giving their patients access to these drugs.

MemorialCare Breast Centers at Long Beach & Los Alamitos

The MemorialCare Breast Center offers the latest in diagnostics, such as 3D mammography, to catch breast cancer at an early stage. This uses digital x-ray technology to capture multiple images of the entire breast from different angles to produce high-resolution, 3D images, enabling our radiologists to "see through" the dense breast tissue and find cancer that may be hiding within it.

Every mammogram is read by a team of all female, sub-specialized, dedicated breast radiologists who focus only on mammography and breast care. This focus and experience results in a higher quality, more accurate mammogram. The Breast Center also offers the latest treatments that not only increase survival, but improve the patient experience and cosmetic outcomes.

Psychosocial Oncology – Supportive Care For Mind, Body & Spirit

TCI's psychosocial support program empowers patients and families affected by cancer to achieve the best quality of life by promoting wellness in mind body and spirit. Resources Include:

- Oncology Rehabilitation & Lymphedema Education
- Adolescent & Young Adult Survivorship Program
- Mind-Body Oncology Coach
- Cancer Answers Hotline
- Behavioral Interventions & Survivorship Programs
- Women Guiding Women: Peer Mentor Support & Education Program
- Support Groups

Patient Education & Navigation Program

TCI has advanced practice nurses who serve as "navigators" to help patients through their cancer journey. Navigators can explain medical terms and processes direct patients through the maze of diagnosis and treatment and lead the patient's transition from treatment into long-term wellness.

Cancer Risk & Prevention Program

The Cancer Risk & Prevention team analyzes family cancer patterns and provides an accurate assessment of a person's genetic risk of developing hereditary cancer. After a genetic test is done the team works with the patient to develop a prevention plan to reduce risk.

Cancer Rehab & Lymphedema Program

Licensed physical therapists teach patients how to effectively manage their lymphedema – buildup of protein and fluid in the limb. TCI also uses "pre-hab" to build a patient's strength before treatment begins.

TCI has a team of fellowship-trained specialists that provide comprehensive cancer care, so no matter the diagnosis you get the best care at the right time to ensure the best outcomes for you and your family. Learn more at memorialcare.org/TCI or call (562) 933-0900.