

El Camino Health Cancer Center

Lung Cancer Report

2021 Capabilities and Outcomes



El Camino Health®



Commission
on Cancer®
ACCREDITED
PROGRAM

A QUALITY PROGRAM
of the AMERICAN COLLEGE
OF SURGEONS®



El Camino Health Cancer Center

2505 Hospital Drive, 1st Floor
Mountain View, CA 94040
650-988-8338

815 Pollard Road
Los Gatos, CA 95032
408-866-3989

elcaminohealth.org/cancer

Topics of Interest

Lung Cancer	4
Unrivaled Cancer Care — Close to Home	4
Types of Lung Cancer	4
Lung Cancer Stages	5
Three Elements Are Considered to Diagnose Lung Cancer Stage.	5
Non-small Cell Lung Cancer Stages	5
Small Cell Lung Cancer Stages	5
Lung Cancer Five-Year Survival Rates	6
Beating Benchmarks at El Camino Health.	6
A Team of Experts Committed to Better Outcomes	7
Medical Specialists in the El Camino Health Cancer Center	7
Other Members of the El Camino Health Cancer Center	7
Risk and Prevention	8
Lung Cancer Risk Factors	8
Lung Cancer Protective Factors.	8
Symptoms and Screenings	9
Lung Cancer Symptoms	9
The Cancer Healthy™ Program	9
Lung Cancer Screening.	10
Lung Nodule Program.	11
Free Lung Cancer Screening Program.	11
Diagnosis	12
Tests to Diagnose Lung Cancer	12
Treatment	13
Surgery	13
Radiation Therapy.	13
Clinical Trials	13
Chemotherapy.	14
Targeted Therapy	14
The Cancer Centers at Los Gatos and Mountain View	14
Making it Easy for Referring Physicians to Care for Their Patients with Lung Cancer	14
Patient Stories	15
Jian: Beating All Odds to See Her Daughter Grow Up	15
Linda: A Heart of Service Comes Full Circle	17
Renina: Finding Joy While Living with Cancer.	19
For the Greater Good	21
Cancer Survivorship Services.	21
Here for Our Patients Today and Tomorrow	21
2021 Community Outreach Coordinator Report	22

Lung Cancer

Unrivaled Cancer Care — Close to Home

A cancer diagnosis permanently changes a patient. It divides their life into two segments: “pre-cancer” and “post-cancer diagnosis.” The winding road after a cancer diagnosis can become an overwhelming maze of confusion and fear. Patients want to find the absolute best care available — care that is compassionate and personalized. They want a place where they are treated as a family member, not a statistic. A place that offers comfort but also superlative results.

Types of Lung Cancer

There are two main types of lung cancer: small cell and non-small cell.

SMALL CELL LUNG CANCER

Small cell lung cancer (SCLC) is typically associated with smoking tobacco and is classified by the types of cells that make up tumors. There are two kinds of small cell lung cancer:

1. **Small cell carcinoma**
2. **Mixed small cell/large cell cancer, also known as combined small cell lung cancer**

NON-SMALL CELL LUNG CANCER

Non-small cell lung cancer (NSCLC) is the most common kind of lung cancer, making up about 80% of lung cancer cases. NSCLC typically spreads slower than small cell lung cancer. There are three kinds of NSCLC:

1. **Adenocarcinoma** – Usually found in an outer area of the lung
2. **Squamous cell carcinoma** – Typically found in the center of the lung
3. **Large cell carcinoma** – Can be found in any part of the lung and generally grows and spreads faster than adenocarcinoma and squamous cell carcinoma



Left to right: Robert Sinha, MD; Shane Dormady, MD, PhD; and Shyamali Singhal, MD, PhD

The El Camino Health Cancer Center has assembled an elite team of doctors, nurses, dietitians, social workers and staff to deliver such outcomes. Our lung cancer team is committed to supporting patients at each step of their cancer journey, from diagnosis to treatment and beyond. At our Los Gatos and Mountain View cancer centers, we work together to develop individualized treatment plans at multidisciplinary tumor conferences, explain the treatment process to patients, answer questions with clarity and provide networks of support for patients and their families.

We surpass the “standard” treatment of lung tumors by using molecular profiling of tumor cell DNA to find genetic weaknesses in tumor cells, allowing “targeted therapy” to eradicate them. We also employ industry-leading software and technology in the field of radiation oncology to target tumors anywhere in the body with laser precision. Our surgeons are trained in videoscopic and robotic chest procedures which allow for resection of lung tumors via minimally invasive techniques, reducing complications and recovery time.

At El Camino Health, we understand the mind, spirit and body must unite to defeat cancer, which is why we also offer resources for emotional and spiritual health. Programs range from complementary wellness services to follow-up support after treatment ends.

Patients can experience the warmth and compassion of a community hospital while receiving cancer treatment that is unsurpassed.

Lung Cancer Stages

After cancer is detected in a patient, their doctors will determine the stage. “Stage” describes how much cancer is in the body and how far it has spread. Knowing the stage of cancer helps doctors create the best treatment plan.

Three Elements Are Considered to Diagnose Lung Cancer Stage

- 1. Tumor** – A tumor is a cluster of atypical cells. Atypical cells can either be cancerous (malignant) or non-cancerous (benign). The size and location of a tumor is one factor that determines the stage of cancer.
- 2. Regional lymph node involvement** – Lymph nodes are small, globe-shaped clusters of cells that help the immune system destroy foreign invaders. If cancer has spread to the lymph nodes around the lungs, or elsewhere in the body, it will influence the stage of cancer.
- 3. Metastasis status** – Metastasis means cancer has spread to other parts of the body from where it started. Metastasis status recognizes whether cancer has spread and which organs it has spread to.

These three staging factors are often referred to as “**TNM Classification**,” short for **T**umor, **N**ode involvement, and **M**etastasis status.

Each kind of lung cancer has a different staging classification.



Non-small Cell Lung Cancer Stages

Non-small cell lung cancer is staged like most cancers, in a range from stage zero through four, expressed in Roman numerals 0 through IV. The lower the lung cancer stage, the less cancer has spread and the better the possible outcome.

STAGE 0: ABNORMAL CELLS – Cancer cells are present in the top lining of the lung or bronchus but have not spread.

STAGE I: EARLY STAGE – A small mass or tumor is present in a tiny area and has not spread. Stage 1 NSCLC is divided into two sub-stages, 1A and 1B, based on the size of the tumor.

STAGE II: LOCALIZED – The tumor is larger than one found in an earlier stage and may have spread to the lymph nodes but has not reached distant organs.

STAGE III: REGIONAL SPREAD – The tumor is larger than 5 cm, has spread to lymph nodes and reached the mediastinum (the space in between the lungs).

STAGE IV: DISTANT SPREAD – The most advanced kind of lung cancer. Stage IV lung cancer has spread to the lining of the lungs or other areas of the body.

Small Cell Lung Cancer Stages

Small cell lung cancer is defined as either limited or extensive.

- + **Limited stage:** Cancer is only present in one lung and has not spread to the lymph nodes
- + **Extensive stage:** Cancer has spread outside of the originally affected lung.

Lung Cancer Five-Year Survival Rates

Cancer survival rates reflect how many people are still alive after a specific period of time has passed since their initial diagnosis. The American Society of Clinical Oncology (ASCO) reports that the national five-year survival rate for all people with all types of lung cancer is 21%.

Beating Benchmarks at El Camino Health

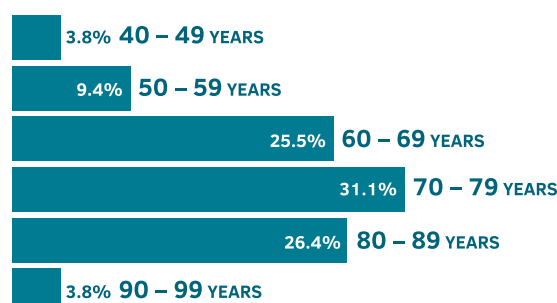
In the United States, lung cancer is the second most common cancer and the leading cause of cancer death. Patient outcome data from the El Camino Health Cancer Center registry shows our survival rates exceed national benchmarks. The five-year survival rate for all patients with all types of lung cancer treated at El Camino Health is 46%. The data presented here includes demographic details of patients treated for lung cancer in 2021.

Survival rates for all patients with all types of lung cancer treated at El Camino Health

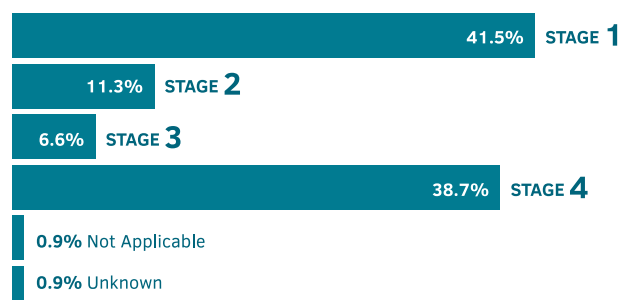
1 year – 100%
2 years – 71%
3 years – 61%
4 years – 47%
5 years – 46%

106
Participants
56 Female
50 Male

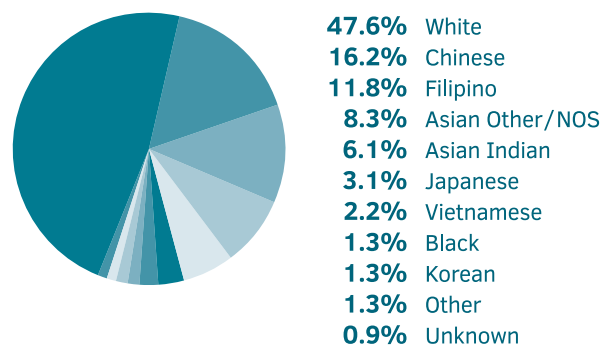
Age at Diagnosis



Stage at Diagnosis



Race / Ethnic Breakdown



A Team of Experts Committed to Better Outcomes

At El Camino Health, our nationally recruited oncology experts collaborate to treat cancer at every stage and support patients each step of the way. We work together to create an individualized treatment plan utilizing the latest medical advancements, provide resources for patients and their families from diagnosis through treatment, and connect patients with coping and healing tools. Patients can count on us to provide comprehensive cancer care that addresses the body, mind and spirit.



El Camino Health Radiation Oncology team

Medical Specialists in the El Camino Health Cancer Center

- + **Thoracic surgeons.** Specialize in the surgical treatment of lung cancer
- + **Medical oncologists.** Administer chemotherapy and targeted therapy to shrink tumors
- + **Nurse practitioners.** Help patients manage treatment side effects
- + **Pathologists.** Examine tissue samples to diagnose the type and stage of tumors
- + **Radiation oncologists.** Use precise radiation therapy to shrink or destroy tumor cells
- + **Radiologists.** Interpret results of advanced imaging procedures that detect tumors

Other Members of the El Camino Health Cancer Center

- + **Dietitians.** Address the unique nutritional needs of each cancer patient
- + **Genetic counselors.** Assess risk and develop treatment plans based on a patient's genetic profile
- + **Complementary care providers.** Offer art therapy, spiritual care, massage and other support
- + **Oncology coordinators.** Dedicated to guiding, educating and advocating for patients, from diagnosis through treatment
- + **Social workers.** Provide emotional support and help patients access in-home, family and medical resources



Risk and Prevention

Cancer occurs when abnormal cells divide and grow within the body. Cancer can start in one part of the body and spread to others. Doctors are still discovering what causes cancer, but they have identified several factors that can increase one's risk of developing lung cancer, along with actions people can take to minimize risk.

Lung Cancer Risk Factors

- + **Smoking.** Smoking is the leading cause of lung cancer, with approximately 80% of lung cancer deaths attributed to smoking. The longer someone smokes and the more they smoke, the greater their risk is of developing lung cancer.
- + **Secondhand smoke.** Breathing in the smoke of others can elevate the chances of developing lung cancer.
- + **Radon exposure.** Radon is a naturally occurring gas that one can't see, taste or smell. Radon is the second leading cause of lung cancer in the United States.
- + **Asbestos exposure.** Asbestos is a fibrous, silicate mineral. People who routinely work around asbestos have shown a higher incidence of developing lung cancer.
- + **Exposure to other cancer-causing agents in the workplace.** Regularly breathing air with toxic or harmful particulates can increase the chances of developing lung cancer.
- + **Air pollution.** Regularly breathing polluted air can increase one's chances of developing lung cancer.
- + **Family history.** Having a parent, sibling or child with lung cancer increases a person's risk.
- + **Personal history of cancer.** Risk increases when a patient has already had lung cancer in one lung or has had chest radiation for another cancer.

Lung Cancer Protective Factors

Protective factors are habits that are associated with a lower risk of developing lung cancer. Lung cancer protective factors include:

- + **Not smoking tobacco.** Tobacco smoke is the leading cause of lung cancer. E-cigarettes and vaping in any form can also cause lung disease and cancer. People should not start smoking or vaping, and if they do, they should seek out resources to stop.
- + **Avoiding exposure to secondhand smoke.** Avoiding tobacco smoke from other people decreases the risk of developing lung cancer.
- + **Avoiding exposure to radon and other cancer-causing agents.** Limiting exposure to these substances will help protect a person from developing lung cancer.
- + **Leading a healthy lifestyle.** Eating nutritious foods and a balanced diet, paired with regular physical activity, helps keep the body and its cells at their healthiest.

At El Camino Health, we offer the latest methods to assess a patient's risk. Once we have a risk estimate, our doctors set up an individual prevention and screening plan for each patient.

Symptoms and Screenings

Lung Cancer Symptoms

The majority of lung cancers do not present any symptoms until cancer has spread to other parts of the body, but some people do exhibit symptoms. These symptoms are most likely caused by factors other than lung cancer, but it is important to see a doctor early so the true cause can be diagnosed and treated. Detecting lung cancer early allows for prompt treatment and better outcomes.

Symptoms of lung cancer can include:

- + Persistent cough that does not go away or worsens
- + Coughing up blood or rust-colored spit
- + Chest pain that worsens with deep breathing, coughing or laughing
- + Loss of appetite
- + Hoarseness
- + Unexplained weight loss
- + Fatigue
- + Feeling weak
- + Shortness of breath
- + Wheezing
- + Recurrent bronchitis or pneumonia infections

If lung cancer has spread to other areas of the body, the following symptoms may occur:

- + Bone pain
- + Headache, dizziness, weakness in limbs, balance issues and other changes in the nervous system
- + Yellowing of the skin due to cancer spreading to the liver
- + Swollen lymph nodes



The Cancer Healthy™ Program

El Camino Health's Cancer Healthy™ program is funded by charitable donations to the El Camino Health Foundation and helps patients and their families fight cancer in all its stages using medically proven approaches for healthy living. We have combined the most current medical advancements with our real-world experience to create an easy-to-understand road map for cancer patients. Through classes and one-on-one support, patients learn how to incorporate cancer-fighting behaviors into daily life.

Symptoms and Screenings (continued)

Lung Cancer Screening

Some lung cancers can be discovered through screening while others are not identified until symptoms begin to appear.

During a screening, the doctor will take a medical history to learn about a patient's habits, family history of cancer and symptoms. They will recommend preventative actions like avoiding tobacco smoke and eating a healthy diet. They may order imaging tests.



Imaging tests can get a closer look at suspicious areas that may be cancer, identify how far cancer has spread, help determine if treatment is working, and check for signs cancer may be returning. Imaging tests include:

- + **Chest X-ray.** A chest X-ray is usually the first scan a doctor will order to check for abnormal areas in the lungs.
- + **Computed tomography (CT) scan.** A CT scan uses X-rays to make cross-sectional images of the body which show tumors in more detail than chest X-rays. CT scans are used to determine the size, shape and position of any lung tumors and can help identify enlarged lymph nodes or areas where cancer may have spread. Sometimes, a CT scan is used while a doctor guides a needle to the site of a tumor to extract a small sample for further examination. This is called a CT-guided needle biopsy.

Symptoms and Screenings (continued)

- + **Magnetic resonance imaging (MRI) scan.** An MRI scan uses radio waves to provide detailed images of the body. MRI scans are usually performed to check if cancer has spread to the spinal cord or brain.
- + **Positron emission tomography (PET) scan.** A PET scan is typically done with a CT scan to identify if cancer has spread to the liver, bones and adrenal glands. During a PET scan, a fluid that is attracted to cancer cells is injected into the bloodstream. A CT scan is then performed to show where the fluid has collected in the body and where cancer has spread.

Lung Nodule Program

A lung nodule is a small, globe-shaped growth in the lung. Lung nodules are fairly common — at least half of all people who have a CT scan of their chest will discover a lung nodule in their scan. Not all lung nodules are cancerous, but all lung cancers start with a lung nodule. That is why close monitoring of lung nodules is crucial.

At El Camino Health, if a lung nodule has been identified in a CT scan, a lung nodule navigator will work with the patient's doctor to make sure they are getting necessary screenings at recommended times. This “watchful waiting” will closely monitor lung nodules and catch cancer sooner, should a lung nodule develop into cancer.



El Camino Health Mountain View Cancer Center team

Free Lung Cancer Screening Program

People who have a family history of lung cancer, work in a setting that increases their risk of developing lung cancer, or have a history of tobacco use, may have their doctor recommend a routine screening of their lungs to regularly check for cancer and catch it in an earlier stage.



Since early detection and treatment is key to improved outcomes, the best defense against lung cancer is screening. El Camino Health offers low-dose CT lung scans to those who are identified to have a higher risk of developing lung cancer and meet eligibility. These screenings are provided free of charge thanks to charitable donations to the El Camino Health Foundation. A low-dose CT scan takes less than a minute to complete, uses no dyes or injections, and uses a smaller amount of radiation than a traditional CT scan used to diagnose or stage lung cancer. A low-dose CT scan can find abnormalities and nodules in the lungs that could potentially be cancer.



Diagnosis

Tests to Diagnose Lung Cancer

If an abnormal mass is found on a patient's imaging scan, their doctor will likely order one of the following tests to closely examine a cellular sample and determine if it is cancerous.

- + **Sputum cytology.** Sputum is mucus coughed up from the lungs. A sample of sputum can be examined under a microscope to see if cancer cells are present.
- + **Thoracentesis.** Sometimes fluid collects around the lungs. This is called a pleural effusion. Doctors can extract some of this fluid and determine if it is caused by cancer spreading to the lining of the lungs.
- + **Needle biopsy.** Doctors can use a needle to remove a tissue sample from a suspicious mass in the lungs or lymph nodes. This tissue sample is then examined to see if the cells are cancerous. Needle biopsies can be administered externally through the chest wall (transthoracic) or internally through the trachea (transtracheal) or bronchi (transbronchial). A doctor may use an ultrasound or CT scan to guide the needle to the site of the tumor. There are two kinds of needle biopsies: fine needle aspiration and core biopsy.
- **Fine needle aspiration (FNA) biopsy –** Fine needle aspiration uses a thin needle to remove a small tissue sample. FNA biopsy is often used to collect samples from lymph nodes since they are so small.
- **Core biopsy –** A larger needle is used to extract a cylindrical tissue sample (core tissue sample) from a tumor. Samples from core biopsies allow for more cells to be examined than samples from an FNA biopsy.
- + **Bronchoscopy.** A thin, flexible tube with a camera on the end, called a bronchoscope, is guided down the throat to examine the airways of the lungs. A bronchoscopy can examine tumors in the lungs as well as lymph nodes and other structures in between the lungs. A small needle can be passed through the bronchoscope to collect a tissue sample for biopsy.

Treatment

El Camino Health's cancer experts develop an individualized treatment plan for all patients that may include surgery, radiation therapy, chemotherapy, targeted therapies or a combination of these treatments.

Surgery

Lung surgery options include removing part or all of a cancerous lung. If a patient has an early-stage tumor, our thoracic surgeons can perform a minimally invasive video-assisted thoracic surgery (VATS), which uses several small incisions (instead of a large one) and special, long surgical tools. For larger tumors, surgeons make a long incision on the side of the chest to reach and remove the tumor.

Radiation Therapy

Radiation therapy uses ionizing radiation, delivered through beams of energy, to kill cancer cells. El Camino Health's Cancer Center offers all available radiation treatment options and thoroughly evaluates these options to decide which will provide the most effective results with the fewest side effects.

Our highly experienced radiation oncology experts use the latest techniques and technology to treat lung cancer, including stereotactic radiosurgery, adaptive radiation therapy and intensity-modulated radiation therapy — all known for their high levels of precision and ability to spare healthy tissue surrounding the tumor.

Doctors at our Radiation Treatment Center have performed more than 5,000 radiosurgery treatments for multiple types of cancer and offer consultations within 24 hours.

Our radiation oncologists also use brachytherapy (implantation of radioactive seeds) and were the first in the world to use a robotic-assisted procedure to place radioactive pellets up against a lung tumor.

Clinical Trials

Clinical trials are research studies that test the newest medical advancements used to treat cancer. The El Camino Health Cancer Center works with other medical centers and the National Cancer Institute to offer patients the ability to participate in ongoing clinical trials.



Treatment (continued)

Chemotherapy

Chemotherapy uses anticancer drugs to destroy cancerous cells. At El Camino Health Cancer Center, we proactively treat not only lung cancer but the side effects of chemotherapy. We strive to provide patients with maximum comfort measures while they're undergoing treatment. We offer anti-nausea medications, pain medications and intravenous hydration to improve comfort. By managing a patient's symptoms, we can keep their treatment course on track for the best outcomes.

Targeted Therapy

Targeted therapy is an advanced treatment option that uses a special combination of drugs to combat lung tumors. A sample of the tumor is studied in a lab to identify the protein and chemical makeup. Then, current data is applied to determine which drugs will have the maximum effect in eliminating that specific kind of cancer.

The Cancer Centers at Los Gatos and Mountain View

Designed to be comfortable, healing environments, our Cancer Centers help reduce stress for patients and their families. We offer innovative technologies and comprehensive programs for whole-patient care – all delivered by a caring, compassionate staff. Coordinated services include, but are not limited to:

- + Advanced imaging
- + Clinic
- + Infusion center
- + Laboratory
- + Pharmacy

Making it Easy for Referring Physicians to Care for Their Patients with Lung Cancer

Primary care physicians choose El Camino Health based on our patient resources and our nationally recognized clinical quality, combined with fast access to physicians and information.

- + **Access.** Our expert schedulers and coordinators streamline the patient care process, offering access within 48 hours. They coordinate appointments and workups to ensure convenience and efficiency.
- + **Technology.** We offer VarianEthos™ adaptive radiation therapy (ART), Varian Bravos™ brachytherapy, Varian RapidArc® intensity-modulated radiation therapy (IMRT) and Varian Edge™ stereotactic radiosurgery. We also offer the da Vinci Xi® Surgical System.
- + **Facilities.** El Camino Health Cancer Center understands patients' needs and offers a full range of services, providing an exceptional emotional and physical experience for patients and their families.
- + **Specialists.** Oncology coordinators, nurse practitioners and support staff make patient-physician engagement seamless. Our nurses are all certified in oncology.
- + **Information.** We provide comprehensive, relevant information about our treatment programs, five-year survival rates and outcomes specific to the type of lung cancer being treated.
- + **Support.** We support our doctors by caring about their well-being, too. We take care of the details so referring physicians can devote their time to their patients.

Jian:

Beating All Odds to See Her Daughter Grow Up

Jian's journey with El Camino Health began a decade ago when she and her husband Andy found out they were pregnant. Their excitement over their growing family quickly waned as Jian began to experience intense pain. Her OB/GYN, Sarah Azad, MD, ordered an ultrasound on her left leg and discovered it was filled with blood clots, which could be life-threatening to Jian and her baby. Jian was immediately admitted to El Camino Health's Mountain View Hospital where she was given blood thinners that successfully broke up the blood clots.

Not long after, Jian developed a persistent cough, which remained despite antibiotic treatment. In August 2012, Jian began to experience contractions. Dr. Azad determined her body was readying for labor even though she was only 22 weeks pregnant.

Doctors stopped Jian's contractions and performed more tests, revealing excess fluid around her heart and lungs.

On August 20, 2012, Dr. Azad visited Jian's room with medical oncologist Shane Dormady, MD, PhD, who gave Jian life-changing news: stage IV lung cancer that had spread to her lymph nodes and bones.

Despite the devastating news, Jian was determined to see her unborn child grow up.

Collaborative Care in Extreme Situations

Dr. Dormady and the team of experts at El Camino Health Cancer Center collaborated with the maternal-fetal medicine team at El Camino Health and designed an aggressive treatment plan that would be safe for Jian's unborn baby. Jian started her cancer treatment within a matter of days.

The morning after beginning chemotherapy, Jian woke up with a very painful contraction. She was in labor. Her daughter was born at just 23 weeks and 4 days, weighing only 1 pound, 2 ounces. Jian and Andy named her Ella.



"One of the most memorable scenes of my career is seeing Jian and Andy huddled over Jian's phone in the Infusion Center while Jian was receiving her chemotherapy. They were just beaming and oozing with love as they looked at photos and videos of baby Ella, who was still in the NICU at the time. And now to see Ella — she's so smart that when she started school, she skipped Kindergarten and went right to first grade!"

— Katie Kuhl, Nurse Practitioner,
El Camino Health Cancer Center

Beating All Odds to See Her Daughter Grow Up (continued)

Ella spent one month in the El Camino Health neonatal intensive care unit (NICU), where she battled many infections but was cared for 24/7 by the expert pediatric nurses and doctors. Ella went into organ failure and was transferred to a nearby facility that could perform a series of specialized surgeries.

While Ella was fighting for her life in the NICU, Jian was fighting for hers at the El Camino Health Cancer Center.

A Mother's and Daughter's Will to Survive

"I was doing chemotherapy, but I was more focused on my daughter's health," says Jian. "My tumors were beginning to shrink, but I found out I needed surgery to relieve fluid that had built up around my heart and lungs once again."

Jian made it through the surgery, but three days after the procedure, she had a massive stroke. She lost mobility on the right side of her body along with the ability to speak.

She began an intensive stroke rehabilitation program at the El Camino Health Rehabilitation Center in Los Gatos to learn to walk, talk, climb stairs, read and write all over again.

"Cancer had not yet defeated me, but stroke almost did," says Jian. "I thought: I can't give up. I have to get better for my daughter, my family and myself."

While Jian was completing her stroke rehabilitation, the cancer care team at El Camino Health continued to adapt to the extreme circumstances Jian was in to manage her lung cancer treatment.

After undergoing four surgeries, Ella was discharged from the NICU in January 2013. She began to grow and thrive. She quickly learned two languages and excelled in the classroom once she started preschool.

Jian received chemotherapy during her rehabilitation and partially recovered from her stroke. She remained in steady condition for nearly three years, during which time, she continued to receive chemotherapy for her cancer.

Fighting Through Another Series of Severe Setbacks

In 2017, doctors discovered Jian had developed a tumor on the right side of her brain, which controlled the side of her body that had been unaffected by her stroke.

Jian underwent CyberKnife® radiosurgery treatments, by radiation oncologist Robert Sinha, MD, removing her brain tumor. She also began targeted therapy as another line of treatment.

In 2020, doctors discovered a tumor in Jian's hip. A biopsy showed a cellular mutation that doctors could treat with an advanced treatment called immunotherapy. It was effective, and Jian began radiation in the spring of 2021.

"I went to radiation every day for six weeks," says Jian. "It made me very weak and tired, but Dr. Sinha fought with me, and after treatment, the hip tumor was completely gone."

Hope on the Horizon

Today, Jian continues to receive immunotherapy every three weeks and injections every six weeks to prevent new tumors from developing. She undergoes regular scans to check for the presence of new tumors.

"My El Camino Health cancer team is wonderful," says Jian. "Dr. Dormady has treated me for almost 10 years, and I think of him as family. He doesn't give up. He keeps fighting for his patients."

After a decade, thanks to the entire cancer team, along with Jian's determination and perseverance, the quiet hope Jian held all along is becoming a reality.

"I'm in remission," says Jian. "I can take care of my daughter and be with her."

Jian is keeping busy — cooking, caring for her family's home and tending to their garden. She is working on a book chronicling her journey. As for Ella, she is a happy and healthy 9-year-old who loves to read and draw.

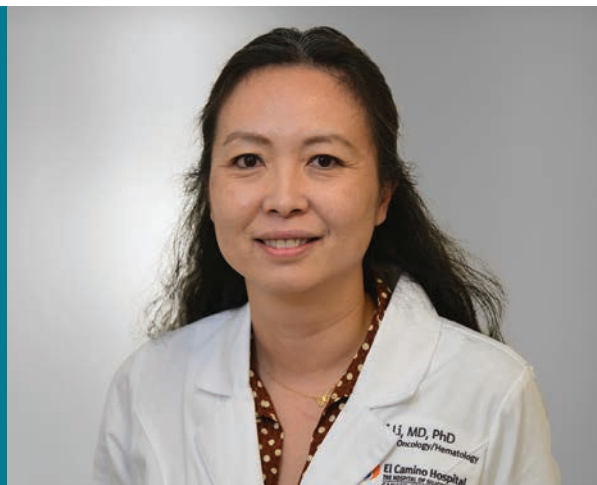
"I deeply appreciate all the doctors, nurses and therapists at El Camino Health," says Jian. "They saved our lives."

Linda:

A Heart of Service Comes Full Circle

“My only goal at that time of my diagnosis was to survive,” says Linda. “I could rely on Dr. Li, Dr. Singhal, Dr. Sinha and the entire team at El Camino Health Cancer Center to get the best treatment.”

— Linda



Jiali Li, MD, Oncologist, El Camino Health Cancer Center

To know Linda is to know what it means to have a heart of service. She has spent most of her life volunteering with organizations she is passionate about and years caring for her ailing husband. After Linda’s husband passed away in January 2016, within a matter of days, she began to cough up red mucous. When her cough was soon accompanied by a painful tightness in her chest, she saw her primary care physician who immediately sent her to El Camino Health for a chest X-ray.

The chest X-ray revealed a spot in her lung that doctors wanted to investigate further. Linda had a computed tomography (CT) scan, bronchoscopy and a needle biopsy that revealed she had stage III lung cancer, and only a 5% chance of survival.

“I never thought I’d have lung cancer — I had half of my cousin’s cigarette when I was 10 years old,” says Linda. “I wanted to know what it was like so I tried it. But I was never a smoker.”

On a Mission to Reach Remission

Linda quickly turned her disbelief to determination to beat her cancer. An engineer by trade, she saw her cancer as a problem that could be solved.

Like many newly diagnosed cancer patients, Linda felt bombarded with information. From doctors to family members to friends, everyone had suggestions about what she should be doing.

“It was overwhelming,” says Linda. “But when I heard I only had a 5% chance to make it, I made a vow to myself that I would be among that 5%.”

Finding a Way Forward

Linda briefly considered pursuing Chinese medicine to treat her cancer but ultimately trusted the treatment plan created by surgical oncologist Shyamali Singhal, MD, PhD, medical oncologist Jiali Li, MD, and radiation oncologist Robert Sinha, MD, at El Camino Health Cancer Center. Linda was ready to move forward, but an unforeseen obstacle threatened to derail her treatment.

A Heart of Service Comes Full Circle (continued)

Soon after Linda's diagnosis, she discovered she did not have health insurance. Her husband had handled renewing their insurance each year and after his death, she unknowingly missed the window to re-enroll.

Faced with a life-threatening cancer diagnosis but no way to pay for the treatment that could save her life, Linda didn't know where to turn.

A True Team Effort

Linda met with a social worker at El Camino Health Cancer Center who worked with Linda's insurance to verify her husband's death as a life-changing event, allowing Linda to re-enroll in her insurance plan. Thanks to the collaboration between Linda's doctors and the social worker, Linda did not need to delay her treatment.

Linda began a combination of chemotherapy and radiation and focused on taking care of her body. She met with Charis Spielman, MPH, RD, CSO, CNSC, an oncology dietitian at El Camino Health Cancer Center who helped guide Linda to nutritious foods she could eat during treatment and explained the importance of staying well-hydrated.

When Linda was receiving infusion treatments, she participated in El Camino Health Cancer Center's Healing Arts program, where volunteers play music or lead patients in art or other activities while they're undergoing their often hours-long treatments.

After two months of chemotherapy prescribed by Dr. Li, and radiation overseen by Dr. Sinha, Dr. Li ordered an additional six months of immunotherapy to prevent recurrence.

Since Linda's husband had passed away only days before her cancer diagnosis, she thought she'd be navigating her treatment alone. But from doctors and nurses, to social workers and administration, to dietitians and volunteers, Linda had the full force of the El Camino Health Cancer Center fighting her cancer alongside her.

Reaching Her Goal

Once Linda's treatment was complete, she had bloodwork and a positron emission tomography (PET) scan to check for cancer. The results showed no signs of cancer.

More than six years after her lung cancer diagnosis, Linda continues to have regular CT scans and bloodwork to monitor her health, which continue to show no presence of cancer. She made it among the 5%.

Paying it Forward

Since her diagnosis, Linda has added a new organization to her regular volunteer rotation: El Camino Health Cancer Center.

Linda volunteers at the infusion center, offering snacks to patients who sit in the chairs she once sat in, undergoing the treatments she once endured.

"My only goal at that time of my diagnosis was to survive," says Linda. "I could rely on Dr. Li, Dr. Singhal, Dr. Sinha and the entire team at El Camino Health Cancer Center to get the best treatment."

"Now I want to provide support and motivation to other cancer patients," says Linda. "I want them to know cancer doesn't have to be the end of your story."

Renina:

Finding Joy While Living with Cancer



Renina with Elie Richa, MD, Oncologist, El Camino Health Cancer Center

“I’m not worried much about my sickness,” says Renina. “When I go to the senior citizen center, they tell me I don’t look sick. I greet them with a song, and they say, ‘You’re always happy.’”

— Renina

Spreading joy is Renina’s passion. She spent 30 years teaching at a Montessori pre-school, and anyone who has shared time with Renina knows she almost always has a song on her lips. In April 2021, Renina’s vision began to blur and she was struggling to read. The letters she had spent more than half her life teaching to toddlers were now difficult for her to see.

Renina’s primary care provider did some preliminary testing and told Renina she likely had a terminal illness. Renina sought a second opinion at another health system and learned she had stage IV lung cancer that had spread to her bones and her brain. She would need surgery to remove her brain tumor and to start treatment immediately for the tumors in her lungs and bones.

Faced with a terminal cancer diagnosis and brain surgery, Renina needed to decide where to have treatment and she had to decide quickly.

Deciding Where to Receive Treatment

With so many health systems in the Bay Area, some patients may hesitate in their decision on where to seek medical care. Renina started her

cancer treatment with the health system that diagnosed her, but she chose El Camino Health for her brain surgery.

Renina has family members who had positive experiences at El Camino Health, and her next-door neighbor of 35 years is a patient at El Camino Health’s Cancer Center. After witnessing her friends and family receive exceptional treatment, Renina knew El Camino Health would be the best fit for her surgery because she would be receiving the highest quality care in a friendly setting.

Lifesaving Surgery in a Comforting Environment

El Camino Health board-certified neurosurgeon Edward Rustamzadeh, MD, PhD, performed surgery on the largest tumor that was causing Renina’s vision issues.

Through the companionship and care of the nurses in the Los Gatos Hospital intensive care unit (ICU), Renina made the most of her recovery.

“I had so much fun in the ICU,” says Renina. “The nurses sang Broadway songs with me and it was like I was at a concert. I was so happy.”

Finding Joy While Living with Cancer (continued)

Renina left the Los Gatos campus in good spirits, ready to continue with treatment of her remaining brain lesions and lung and bone cancer at the health system that provided her initial diagnosis.

Coming Back to El Camino Health

“In September, I got very weak,” says Renina. “I was not eating well and vomiting. My son took me to the emergency department at El Camino Health in Los Gatos.”

The doctors at the emergency department did a workup on Renina to pinpoint what was making her so ill and treated her for low sodium levels. She improved and was able to go home, but in their testing, they discovered more information regarding her lung cancer.

Oncologist Elie Richa, MD, collaborated with Renina’s oncologist from another local health system to develop the most effective plan to treat Renina’s cancer. Renina would continue her brain cancer treatment at the same facility, but move her lung and bone cancer treatment to El Camino Health where she would receive targeted oral therapy for her lung cancer and begin to receive injections for her bone cancer. Her goal was to receive the best treatment at facilities

close to home, and her doctors collaborated to make sure her preferences were met. El Camino Health strives to always act in the best interest of patients, including collaborating with other health systems to create optimal treatment plans.

Moving Forward with Joy

Renina is still undergoing treatment and has an MRI (magnetic resonance imaging) and PET (positron emission tomography) scan once every three months to monitor for the presence of cancer. Renina’s brain lesions are improving, and the bone and lung cancers have both shrunk.

Renina trusts the doctors and nurses at El Camino Health Cancer Center to handle her cancer treatment and keeps her focus on living her life.

“I’m not worried much about my sickness,” says Renina. “When I go to the senior citizen center, they tell me I don’t look sick. I greet them with a song, and they say, ‘You’re always happy.’”

“I was always happy-go-lucky and making others laugh. Even now, I can still make them laugh.”

For the Greater Good

To help ensure no patient faces cancer alone, the El Camino Health Foundation provides funds for patient programs and medical advancements at the El Camino Health Cancer Center.

From leading-edge treatments to patient support programs — patients can trust they are receiving the highest quality of care from providers who care. Thanks to the generous donors of the El Camino Health Foundation, resources and programs like these exist:

- + **Oncology coordinators.** Our oncology coordinators guide patients and their families from diagnosis through treatment. They serve as a point of contact, providing education as well as coordination of care and support tailored to each patient's specific needs. They work hard to remove barriers to care as well as to empower patients to make informed decisions along the way.
- + **The Cancer Patient Emergency Fund.** The Cancer Patient Emergency Fund was established in 2015 to help meet emergent needs of patients at the El Camino Health Cancer Center who are in financial distress. Funds may be used for paying for temporary housing during treatment, transportation to and from infusion appointments, medications, nutrition and other needs identified by patients going through treatment.
- + **Cardio-Oncology program.** Patients who have received chemotherapy are at increased risk of developing future heart problems. The Cardio-Oncology program at El Camino Health is designed and dedicated to preventing and minimizing heart damage from cancer treatment. We aim to improve the heart health of newly diagnosed cancer patients, patients undergoing cancer treatments and cancer survivors.

Cancer Survivorship Services

It is not uncommon to face emotional and physical struggles before, during and after cancer treatment. El Camino Health makes sure no one feels abandoned when treatment stops. Gatherings and classes in our Taft Healing Space help survivors adapt to the new normal of life after cancer. A coordinator and nurse practitioner link patients to resources that include:

- + Social workers who connect patients to in-home family and medical resources and provide emotional support
- + Nutritional counseling and dietary guidance from oncology dietitians that encourage survivors to eat foods that support their best possible health
- + Wellness activities such as yoga, meditation, relaxation classes and spiritual care
- + Support groups that allow cancer survivors to share experiences of their journey

These services are made possible with the support of charitable donations to the El Camino Health Foundation.

Here for Our Patients Today and Tomorrow

At El Camino Health, our relentless pursuit of options and answers, paired with our personalized approach, helps us achieve better outcomes for patients with cancer. We remain on the leading edge of screening, diagnosis and treatment and have achieved superior five-year survival rates for lung cancer. At El Camino Health, patients receive customized treatment in a warm, friendly environment from a compassionate staff. Our experts make a point of being readily available — from a patient's first appointment through their final treatment, and a life beyond lung cancer.

2021 Community Outreach Coordinator Report

PROGRAM TYPE	3/31/22
	STANDARD 8.2 — PREVENTION
	LUNG CANCER
	Lung cancer is the second most common cancer and the leading cause of cancer death in both men and women in the U.S. per the Centers for Disease Control and Prevention (CDC). According to American Cancer Society (ACS), the risk of getting lung cancer increases with tobacco use and increased age. In U.S. Preventive Services Task Force (USPSTF), smoking is estimated to account for about 90% of all lung cancer cases, with a relative risk of lung cancer approximately 20-fold higher in smokers than in nonsmokers. The USPSTF recommendation for screening is adults aged between 50 and 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years.
CANCER SITE SELECTED	
NEED ADDRESSED / REASON FOR PROGRAM	
DATE NEED IDENTIFIED AND DOCUMENTED IN MINUTES	12/8/21
DATE OF ACTIVITY	Between October 11 and November 12, 2021, the El Camino Health Cancer Center hosted a lung cancer prevention survey online.
ACTIVITY & LOCATION	El Camino Health Cancer Center, Lung Cancer Prevention Survey online.
TOOLS OFFERED	El Camino Health offered prevention education and electronic informational handouts on lung cancer. Information contained the recommended age to discuss lung cancer prevention, low dose CT scan guidelines, symptoms of lung cancer, education about lung nodules, exposure to harmful substances, family history, lifestyle changes and cancer care services.
NUMBER OF PARTICIPANTS	35 survey respondents.
SUMMARY OF ACTIVITY	Outreach effort included online prevention survey, distribution of electronic education materials, email and newsletter marketing.
EFFECTIVENESS	Summary of effectiveness of lung cancer prevention survey, based on 35 responses: <ul style="list-style-type: none">+ 77.14% patients responded that all lung cancers do not start from lung nodules (27).+ 57.14% patients responded are between 60 and 79 years of age (20).+ 51.43% patients indicated have heard of low dose CT scan (18).+ 45.71% patients answered that lung cancer is preventable (16).
NATIONAL GUIDELINE OR INTERVENTION FOLLOWED	Centers for Disease Control and Prevention (CDC), U.S. Preventive Services Task Force (USPSTF), American Cancer Society (ACS), El Camino Health Cancer Care.
DATE ACTIVITY ASSESSED	3/31/2021

PROGRAM TYPE

3/31/22

STANDARD 8.3 — SCREENING

CANCER SITE SELECTED

LUNG CANCER AND BREAST CANCER

NEED ADDRESSED /
REASON FOR
PROGRAM

Lung Cancer: Lung cancer is the leading cause of cancer death in the United States and the world per National Comprehensive Cancer Network (NCCN). NCCN indicates the goal of lung cancer screening is to catch lung cancer early at a stage before there are any symptoms. This is when treatment is most successful. **Breast Cancer:** Breast cancer is the most common cancer in women and is the second leading cause of cancer death among women overall in the United States, according to the Centers for Disease Control and Prevention (CDC). According to American Cancer Society (ACS), screening mammography is currently the most reliable screening tool for breast cancer. ACS recommends that those 40 to 44 years of age have the option to begin annual mammography, 45 to 54 to continue annual mammography, and 55 years of age and older transition to biennial mammography or continue annual mammography. **Lung Cancer and Breast Cancer:** Based on our Community Needs Assessment 2019-2021, breast cancer and lung cancer are in the top five most common cancer sites diagnosed at El Camino Health in Mountain View, California, from 2016 to 2017. In GO2 Foundation for Lung Cancer, lung cancer accounts for 25% of all cancer deaths with breast cancer at 14%.

DATE NEED IDENTIFIED
AND DOCUMENTED
IN MINUTES

12/8/21

DATE OF ACTIVITY

In 2021, El Camino Health hosted Return to Cancer Screening PDSA Study.

ACTIVITY & LOCATION

Interventions include the following:

- + Social media posts: Facebook
- + Hospital-wide patient reminder/outreach: HealthPerks newsletter
- + Dissemination of guideline/messaging information to primary care practitioners: Physician Briefings newsletter
- + Reducing socioeconomic barriers: Free screenings

TOOLS OFFERED

El Camino Health offered prevention education and electronic informational handouts on lung cancer. Information contained the recommended age to discuss lung cancer prevention, low dose CT scan guidelines, symptoms of lung cancer, education about lung nodules, exposure to harmful substances, family history, lifestyle changes and cancer care services.

NUMBER OF PARTICIPANTS

Lung cancer screening total participants were 37 in pre-intervention and post-intervention. Breast cancer screening total participants were 3,025 in pre-intervention and post-intervention.

SUMMARY OF ACTIVITY

The goal of study was to return to pre-pandemic screening rates. The secondary goal was to increase screening rates by 10%.

EFFECTIVENESS

Summary of effectiveness of lung cancer and breast cancer screening rates:

- + Lung cancer screening goal was 4. The total outcome was 37 pre-intervention and post-intervention lung cancer screenings.
- + Breast cancer screening goal was 361. The total outcome was 3,025 pre-intervention and post-intervention for breast cancer screenings.

NATIONAL GUIDELINE OR
INTERVENTION FOLLOWED

Centers for Disease Control and Prevention (CDC), American Cancer Society (ACS), National Comprehensive Cancer Network (NCCN), GO2 Foundation for Lung Cancer, El Camino Health Cancer Care.

DATE ACTIVITY
ASSESSED

3/31/2021

REFERENCES

<https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2021.html>
https://www.cdc.gov/cancer/breast/basic_info/
<https://www.elcaminohealth.org/services/cancer-care/conditions-treatments/breast-cancer>
<https://www.elcaminohealth.org/services/cancer-care/specialty-programs/early-detection>
<https://www.cancer.org/content/dam/cancer-org/cancer-control/en/booklets-flyers/breast-cancer-fact-sheet.pdf>
<https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/lung-cancer-screening#fullrecommendationstart>
https://www.cdc.gov/cancer/lung/basic_info/
https://www.nccn.org/patients/guidelines/content/PDF/lung_screening-patient.pdf
<https://go2foundation.org/risk-early-detection/screening-facts-figures/>
<https://www.elcaminohealth.org/services/pulmonary-health/specialty-programs/lung-nodule-program>
<https://www.elcaminohealth.org/services/cancer-care/conditions-treatments/lung-cancer/low-dose-ct-scan-lung-cancer-screening>



For more information or referral to one of our experts,
please call or visit our website.

800-216-5556

elcaminohealth.org/cancer



A QUALITY PROGRAM
of the AMERICAN COLLEGE
OF SURGEONS