City of Hope’s median survival surpasses SEER LA in Stages I-IV NSCLC*
The Lung Cancer and Thoracic Oncology Program: Providing optimal outcomes for patients

City of Hope’s Lung Cancer and Thoracic Oncology Program is achieving superior outcomes by bringing together the best and the brightest clinicians and medical researchers who possess vision, integrity, compassion and a state-of-the-art skill set.

Our Lung Cancer and Thoracic Oncology Program offers a comprehensive approach and customized care for our cancer patients. We are experts at treating advanced and recurrent disease, and we believe that the best patient care comes from collaboration. When your patient arrives at City of Hope, our multidisciplinary team becomes your partner in seeking optimal outcomes. It is our multidisciplinary approach, combined with our dedication to advancing cancer care, that results in our superior survival outcomes data compared to SEER LA, making City of Hope the best choice for lung and thoracic cancer treatment in the region.

Providing a comprehensive team of health care professionals in one central place

The proximity of our broad interdisciplinary team makes collaboration and access convenient for clinicians and patients. Our tumor board includes:

- Pulmonologists
- Thoracic surgeons
- Thoracic oncologists
- Pathologists
- Geneticists
- Radiation oncologists
- Nurses
- Social workers

Why We Measure Outcomes

We measure outcomes to challenge ourselves to continually improve quality of care, give clinicians a measure of our performance, demonstrate value to payers and give patients confidence.

“City of Hope is just such a special place ... no other place that I’ve been to combines leading-edge treatment with such a nurturing environment.”

— Dan J. Raz, M.D., M.A.S.
Co-director, Lung Cancer and Thoracic Oncology Program
City of Hope surpasses SEER LA nonsmall cell lung cancer survival rates at all stages (Stages I-IV)

Data were derived from the City of Hope Cancer Registry (CNeXT) and SEER November 2017 Disease Specific Data Files, with the Los Angeles Registry as the comparator. All patients were diagnosed from 2005 to 2014, and the City of Hope follow-up cutoff date was 12/31/2015, to align with SEER data.

The National Cancer Institute’s Surveillance, Epidemiology and End Results (SEER) Program

An authoritative source on cancer incidence and survival, the SEER Program provides cancer statistics to reduce the cancer burden among the U.S. population. It is supported by the Surveillance Research Program, which provides national leadership in cancer surveillance using analytical tools and methodological expertise in collecting, analyzing, interpreting and disseminating reliable population-based statistics.
This Is How We Do It

Utilizing groundbreaking treatments to achieve superior outcomes for lung and thoracic cancer patients

At City of Hope we recognize that each patient, tumor and immune system is unique. With this understanding, we determine a personalized course of treatment that will produce the best patient outcome. When compared to other centers, patients treated for lung cancer at City of Hope had lower lengths of stay overall and the lowest unplanned readmission rates. From screening to treating to advancing research discoveries into therapies, City of Hope is committed to providing patients with the best outcomes.

Earlier lung cancer detection with low-dose computed tomography (LDCT) scanning

- Patients are screened using cost-effective LDCT scanning technology that can detect cancer earlier and help save lives.
  - LDCT is sensitive enough to detect pulmonary nodules caused by secondhand smoke.

Video-assisted lung and thoracic robotic surgery

- The thoracic surgery team has extensive experience with video-assisted, minimally invasive lung and thoracic robotic surgery, including removal of complex, locally advanced thoracic malignancies. These minimally invasive techniques result in less pain, fewer complications and faster recovery time.
- City of Hope is one of the few centers in the nation with extensive experience in video-assisted lobectomy.

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<th>Cases</th>
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<th>LOS index</th>
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<td>4.33</td>
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Precise stereotactic ablative body radiation as an alternative to surgery

- For high-risk surgical patients and those with Stage 1 malignancies, our expert radiation oncologists provide precise stereotactic ablative radiotherapy — also known as stereotactic body radiation therapy — as an alternative to surgery.

Partnership with the Translational Genomics Research Institute (TGen)

- The partnership’s goal is to accelerate the conversion of research discoveries into therapies.
- City of Hope provides a state-of-the-art clinical setting in which to advance genomic breakthroughs made by TGen.

Access to the latest therapy and to clinical trials evaluating novel drugs, including:

- Immunotherapy
- Targeted therapy
- CAR T cell therapy
- Biomarker identification to guide treatment selection
Providing innovative, onsite and ongoing research and clinical trials

City of Hope has a “bench to bedside” approach that is unlike any other cancer center. The staff at the Lung Cancer and Thoracic Oncology Program has the opportunity to conduct leading-edge research and enroll patients in clinical trials that may be life-prolonging and even lifesaving. Our translational R&D efforts make innovative, customized treatments available to our patients. By having scientists, physicians and treatment manufacturing facilities side by side at our main campus, we’re able to quickly turn breakthrough discoveries into experimental treatments. City of Hope is currently conducting more than 500 clinical trials, enrolling over 6,200 patients.

Our current lung and thoracic cancer investigations include:

- Focus on new therapeutic targets for patients with nonsmall cell lung cancer (NSCLC), investigation of heat shock protein 72 as a mechanism to overcome resistance in EGFR mutated NSCLC. Further investigation is evaluating germline variants in NSCLC that may become important for genetic counseling about the risk of lung cancer.
- Research to identify new therapies targeting specific epigenetic changes to improve platinum sensitivity in lung cancer.
- Research uncovering a novel mechanism underlying mitochondrial regulation by MET leading to a novel strategy for treating NSCLC. Additional research is being done on the mechanism(s) by which PXN confers drug resistance in lung cancer.
- Health outcomes research in older adults undergoing lung cancer treatment, including quality-of-life metrics and evaluations of the mental and physical effects of cancer diagnosis and treatment.
- Research with lung cancer patients that shows evolutionary trajectories of tumors during progression, with bottleneck events occurring during therapy, often resulting in a dominant subclone that acquires resistant traits. Additional systems research focuses on the development and application of multi-omic biomarkers inclusive of RNA expression, DNA mutations and protein levels for cancer prevention and treatment.
- Clinical trials evaluating self-management interventions to help caregivers of patients undergoing surgery for lung cancer prepare and develop skills to improve quality of life for themselves and their patients.
- An interdisciplinary approach focused on elucidating the mechanism(s) by which intrinsically disordered proteins enable cancer cells to evade drug treatments in lung cancer.
- Studies demonstrating that depleting or inhibiting RLIP (a 76 kDa Ral-interacting protein) is a novel and highly strategic targeted therapy for treatment of lung cancer.
- A bench breathing model that may provide insights into improved gas exchange and ventilator efficiency.
At City of Hope we strive to “maximize the wellness for all people affected by cancer” and an important part of this is accomplished by providing supportive care services tailored to the needs of our patients and their families.

Our goal is to provide education and support to help patients feel confident in their knowledge of the procedure, what to expect during the recovery process and how to manage issues that may arise after surgery. To help ensure continuity in the patient’s care, information is also provided to their primary care physicians.

With our Survivorship Program, we see patients every six months for the first two years and then annually to:

- Immediately address any postsurgical complications
- Manage any side effects that may occur
- Educate them about appropriate nutrition, exercise and fitness
- Assist in early detection should the cancer recur
- Connect them with social workers, psychologists, financial advisors or other support as needed

“My motivation has always been: How can we do better?”

— Karen Reckamp, M.D., M.S.
Co-director, Lung Cancer and Thoracic Oncology Program
Meet the experts of our Lung Cancer and Thoracic Oncology Program

Karen Reckamp, M.D., M.S.  
- Medical Oncologist

Ravi Salgia, M.D., Ph.D.  
- Medical Oncologist

Erminia Massarelli, M.D., Ph.D., M.S.  
- Medical Oncologist

Marianna Koczywas, M.D.  
- Medical Oncologist

Dan J. Raz, M.D., M.A.S.  
- Thoracic Surgeon

Jae Y. Kim, M.D.  
- Thoracic Surgeon

Loretta Erhunmwunsee, M.D.  
- Thoracic Surgeon

Sagus Sampath, M.D.  
- Radiation Oncologist

Arya Amini, M.D.  
- Radiation Oncologist
About City of Hope

City of Hope is a leading independent biomedical research, treatment and education center dedicated to developing and testing new therapies for cancer, diabetes and other life-threatening diseases. With a 106-year legacy, we are achieving superior outcomes by bringing together the best and the brightest clinicians and scientific researchers dedicated to providing the best, most appropriate personalized interventions for each patient.

Designated one of only 49 comprehensive cancer centers, the highest recognition bestowed by the National Cancer Institute, City of Hope is also a founding member of the National Comprehensive Cancer Network, with research and treatment protocols that advance cancer care throughout the world.

To find out more about City of Hope’s Lung Cancer and Thoracic Oncology Program, visit CityofHope.org/lung-cancer

To begin the referral process for your patients with lung cancer:

- Call **800-COH-4DRS (264-4377)**, Monday through Friday, 8 a.m. to 6 p.m., to speak with a patient referral specialist
- Fax a referral request letter with a patient face sheet to **626-301-8432**
- Complete an online referral request form at CityofHope.org/refer-a-patient
- Visit **clinicaltrials.coh.org** or call **626-218-1133** to see if one of our clinical trials holds promise for your patients

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