



2012 ANNUAL REPORT

Outstanding Achievement Award - Commission on Cancer Approved Program

Award-Winning Cancer Care

The Mount Sinai Comprehensive Cancer Center is a nationally recognized, award-winning facility that utilizes a collaborative, multidisciplinary approach to diagnosing and treating cancer. We provide quality care, leading innovation and personalized treatment plans for each patient to treat a broad range of cancers.

Mount Sinai's patient-centered focus ensures access to convenient, timely appointments, clinical trials and a host of support services all aimed at helping patients heal.

Recognition for Outstanding Treatment

Mount Sinai is the only hospital in Florida, and one of only 23 in the U.S., to receive its third consecutive Outstanding Achievement Award from the American College of Surgeons Commission on Cancer (CoC). The CoC created this award to recognize programs that strive for excellence in providing quality cancer care.

In addition, our radiation oncology program was the first in South Florida to earn accreditation from the American College of Radiology and American Society of Radiology and Oncology. This accreditation represents the highest level of quality and patient safety, and is awarded to facilities meeting specific practice guidelines and technical standards. As a recognized radiation safety provider, Mount Sinai has strict safety measures in place to ensure that patients receive radiation only when it is necessary and in the smallest possible dosage.

"The fact that we received this important accreditation underscores our commitment to patient safety and optimal results," says Leonard Toonkel, M.D., chief of the division of radiation oncology.

Cancer Research

The Mount Sinai Comprehensive Cancer Center offers one of the most integrated cancer research programs in the state. As South Florida's only National Cancer Institute-funded adult Community Clinical Oncology Program (CCOP), we take part in clinical trials that give patients access to pioneering new cancer treatment options before they become available to the general public.

Mount Sinai's CCOP is currently engaged in more than 45 active clinical trials, placing Mount Sinai at the forefront among the nation's cancer research institutions. Many of our protocols have resulted in cutting-edge cancer treatments.

"Oncology, perhaps more than any other discipline, relies on research," says Jose Lutzky, M.D., director of Mount Sinai's Melanoma Program. "To be able to give patients the best cancer care, we must be involved in clinical trials."

Immunotherapy is one of the most important areas of research, with major discoveries and clinical trials leading to the approval of new cancer-fighting drugs and therapies. Current trials offer promising vaccines for melanoma and brain tumors, as well as renal, prostate and gastric cancers. Groundbreaking cancer research trials underway at Mount Sinai include:

- Vitamin D/breast cancer study to examine whether Vitamin D affects mammographic density. This is important because breast cancer can go undetected in mammograms of women with dense breasts.
- Manuka honey/lung cancer study to determine whether consuming manuka honey will prevent inflammation and pain in the esophagus for lung cancer patients undergoing chemotherapy and/or radiation.

- Melanoma study to investigate whether a new vaccine will immunologically fight cancer cells in patients with stage III and stage IV melanoma.
- Regorafenib/colon cancer study to monitor the effectiveness of the regorafenib inhibitor drug on advanced colon cancer.

Advanced Technology

Mount Sinai is committed to applying major technological advances in the diagnosis and treatment of cancer. We are among a select few hospitals in the nation to acquire the SPECT-CT, a state-of-the-art imaging system for the diagnosis and treatment of cancer, cardiac and orthopedic conditions. SPECT-CT uses advanced molecular technology to produce highly detailed 3-D anatomic images. This system gives physicians the best available visual information to precisely plan therapy, radiation or surgical procedures. SPECTCT also aids in tumor staging and in determining efficacy of treatment. Mount Sinai was the first Florida hospital with the Evident™ ablation system, which destroys tumors in the kidneys, liver, lungs and other soft tissues using microwave energy.

Multidisciplinary Approach With a Research Focus

The Lila and Harold Menowitz Comprehensive Breast Center

Breast cancer is the leading cause of cancer death among women of all races in the United States, with one of every eight women susceptible to the disease. Mount Sinai's Lila and Harold Menowitz Comprehensive Breast Center gives patients access to a full range of screening, diagnostic, counseling and support services. Mount Sinai offers comprehensive breast cancer services at two convenient locations, Miami Beach and Aventura.

The Menowitz Breast Center is the first facility in Florida to receive accreditation from the National Accreditation Program for Breast Centers and has been recognized as a Breast Imaging Center of Excellence by the American College of Radiology.

Mount Sinai's focus on reliable, safe and effective treatment has led to new advances in our response to breast cancer. For example, eligible breast cancer patients are being treated with Canadian fractionation, a process that delivers a higher, more focused dose of radiation during each treatment. As a result, radiation is more precisely applied to cancerous cells in fewer therapy sessions, and patient recovery time is reduced.

Mount Sinai's oncologists have found that positioning of the breasts during radiation treatments can also play a critical role in patient health and recovery. While most health facilities treat breasts in the supine position in which women lay on their backs, our specialists place patients in the prone position, lying face down. This causes the breasts to fall away from the rest of the body, and lowers the amount of radiation exposure to the heart, lungs and other organs.

New Treatments for Prostate Cancer

Our oncologists offer a wide array of technologically advanced treatment options for prostate cancer patients with the objective of providing the most effective responses, the greatest amount of patient comfort and the swiftest recovery times.

RapidARC™ is a groundbreaking approach to image-guided, intensity-modulated radiation therapy that generates precise treatments in far shorter sessions than conventional radiation therapy. RapidARC rotates around the patient with small beams of

varying intensity aimed at the tumor from different angles. This technique delivers higher doses of radiation to the tumor, exposing surrounding healthy tissue to less radiation.

Mount Sinai's oncologists have treated more than 1,500 prostate cancer patients with radiation seed implants since 1990. This process involves inserting tiny radioactive implants into the prostate gland to combat tumors, based on computer modeling. The seeds, which become inactive over a period of months, expose the prostate to high doses of radiation with limited damage to surrounding tissue.

In some instances of prostate cancer, radiation oncologists may use brachytherapy, a computer-controlled process that briefly exposes tumors to radioactive seed implants through temporarily inserted, catheter-guided syringes. This approach allows doctors to position and move the radiation source in a precise manner to conform to the shape of a tumor before withdrawing the seeds. The prostate receives a precise dose of radiation without requiring long-term exposure to the seeds.

Mount Sinai was also the first comprehensive cancer center in South Florida to offer PROVENGE®, a new therapeutic drug for patients with advanced prostate cancer. By stimulating patients' immune systems to attack cancer cells, PROVENGE demonstrated the ability to extend survival rates and reduce the risk of death.

Oncology Conferences

The doctors at Mount Sinai participate in ongoing conferences that bring together a diverse group of specialists to analyze and review individual patient cases, all in an effort to enhance the safety and effectiveness of each patient's treatment. Participants include oncologists, surgical oncologists, radiation oncologists, pathologists, radiologists and other specialists.

In addition to evaluating all available treatment options, conference participants consider each patient's extenuating circumstances that may impact their care. They also designate beneficial support services, such as pain management, psychosocial and nutritional services, to meet each patient's unique requirements for care.

"Everyone is working toward the same goals," explains Michael Schwartz, M.D., chief of hematology and oncology, and the CCOP's principal investigator. "At Mount Sinai, you benefit from a team of experts who have input on each patient's care, we get patients started on treatment in a timely fashion and we address all aspects of care, physical and emotional."

Experienced, Comprehensive Lung Care

Lung cancer is the second most commonly diagnosed cancer in both men and women, and the most prevalent cause of cancer death in the United States. Mount Sinai's Lung Cancer Center of Excellence offers patients a comprehensive array of diagnoses and treatment options, including minimally invasive, robotic-assisted surgery and access to clinical trials not available at other local institutions.

Robot-Assisted Lung Care

Mount Sinai's thoracic surgical team has performed more than 300 robotic-assisted lung cancer surgeries since 2009, qualifying them among the most experienced surgeons performing robotic-assisted lung procedures in the nation.

Robotic surgery enables doctors to perform complex lung operations through relatively small incisions. Mount Sinai was among the first hospitals in South Florida to offer robotic assisted lung surgery, which is associated with fewer complications and shorter recovery times.

In addition to treating cancerous lung tumors, Mount Sinai's thoracic surgeons also treat conditions such as esophageal cancer and hernias of the diaphragm. Since minimally invasive surgery offers reduced physical stress and pain, older patients who are not candidates for traditional open lung surgery may qualify for robotic-assisted procedures.

"Anesthetics are now more sophisticated, and robotic surgery allows us to treat our patients with far less trauma," explains thoracic surgeon Roy Williams, M.D., a leader in robotic assisted lung surgery. "Age alone is not a reason to exclude a patient."

Cancer Detection

Mount Sinai is at the forefront of lung cancer screening, utilizing imaging technology and minimally invasive surgical techniques to detect the disease in its earliest stages. For example, our surgeons use low-dose computed tomography scans to seek nodules in the lungs of patients with long-term histories of smoking. These nodules are subsequently stained, removed and biopsied to determine whether they are cancerous.

Our thoracic oncology specialists also are among the most experienced physicians in South Florida in employing endobronchial ultrasound to diagnose cancer, infections and other respiratory disorders. This relatively non-invasive imaging tool allows doctors to see beyond the bronchial wall and detect diseased tissue outside the bronchial airways.

Team Approach

Lung cancer treatment is a highly complex field that requires the expertise of various specialized physicians. Mount Sinai's thoracic oncology team meets regularly to apply its collective knowledge and extensive experience to meet each patient's needs.

Participants in these multidisciplinary tumor conferences include thoracic surgeons, pulmonologists, radiologists, pathologists and radiation oncologists. Together, these specialists analyze and discuss molecular analysis of tumors, chemosensitivity testing and other complex medical factors to identify the most effective treatment plan for each patient.

Pulmonary Care

Mount Sinai's Lung Cancer Center of Excellence is equipped with the latest diagnostic and treatment technology to respond to a wide array of pulmonary disorders. Our specialists identify and treat conditions such as asthma, sleep disorders, chronic obstructive lung disease, respiratory failure and pulmonary hypertension. The center also offers a smoking cessation program.

Prevention Programs

Mount Sinai Medical Center hosts free monthly lectures throughout the Miami-Dade community. These lectures cover some of today's most vital health-related topics and are presented by several of the hospital's top medical experts. In 2012, a number of our physicians from the Comprehensive Cancer Center participated in educational presentations around the community. In February, Dr. Juan Paramo, Surgical Oncologist presented information on "The Five Things Everyone Should Know about Cancer" and in September and October, Dr. Ivy Salom, Breast Center Women's Imaging Radiologist presented information on "Breast Cancer – What Every Women Needs to Know".

Other participation included prevention lectures by our Medical Oncologists' and Breast Center Radiologist that were featured as a printed ad in: *Miami Today* and *El Nuevo Herald*; on TV: *Telemundo 51*; and on the radio: *Radio Caracol / WSUA 1160 AM* and *Lite 101.5 FM*. The prevention lectures included information on prostate cancer, colon cancer, hematology, secondary cancer, and breast cancer and breast services. Our physicians are very much engaged in community education.

Screening Programs

Mount Sinai Comprehensive Cancer Center hosted a free Melanoma Screening courtesy of the Mount Sinai Medical Center Foundation. This year's Melanoma Screening event was held on April 25th, 2012 from 5 – 7 p.m. at the Blue and Green Diamond Clubhouse in Miami Beach. Thirty-one patients were screened by Dermatologist, Dr. Brian Katz, Dr. Martin Zaiac and Dr. Nardo Zaias. Nine of these patients were requested to be seen back in the office for additional follow-up. A secondary skin cancer screening was conducted at the Miami Beach Marina in conjunction with the Skin Cancer Foundation.

In conjunction with the Florida Breast Health Initiative and the Florida Health Department, Mount Sinai Comprehensive Cancer Center sponsored free mammograms in an effort to promote screening and early breast cancer detection.