

Great Lakes Cancer Institute— McLaren Regional Medical Center 2010 Annual Report

(2009 Statistical Data)



Miles ahead, not miles away.



karla grunow

A Message from the Director

It goes without saying the diagnosis of cancer can be stressful, frightening and confusing for patients and their loved ones.

Knowing you have up-to-date, expert care available in your own community can provide a sense of familiarity and comfort. Professionals at Great Lakes Cancer Institute (GLCI)-McLaren who have made it their life work to stay up-to-date with current national standards are dedicated to advancing cancer treatments through clinical research trials. Our medical team makes it their mission to recognize you and your family by name, participate in raising awareness around cancer, organize and facilitate support groups, and be knowledgeable about available resources for cancer both at the local and national level.

GLCI-McLaren brings you unmatched cancer treating technology and physician specialists who work together because they recognize how collaboration of specialties contributes to better care. They do it all with compassion and hope.

GLCI-McLaren is miles ahead of what you might expect and we are right here; only a few miles away, in your community.

Karla Grunow, RN, BSN
Director of Oncology Services



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You need to know



dr. t. trevor singh

Chairman's Report

McLaren Health Care now provides health care to the majority of patients in mid-Michigan. There are now nine Great Lakes Cancer Institute (GLCI) campuses in Michigan. Through the collaboration with Michigan State University (MSU), we are able to offer advanced treatment through national clinical protocols. This, coupled with cutting-edge technology, enables us to provide the best possible oncologic care to our patients right in their own community. GLCI-McLaren in Flint continues to grow, with the addition of the most technologically-advanced photon beam equipment, Truebeam STX™. A new proton beam treatment center will be operational in late 2012. In addition to the surgical oncology program, we have a combined hematology/medical oncology fellowship with MSU. We are now participating not only in phase III, but also phase II clinical trials. In the near future we will be starting phase I clinical trials.

Another notable advance in 2010 is the transition to electronic medical records. The entire GLCI-McLaren campus has completed the switch following the medical oncology office's conversion as the second phase of the two-year process.

Over the past three decades, the number of cancer survivors in the United States has increased from two million to almost 13 million. This statistic is mirrored at GLCI-McLaren as our registry of survivors continues to grow in volume and individual outcomes. The growing alumni of cancer survivors can be attributed to early diagnosis, prevention efforts, and more effective treatment. Treatment has become more individualized. Through new technology, we have been able to personalize therapy for cancer patients, customizing treatment using medication, radiotherapy and surgical procedures that will best target the cancer and spare healthy tissue. There are several examples of drugs for specific genotypes of breast cancer. Advances have also been made to treat colon and lung cancer.

As the international cancer community continues to refine treatments through smarter drugs, more precise radiation therapy and less invasive surgical techniques, GLCI-McLaren will continue its rich tradition of delivering technologically advanced and groundbreaking treatments by a staff that understands the extraordinary value of compassionate care.

T. Trevor Singh, MD, FACP
Chairman, GLCI-McLaren Cancer Committee

2010 Cancer Committee

Physician Members

T. Trevor Singh, MD, FACP
Cancer Committee Chairman,
Medical Director of Medical
Oncology

Hesham Gayar, MD
Medical Director of Radiation
Oncology

Sukamal Saha, MD, FACS, FRCS(C)
Surgical Oncology, Cancer Liaison
Physician

David Wiese, MD
Pathology

Linda Lawrence, MD
Medical Director of McLaren
Imaging

Raymond Demers, MD
GLCI CEO/Medical Director

W. Edward Naill, MD
Radiation Oncology

Jack Nettleton, MD
Radiation Oncology

Madan Arora, MD
Medical Oncology

David Eilender, MD
Medical Oncology

Sunil Nagpal, MD
Medical Oncology

Venkatasiva Peram, MD
Medical Oncology

Harold Rutila, MD
Urology

Frederick Armenti, MD
Thoracic Surgery

Dale Wilson, MD
Obstetrics & Gynecology

Hussein Mazloum, MD
General Surgeon

Rama Rao, MD
Anesthesia, Pain Management

Rohit Bishnoi, MD
Resident

Allied Health Professional Members

Karla Grunow, RN BSN
Director of Oncology Services

Debbie Amey
American Cancer Society

Lisa Ash, CPHQ
Quality Improvement

Elizabeth Bowie, RN, BSN, OCN
GLCI Research Manager

Ann Roat, RD
Registered Dietitian

Katherine Robertson-Cain, RN, BSN
11 South Nurse Manager

Lisa Salmons
Vice President, Hospice & Palliative
Services

Kathi Scruggs, RN
Case Management

Cathy Sudborough, CTR
Oncology Data Coordinator

Brent Wheeler
Vice President,
Ancillary/Support Services

Kimberly Wright, CTR
Cancer Registrar



Cancer care that's miles ahead, not miles away.

When cancer strikes, Great Lakes Cancer Institute-McLaren is here, making sure exceptional care is close when needed the most. As part of the Great Lakes Cancer Institute network, our patients receive the most advanced treatment technologies, surgical techniques, and pharmaceutical developments available. And, we use a multidisciplinary team approach to treat the whole patient. This means we integrate all aspects of care, treating the cancer and addressing each and every way it affects our patients' lives.

A United Front.

Cancer specialists from all treatment and diagnostic modalities, along with the primary care physician, participate in multidisciplinary conferences addressing diagnosis, treatment options and long-term monitoring. Traditional treatments and open clinical trials are both considered. After careful consideration, the consulting physicians reach a consensus recommendation.

Multidisciplinary conferences at GLCI-McLaren:

- Neuro oncology conference is held the third Monday of the month at 7:30 a.m.
- Breast conference is held each Wednesday at 7:00 a.m.
- Thoracic conference is held each Thursday at 7:30 a.m.
- General oncology conference meets each Monday at noon.
- Head and Neck conference meets four times each year.



Main Entrance

West
GREAT LAKES
CANCER
INSTITUTE



Diagnosis and Staging



Diagnostic Capabilities

GLCI-McLaren has excellent imaging technology nearby, at the McLaren Imaging Center and at McLaren Regional Medical Center. The McLaren Imaging Center is designated as a Breast Imaging Center of Excellence by the ACR. The designation indicates the center's full accreditation in mammography, stereotactic breast biopsy, breast ultrasound and ultrasound-guided breast biopsy. Other imaging capabilities include:

- Positron Emission Tomography/Computed Tomography (PET/CT)
- Digital Mammography
- Magnetic Resonance Imaging (MRI)
- CAD (Computer-Aided Detection)

Endoscopic Ultrasonography Used for Less Invasive Testing

McLaren gastroenterologist Mustafa Alnounou, MD, began utilizing Endoscopic Ultrasonography (EUS) to perform minimally invasive biopsies that could eliminate the need for invasive testing and prevent unnecessary surgery in certain patients.

Endoscopic Ultrasonography combines endoscopic visualization and high-frequency ultrasound. This combination of technology allows for precise delineation of the individual layers of the gastrointestinal tract. The technique allows local-regional staging of gastrointestinal malignancy, determination of the origin of submucosal lesions, and differentiation of other gut-wall abnormalities. EUS organ indications include the esophagus, stomach, pancreatic-biliary, and colorectum. It is used for non-gastrointestinal disease organs in the following instances: lung cancer staging, lymphadenopathy of unknown cause and evaluation of mediastinal masses.

Endobronchial Ultrasound Used to Stage Lung Cancer

John Blamoun, MD, and McLaren Regional Medical Center's Endoscopy Laboratory now perform transbronchial needle aspiration (TBNA) under visual ultrasound guidance.

The Endobronchial Ultrasound (EBUS) procedure allows physicians to perform TBNA to obtain tissue or fluid samples from the lungs and surrounding lymph nodes using a special endoscope guided through the trachea. The samples can be used for diagnosing and staging lung cancer, detecting infections, and identifying inflammatory diseases that affect the lungs, such as sarcoidosis.

Pathology

Diagnostic pathology represents the foundation of cancer care. Pathologists make the final diagnosis and provide staging information used for optimal treatment. At McLaren, our team of experienced board-certified pathologists includes subspecialists in cytopathology, hematopathology, dermatopathology and genitourinary pathology. All newly-diagnosed cancers have an automatic second opinion within the department to assure the quality of our care. Up-to-date methods including flow cytometry and automated assisted screening of Pap tests are available in the department to provide optimal diagnostic services.



Treatment

Radiation Oncology

GLCI-McLaren's radiation treatment area was expanded in 2010 with the addition of a new vault to house the Varian TrueBeam STX™ real-time imaging and radiation treatment system. The TrueBeam is the only system of its kind in Michigan and one of only a handful in the country. It is the most advanced form of radiation therapy currently available. With its fully-integrated design, TrueBeam incorporates numerous technical innovations that synchronize imaging, patient positioning, motion management, and treatment delivery during radiotherapy or radiosurgery. The system delivers the appropriate dose more than twice as fast as other linear accelerators and streamlines workflow to significantly reduce the number of steps needed to complete a treatment.

Today's cancer treatment is miles ahead of what it was just one generation ago. The technologically advanced systems now available at GLCI-McLaren, combined with custom planning, result in the delivery of a precise, expert course of radiation treatment.

Advanced external beam radiotherapy services:

- Image-Guided Radiation Therapy (IGRT)
- Intensity Modulated Radiation Therapy (IMRT)

Brachytherapy (internal radiation) services include:

- Low Dose Rate (LDR) permanent seed implantation
- High Dose Rate (HDR) computer-guided treatment and placement of fiducial marker seeds.



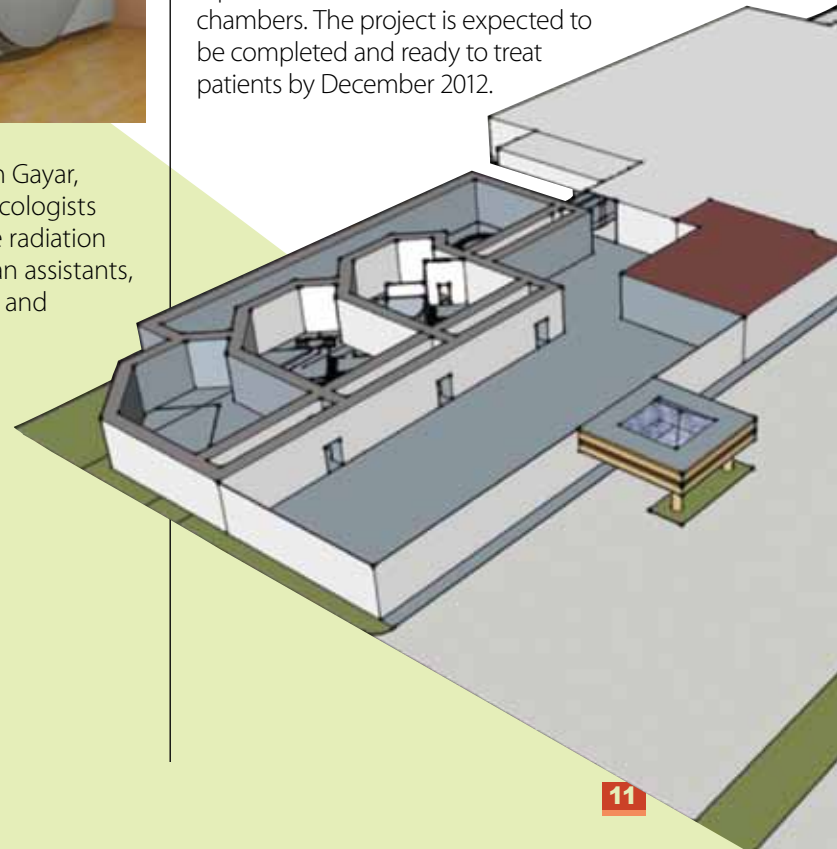


Chairman of Radiation Oncology Services, Hesham Gayar, MD, along with fellow board certified radiation oncologists Jack Nettleton, MD, and Edward Naill, MD, lead the radiation treatment team which includes physicists, physician assistants, radiation therapists, dosimetrists, oncology nurses and support staff.

GLCI-McLaren also provides radiation oncology services to GLCI facilities in Lapeer and Owosso.

Breaking Ground in mid-Michigan.

In 2010, McLaren Health Care – in a joint venture with Texas-based healthcare technology company, ProTom International – received approval to construct a \$65 million proton beam cancer center on the campus of GLCI-McLaren. A new wing and entrance is planned to house three treatment chambers. The project is expected to be completed and ready to treat patients by December 2012.



Treatment

Medical Oncology

The advent of smarter drugs and the ability to create more individualized treatments has enabled the Medical Oncology team to participate in the amazing transformation occurring in cancer care. Today, medical oncologists at GLCI-McLaren see more patients for checkups at 1-year, 5-years, 10-years and more following their treatment.

Several medical oncology physicians throughout the Greater Flint area partner with GLCI-McLaren to coordinate personalized treatment plans. When appropriate and if available, new drugs that target specific tumors' traits are utilized. Drug therapy may also be combined with radiation therapy and surgery. The medical oncology and hematology practice of T. Trevor Singh, MD; Madan Arora, MD; David Eilender, MD, and Sunil Nagpal, MD is located within GLCI-McLaren. In 2010, the practice converted to an electronic medical record system, streamlining the flow of patient information between members of the treatment team.

Medical Oncology Treatments:

- Biologic Therapy
- Clinical Trials
- Genetic Counseling
- Chemotherapy
- Hormonal Therapy
- Targeted Therapy



Surgical Oncology

GLCI-McLaren is located on the extended campus of McLaren Regional Medical Center (MRMC). With the addition of a second robotic surgical system, the daVinci Si HD™, and ongoing investments in OR systems and inpatient facilities, MRMC is expanding the scope of surgical capabilities and creating a more comfortable environment for patients.

Through robotic-assisted surgery, surgeons Sukamal Saha, MD, and Douglas Iddings, MD, are now able to perform surgery to remove thyroid cancer without the tell-tale scar running across the collar line of the neck. This innovative procedure, transaxillary robotic thyroidectomy, allows a surgeon to remove a tumor in the upper neck through an incision under the arm. Using this remote-access approach the patient no longer has a prominent scar on the neck. Another important advantage to using the daVinci system is the enhanced visualization. The surgeon sees the surgery in 3D at 10 times magnification making it easier to avoid structures in the neck that control important functions such as speaking and swallowing.



Treatment



Surgical Care Unit Opens

The new Surgical Care Unit (SCU) opened to patients in January 2010. The area is dedicated to the care of high acuity and progressive level surgical patients. Many oncologic surgical patients are placed on the unit which features state-of-the-art technology and contemporary,

earth-tone décor. SCU is a secure unit with badge-access or staff clearance required to enter due to the acute level of care provided. The unit has 18 beds, all in private rooms. Six rooms on the Unit are designated for high acuity patients who will require constant observation and care. The other 12 rooms are for progressive level patients.

Inpatient Oncology Unit

The Inpatient Oncology Unit is a 36-bed unit for inpatients recovering from oncologic surgeries, immunocompromised patients, as well as patients receiving chemotherapy, external radiation and brachytherapy. The staff on this unit is highly trained and experienced in caring for patients receiving treatment for cancer. All nurses on the unit are trained through the Oncology Nursing Society to administer chemotherapy treatment.





Support Programs

Some of the most inspiring support to our patients is made possible through financial gifts to the cancer program through the McLaren Foundation. Providing services to patients, and their caregivers, beyond the prescribed therapy is an important step in treating the whole person, not just the disease. This year, GLCI-McLaren benefited from two donor-funded programs that have enabled patients to experience a greater level of support and complementary care.

Art Therapy

Through the generosity and dedication of many donors and volunteers, **Healing Through Art** – the art therapy collaboration between McLaren and the Flint Institute of Arts (FIA) – began in December 2009. This program is designed to help cancer patients, along with their families and caregivers, cope with cancer diagnosis, treatment and other associated issues.

Gail Singer, counselor and art therapist, creates simple, yet significant, thought-provoking art projects that can be completed by people of any artistic skill level. The projects act as vehicles to explore issues and stimulate conversation relevant to one's journey with cancer. Gail holds classes separately for patients and caregivers each month at the Flint Institute of Arts. These classes, held free of charge, incorporate an art activity with a current exhibit at the Institute. Gail has also incorporated art therapy into the breast cancer support group meeting held at GLCI-McLaren.

The art therapy program at McLaren is funded through the generous gifts of patrons in the community. The FIA and McLaren are grateful to all of the individuals and organizations that are supporting this collaboration. A special thank you is extended to both the Stella & Frederick Loeb Charitable Trust and the McLaren Auxiliary, without whose support this special program would not be possible.

Creating art is an effective form of expression and can provide positive emotional benefits, especially when facilitated by a trained art therapist.





Support Programs

it's just a
good thing
to do.

Going the Extra Mile for Patients

The **Extra Mile Program** at GLCI-McLaren took shape after social worker Jean Battles witnessed patients who were not able to meet basic needs during treatment or who needed help with incidental costs to receive their treatment.

"There have been times patients have had to stay for treatment longer than expected and didn't have money for lunch, or they couldn't get the medicine for treatment because they couldn't afford their copay," said Battles.

Wanting to help, the staff started hosting bake sales and spring basket sales to raise money for patient needs. Local community organizations and clubs have held events to benefit the **Extra Mile Program** as well. The creation and growth of the **Extra Mile** patient fund has benefited many patients since its inception. Nutritional supplements are provided to patients with dietary issues who cannot afford the retail cost of the products.

"Needs really range from one patient to the next," Battles said. "We are proud to be able to provide this extra level of comfort to our patients. The most important thing we can give our patients during tough times is hope. The **Extra Mile** signifies people going out of their way to help someone even if it is not part of their job, or for someone they know. It's just a good thing to do."



Ever Living Tree Continues Legacy of Care

The **Ever Living Tree Program** was established with the goal of providing financial assistance to cancer patients being treated at McLaren. The program bestows a one-time cash gift to current cancer patients.

The Program is funded through the generous support of employees, patrons and special friends of McLaren's cancer program. An annual campaign makes it possible for patients to receive some financial assistance during their treatment. In November, when people's thoughts turn to holiday shopping and parties, McLaren mails a special holiday letter giving recipients the opportunity to honor a loved one and support the **Ever Living Tree Program** with a financial gift. Donors can also customize an ornament and have it placed on the large holiday tree displayed in the lobby of McLaren Regional Medical Center.

The **Ever Living Tree Program** has firmly taken root in the hearts of many whose lives have been touched by cancer. The Program has raised more than \$133,000 providing help to more than 400 patients. With continued support, the program will remain a valued resource and provide respite for those with a special need who come to McLaren for cancer treatment.



Support Services

Lymphedema Clinic

Complete Decongestive Therapy is provided by Physical Therapy in collaboration with GLCI-McLaren as part of the Breast Cancer program. Lymphedema education is provided as part of the weekly Breast Cancer Conference. Treatment requires physician referral and is tailored to the patient's symptoms and requirements. Components are: manual lymphatic drainage, compression bandaging, training and education in self-care, precautions and contraindications, and a home exercise program. The Lymphedema Clinic is held at the McLaren Physical Therapy site in Flushing.

Hospice

"I wish I had known about hospice sooner." This is one of the most frequent comments McLaren Homecare Group receives from patients and families.

The hospice program offers specialized care to eligible patients to enhance the time they spend with family and friends. Our skilled specialists provide care that addresses all aspects of a patient's illness, as well as the patient's physical, spiritual, and emotional needs. From pain and symptom management to respite care for family members, the care provided supports patient and family choices with respect, comfort, and dignity. Hospice nurses address patients' personal needs and symptoms to give them the greatest amount of independence possible. McLaren Hospice focuses on improving the quality of life so that patients and families can live their lives as fully as possible. Inpatient and home hospice services are available in Bay, Ingham, Genesee, Lapeer, Oakland, and surrounding counties.

American Cancer Society

The American Cancer Society (ACS) is a valued partner in the support and healing of cancer patients at GLCI-McLaren. ACS volunteers staff the patient resource area, providing helpful print materials and online resources. Additional services and programs coordinated through ACS include: transportation to receive treatment; the **Reach to Recovery** program, where people affected by breast cancer receive support from a trained volunteer; and the **Look Good Feel Better** beauty and emotional healing program.

Support Staff

An extended team of support is available for patients with cancer. Beyond those that provide treatment, there are resources to aid in the healing and recovery process.

- A registered dietitian counsels patients on nutrition during and after treatment.
- A social worker can provide patients with assistance in addressing any special needs that arise with a cancer diagnosis.
- Spiritual support is available to patients and their families with chaplain representation in many faiths.
- Physical, occupational, and speech therapists provide care to those with restricted physical function following a physically debilitating medical situation. Rehabilitation services are offered at seven area facilities in Flint and the surrounding communities.

Support Groups

Support groups can be a valuable source of empowerment, education and friendship when faced with a diagnosis of cancer. Support groups specific to certain cancers meet on a regular basis at GLCI-McLaren and McLaren Regional Medical Center.

- UsTOO Prostate Cancer Support Group
- Community Breast Cancer Support Group
- Multiple Myeloma Support Group
- New Tomorrows Grief Support Group



Touching our Community

Each year GLCI-McLaren is involved with offering free cancer screenings to the community. In 2010, over 803 screenings were conducted. Detecting cancer at an early stage, through screenings like these, increases the success of cancer treatment outcomes.

2010 Community Outreach

Event	Collaborating Agency	Month	Results
Colorectal Screening	Great Lakes Cancer Institute	March	GLCI-McLaren kits distributed = 259 # returned = 104
Daffodil Days	American Cancer Society (ACS)	March	Raised \$1,850.00 for ACS
Skin Cancer Screening	McLaren Internal Medicine physicians and residents	May	175 people screened
Prostate Screening	WJRT ABC 12 and Genesee County Cancer Connection (GCCC)	June	283 men screened (PSA/DRE)
Cancer Survivor Celebration		June	528 people attended
Relay for Life	ACS	June	Participated in multiple relays: Shiawassee, Lapeer and Genesee Counties
Prostate Screening	GCCC	September	201 men screened
Breast Screening	GCCC	October	40 women screened
Making Strides Against Breast Cancer	ACS	October	89 walkers Raised over \$6,000.00

Celebrate Survival

Each year the Great Lakes Cancer Institute-McLaren helps hundreds of people through their battle with cancer. As a way to honor the strength and spirit of those who have overcome cancer and those who are currently

undergoing treatment, McLaren hosted its 16th Annual Cancer Survivors' Celebration in 2010. At this year's event, 528 guests were introduced to **Healing Through Art**, a new art therapy program available to cancer patients and

their caregivers at GLCI-McLaren. Guests were entertained by featured speaker Mack Dryden, comedian and two-time cancer survivor.



Promoting Prevention

Tobacco-Free Campus Initiative Takes Effect at McLaren

"Clear the Air. Show We Care." signs appeared on the extended campus of McLaren Regional Medical Center (MRMC) this year as the organization, which includes GLCI-McLaren, moved to a completely tobacco-free campus in July 2010. To assist employees, patients and visitors who use tobacco products with the change, MRMC offers smoking cessation classes, educational materials and discounted smoking cessation aids.



Research

National Clinical Trials

Oncologists and surgeons at GLCI-McLaren are impassioned in conducting research to advance cancer treatment standards. Many of our patients have chosen to include a research protocol as part of their treatment plan.

Many of the oncologists on staff serve as investigators for national and institutional studies. For a description of the individual studies taking place at GLCI-McLaren, visit mclarenregional.org/cancer.

Breast

NSABP B-43
NSABP B-46
NSABP FB-6
ECOG PACCT-1/TAILORx
REFLEXOLOGY
CALGB 40503
RTOG 0413
RTOG 1014
SWOG S0715
SWOG S0702
Z1041
Z1071
Z1072

Colon

E5202
N0147
NSABP P-5

Head and Neck

LORHAN REGISTRY

Lung

ECOG E1505
Eli Lilly S130
RTOG 0617
RTOG 0915

Prostate

RTOG 0534
RTOG 0815
RTOG 0831

Multiple Myeloma

Celgene CONNECT registry

PNH

Alexion PNH registry

Chemo Induced Peripheral Neuropathy

CALGB 17061

Depression Screening

RTOG 0841

Institutional Prospective and Retrospective Studies

Many noteworthy oncologic prospective and retrospective clinical studies have been developed by our physicians. This research is compliant with the guidelines set forth by the Institutional Review Board of the Federal Government.

Institutional studies currently underway involve the following sites:

- Breast
- Kidney
- Vocal Cord
- Ovary
- Colon and Rectum
- Lung
- Bone Marrow
- Uterine
- Head and Neck
- Prostate
- Liver

Sukamal Saha, MD, surgical oncologist, leads innovative research and shares his findings at symposiums and scientific meetings around the world. This year, Dr. Saha and his team have begun original research involving molecular markers for solid tumors. Numerous 2010 manuscript publications of Dr. Saha's methods and findings can be found in prestigious peer-reviewed journals such as **Annals of Surgery**, **American Journal of Surgery** and **Journal of Clinical Oncology**.

Hesham Gayar, MD, presented original research at the 2010 ASTRO conference in San Diego, California. Dr. Gayar and co-authors evaluated the clinical outcomes of specific type of lung cancer patients treated with Image Guided Stereotactic Body Radiation Therapy (IG-SBRT) delivered by Helical TomoTherapy. The results of the research showed that Helical TomoTherapy IG-SBRT for inoperable, non-central non small cell lung cancer is a safe and well-tolerated technology with very good local control.



Case Study

Data
Comparison
of McLaren
Regional
Medical Center
and National
Cancer Data
Base for 2008

2003 Observed
Survival
Comparison

MRMC – 205 Analytic Cases
NCDB – 2,180 Analytic
Cases, Teaching Research
Facilities
Great Lakes ACS Division
(Indiana and Michigan)

Detailed Statistical Analysis of Prostate Cancer

According to **Cancer Facts & Figures 2010**, prostate cancer is the most commonly diagnosed cancer (excluding skin cancer) among men in the US and the second most common cause of cancer death among men. It is estimated that about 1 in 6 men in the US will be diagnosed with prostate cancer during their lifetime and 1 in 36 will die from this disease.

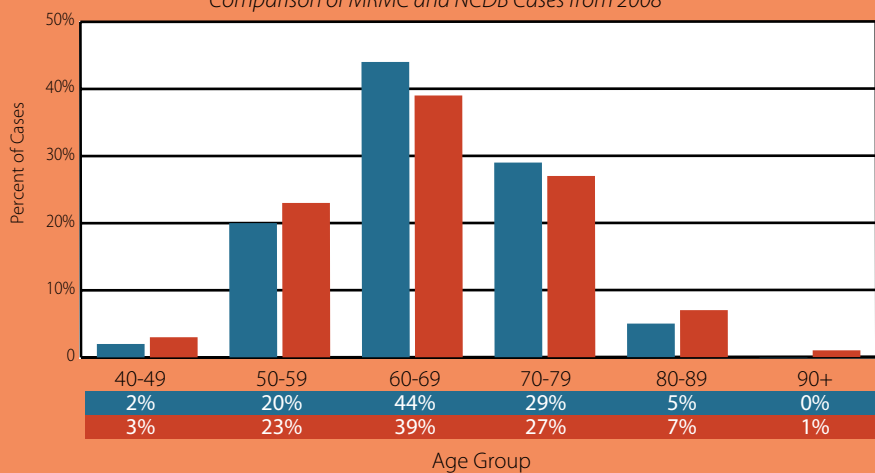
Age is the most important risk factor for prostate cancer. Prostate cancer incidence rates increase in men until about age 70 and decline thereafter. From 2002-2006, the median age of men diagnosed with prostate cancer was 68 years. During this same time period, the median age of death from prostate cancer was 80 years. African American men have a higher incidence of prostate cancer and are more likely to die from the disease than white men in every age group. Some other risk factors include family history, genetic factors, nutrition and dietary supplements, and obesity and physical activity.

This study includes a data comparison of 2008 cases from McLaren Regional Medical Center and the National Cancer Data Base (NCDB), teaching and research facilities in the Great Lakes (Indiana and Michigan) ACS Division. The patient's age at diagnosis, stage at presentation, and first course of treatment modality utilized were reviewed and compared to NCDB data. The five-year survival was reported for patients diagnosed during 2003 and compared to NCDB data for the same year.

When we compared age at the time of diagnosis, results were similar to NCDB data.

Distribution of Age at Diagnosis

Comparison of MRMC and NCDB Cases from 2008

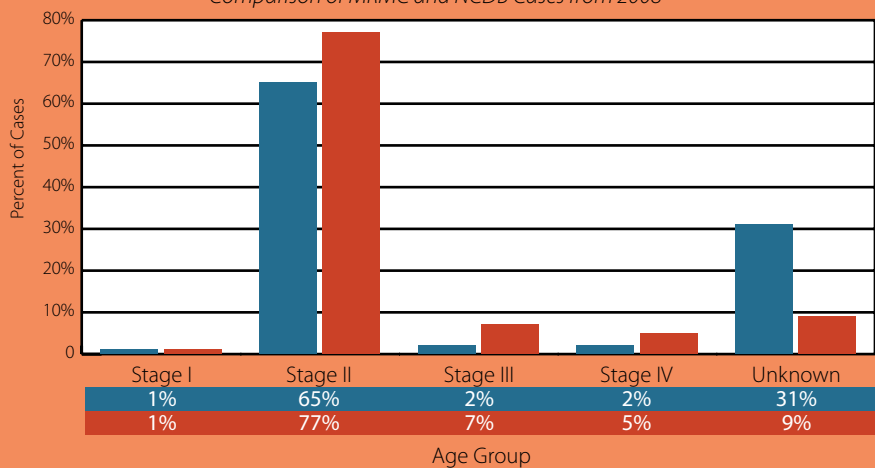


MRMC
NCDB

The stages of all prostate patients diagnosed in 2008 were reviewed with ACS Division data. A significant discrepancy was found in the percentage of patients classified with unknown stage, which was 31% of McLaren patients while NCDB data showed only 9%. This percentage was based on physician staging; however, when the collaborative stage was reviewed, only one case had an unknown stage.

Distribution of Stage at Diagnosis

Comparison of MRMC and NCDB Cases from 2008

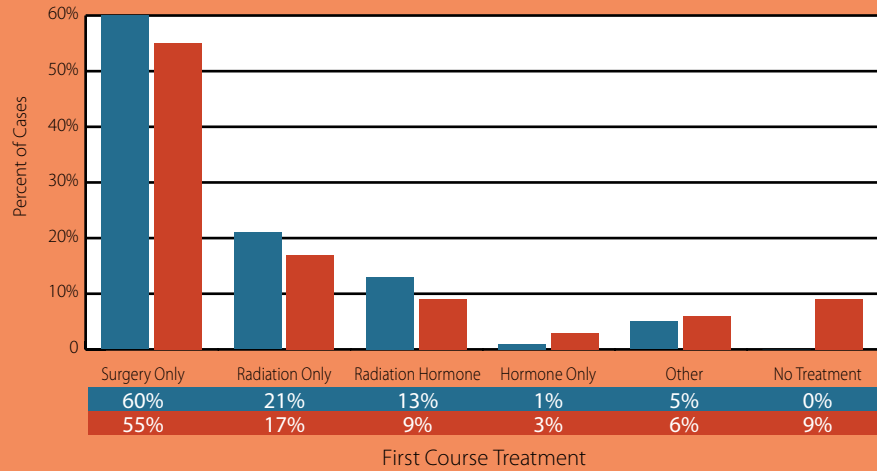


MRMC
NCDB

The first course of therapy used at McLaren for prostate cancer treated in 2008 showed utilization of surgery at a higher rate with 60% of all patients compared to 55% in the regional data. Radiation utilization was comparable and less patients were observed or received hormones only when compared to NCDB data.

Distribution of First Course of Treatment

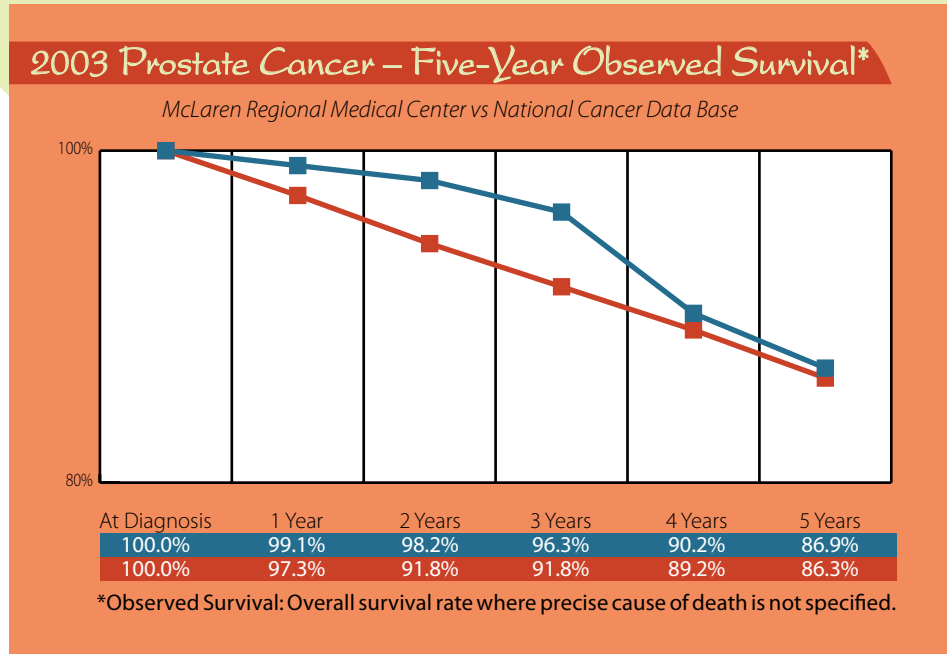
Comparison of MRMC and NCDB Cases from 2008



MRMC
NCDB



The latest reported NCDB five-year observed survival data was for the year 2003 which was 86.3%. This was almost identical to McLaren's five-year observed survival at 86.9% for the same year.



In conclusion, McLaren's data was very similar to the NCDB data. The most significant difference was in stage at presentation, with McLaren's data revealing a higher incidence of unknown stage. McLaren is working very diligently to ensure the managing physician documents staging prior to initiation of treatment. Various measures have been implemented to assist with this process.

Prepared by:

Hesham Gayar, MD
Radiation Oncologist

Cathy Sudborough, CTR
Oncology Data Coordinator

2009 Statistical Data

2009 Data Summary

Total Number of Cases Reviewed	2,267
Total Number of Completed Cases	1,330
Total Number of Analytic Cases (diagnosed and/or treated at McLaren).....	1,225
Total Number of Cases Reportable to State of Michigan Cancer Registry	124
Total Number of Cases Reviewed Which Were Non-Reportable	813

2009 Primary Site Table

Primary Site	Total (%)	Sex		Class of Case		Status		Stage Distribution - Analytic Cases Only						
		Male	Female	Analytic	NA	Alive	Expired	Stage 0	Stage I	Stage II	Stage III	Stage IV	N/A	Unk
ORAL CAVITY & PHARYNX	27 (2.0%)	20	7	23	4	22	5	0	2	2	2	13	3	1
DIGESTIVE SYSTEM	187 (14.1%)	111	76	178	9	115	72	5	39	40	39	33	7	15
RESPIRATORY SYSTEM	251 (18.9%)	146	105	234	17	124	127	1	59	22	57	90	1	4
BONE & JOINTS	1 (0.1%)	1	0	1	0	1	0	0	0	0	0	0	0	1
SOFT TISSUE (INCLUDING HEART)	3 (0.2%)	3	0	3	0	3	0	0	1	1	0	0	0	1
SKIN EXCLUDING BASAL & SQUAMOUS	17 (1.3%)	7	10	16	1	16	1	3	12	0	0	1	0	0
BREAST	207 (15.6%)	1	206	197	10	199	8	39	81	50	15	5	0	7
FEMALE GENITAL SYSTEM	81 (6.1%)	0	81	77	4	66	15	3	43	5	13	8	3	2
MALE GENITAL SYSTEM	272 (20.5%)	272	0	244	28	268	4	0	4	211	23	5	1	0
URINARY SYSTEM	81 (6.1%)	59	22	74	7	60	21	24	32	6	6	3	0	3
BRAIN & OTHER NERVOUS SYSTEM	18 (1.4%)	10	8	18	0	9	9	0	0	0	0	0	18	0
ENDOCRINE SYSTEM	49 (3.7%)	16	33	44	5	48	1	0	32	4	3	2	3	0
LYMPHOMA	48 (3.6%)	23	25	37	11	39	9	0	14	7	5	9	0	2
MYELOMA	17 (1.3%)	6	11	16	1	15	2	0	0	0	0	0	16	0
LEUKEMIA	26 (2.0%)	14	12	24	2	19	7	0	0	0	0	0	24	0
MESOTHELIOMA	2 (0.2%)	1	1	1	1	0	2	0	0	0	0	1	0	0
MISCELLANEOUS	43 (3.2%)	22	21	38	5	13	30	0	0	0	0	0	38	0
TOTAL	1,330	712	618	1,225	105	1,017	313	75	319	348	163	170	114	36

Data Summary

The Cancer Registry staff accessioned 1,330 cases in 2009, 1,225 of which were analytic (diagnosed and/or treated at McLaren Regional Medical Center and Great Lakes Cancer Institute campuses at McLaren, Owosso and Lapeer). This total reveals a slight decrease when comparing the total number of cases from 2008.

The highest incidence of cancer seen at McLaren & GLCI during 2009 was prostate at 19%, lung at 17%, breast at 16%, and colorectal at 7%. This trend continues when compared to previous years.

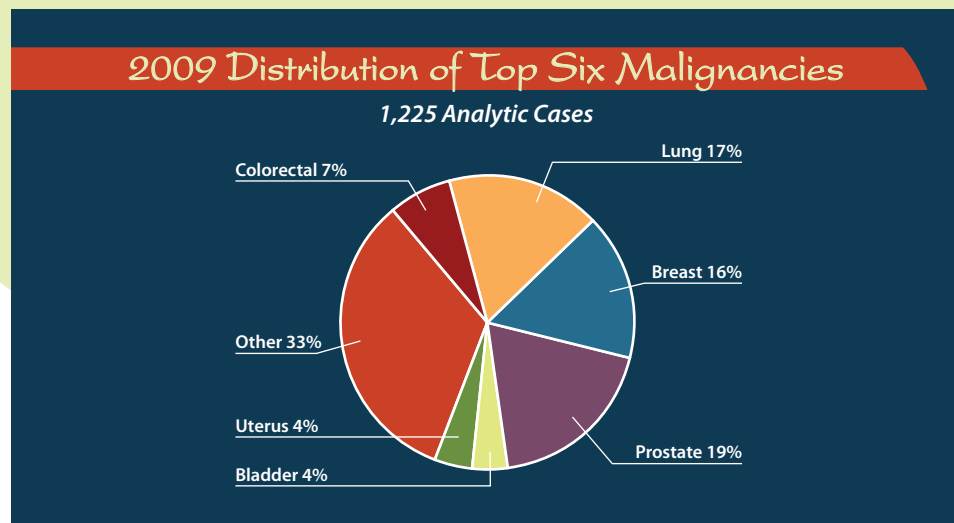
Gender distribution reveals that 644 patients (53%) were male while 581 patients (47%) were female.

The majority of patients came from Genesee County (72%), followed by Shiawassee County (11%) and Lapeer County (10%). Additional counties representing the remaining 9% include Oakland, Tuscola, Saginaw, Roscommon, Clinton, Ingham, Livingston, among several others.

Additional statistics and graphs follow representing McLaren's 2009 data.

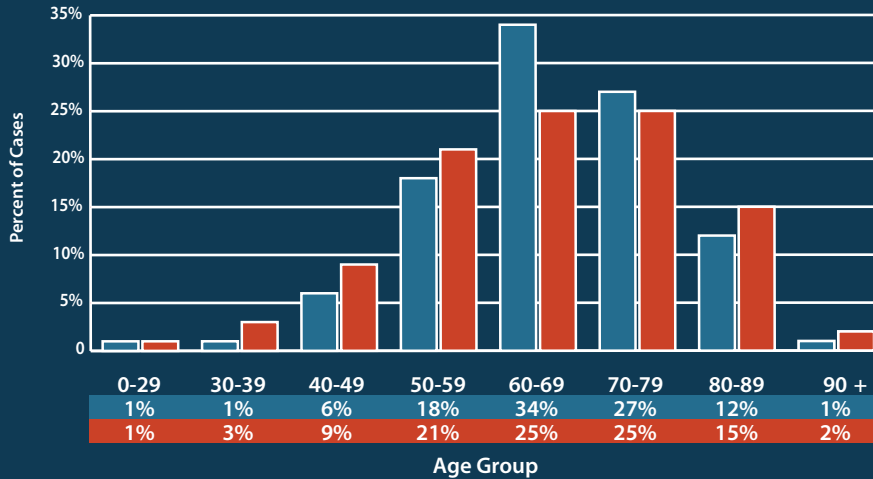
Prostate cancer had the highest incidence at McLaren in 2009 at 19%. Lung cancer was second at 17%.

There was equal distribution of the fifth top site which included bladder and endometrium at 4%.



2009 Distribution by Age at Diagnosis

1,225 Analytic Cases

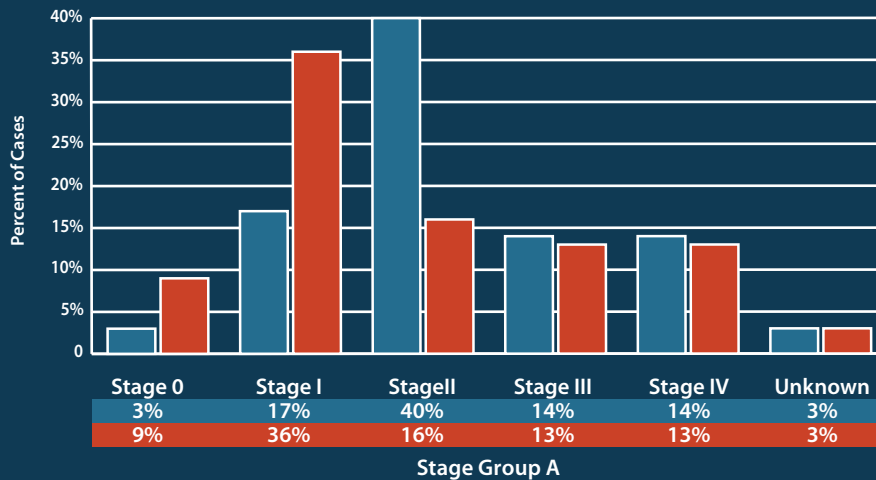


This graph illustrates age distribution at the time of initial diagnosis for the 2009 analytic cases. The majority of males were diagnosed between the ages of 60-69 while females had equal distribution among 60-69 and 70-79 age groups.

■ Male
■ Female

2009 Distribution by AJCC Stage

1,225 Analytic Cases



This graph represents the AJCC Stage Distribution for 2009 analytic cases which indicates the majority of males were diagnosed with Stage II disease. This is due to the high incidence of prostate cases McLaren treats. The majority of females were diagnosed with Stage I disease, with breast contributing significantly to that number.

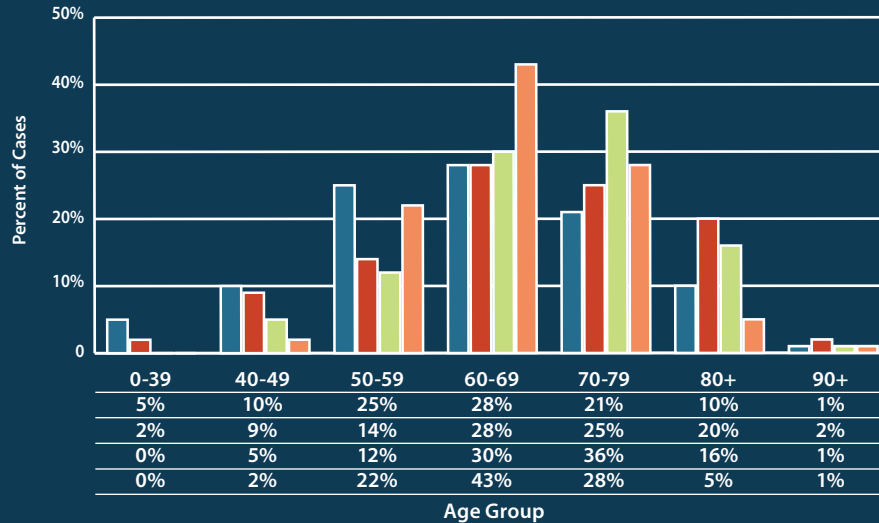
■ Male
■ Female

This graph represents the age distribution at the time of initial diagnosis for the four most common cancer sites seen at McLaren in 2009. The majority of breast, colorectal, and prostate cancer patients were diagnosed between the ages of 60-69 while the majority of lung cancer patients were diagnosed between the ages of 70-79.

Breast = 197 Cases █
 Colorectal = 89 Cases █
 Lung = 213 Cases █
 Prostate = 237 Cases █

2009 Distribution of Four Major sites by Age at Diagnosis

1,225 Analytic Cases

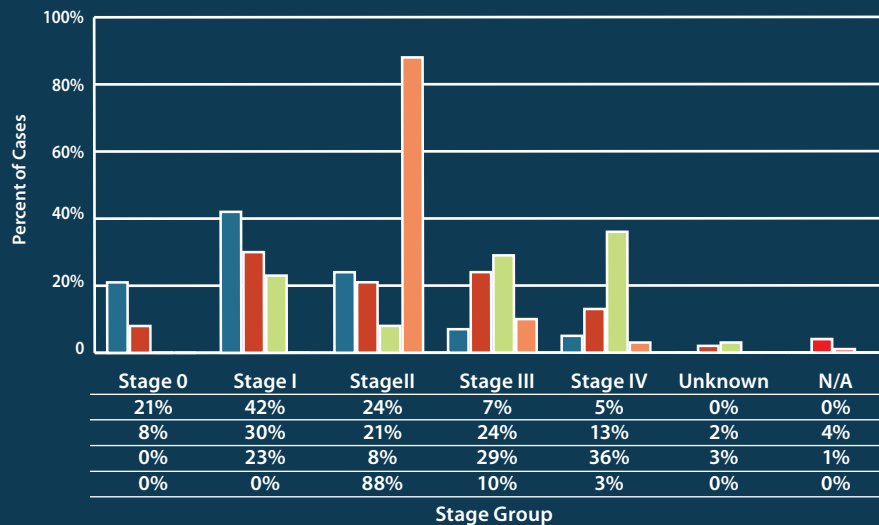


This graph depicts the AJCC Stages of the four major cancer sites diagnosed at McLaren during 2009. The majority of breast and colorectal cancer patients were diagnosed with Stage I disease. The majority of lung cancer patients were diagnosed with Stage IV disease while the most prevalent stage among prostate cancer was Stage II.

Breast = 197 Cases █
 Colorectal = 89 Cases █
 Lung = 213 Cases █
 Prostate = 237 Cases █

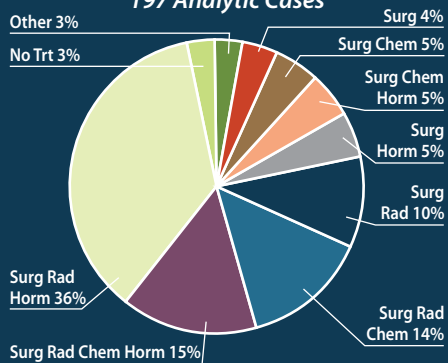
2009 Distribution of Four Major sites by AJCC Stage

1,225 Analytic Cases



2009 Initial Treatment for Breast Cancer

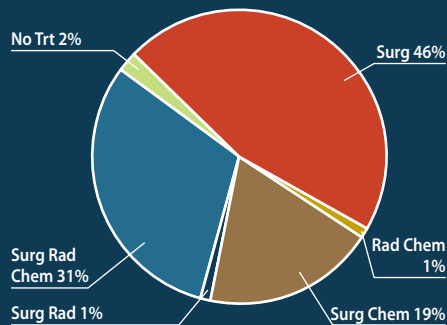
197 Analytic Cases



The most prevalent treatment among breast cancer patients was multimodality treatment consisting of surgery, radiation and hormone. The second most common treatment combination was surgery, radiation, chemo, and hormone, followed by surgery, radiation and chemo.

2009 Initial Treatment for Colorectal Cancer

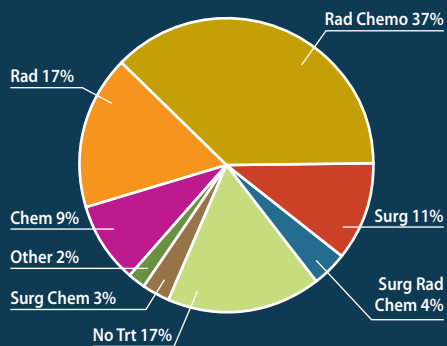
89 Patients



The primary treatment for colorectal cancer was surgery followed by the multimodality approach consisting of surgery, radiation and chemo.

2009 Initial Treatment for Lung Cancer

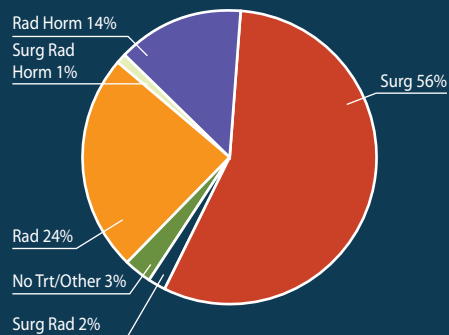
213 Analytic Cases



The majority of lung cancer patients received multimodality treatment consisting of radiation and chemotherapy. Radiation alone was the second most common treatment modality followed by surgery alone.

2009 Initial Treatment for Prostate Cancer

237 Analytic Cases

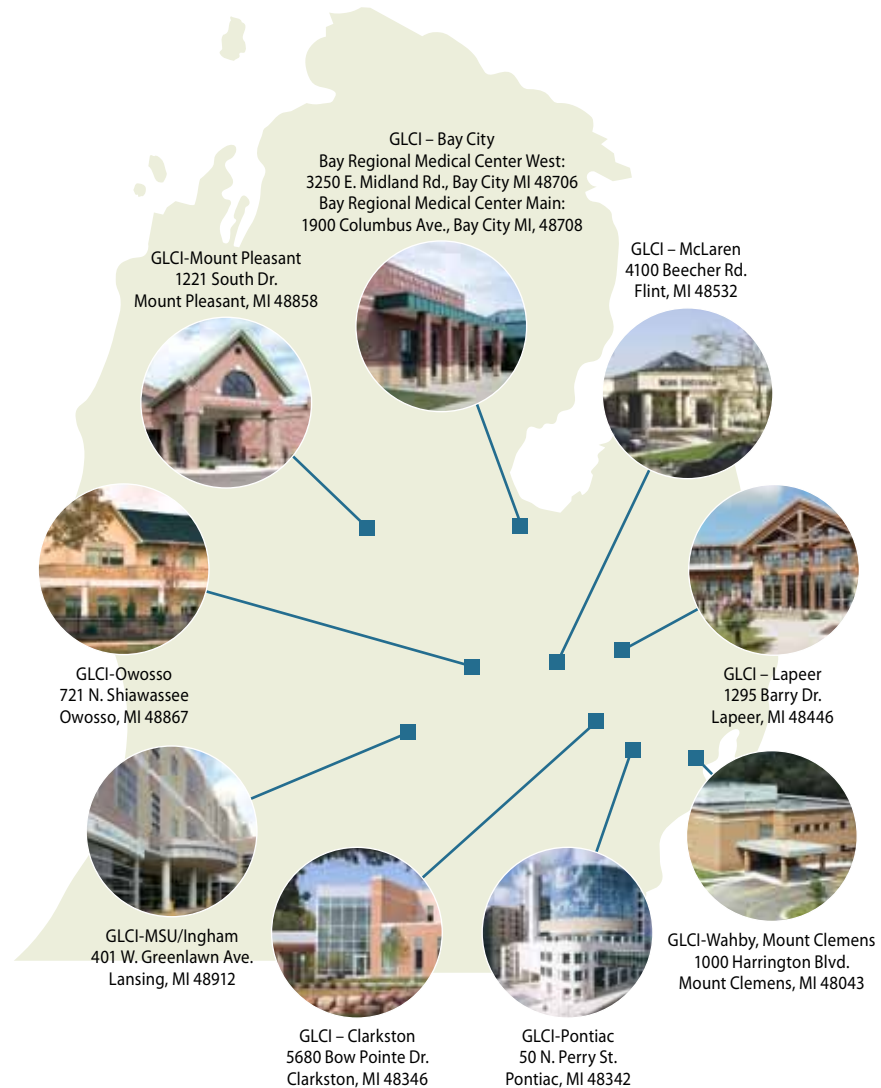


Surgery was the most frequent treatment approach for patients diagnosed with prostate cancer followed by radiation alone.



GLCI Locations

Great Lakes Cancer Institute (GLCI) is pleased to offer comprehensive cancer care in several mid-Michigan cities. For detailed information about the Great Lakes Cancer Institute, visit the GLCI website at www.glci.com



Great Lakes Cancer Institute– McLaren Regional Medical Center

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mclarenregional.org/cancer