

2014 CANCER ANNUAL REPORTS



Dear Colleagues:

These reports highlight exciting advancements in the prevention, diagnosis, treatment, research and supportive care for patients with cancer achieved at Northwestern Medicine and the Robert H. Lurie Comprehensive Cancer Center of Northwestern University.

The most exciting development over the past year was the continued growth of Northwestern Medicine. Under the leadership of Eric Neilson, MD, the Dean of the Feinberg School of Medicine of Northwestern University and Dean

Harrison, President and CEO of Northwestern Memorial Healthcare, Northwestern Medicine continues to thrive and grow. This shared vision of the medical school and the hospital, is focused on improving how care is provided, accelerating breakthrough research, and fostering an environment of academic excellence that supports the training of outstanding caregivers. Since, we have grown by adding 3 excellent hospitals, over 1000 physicians and practically all specialties, and over 50 access points for our patients. Lurie Cancer Center is leading the efforts, thorough the Clinical Cancer Center Executive Council, to increase collaboration and integration across this newly formed system. We are so excited for our future, as this provides a platform for maximizing impact across all our mission areas including education, research, patient care and community outreach.

The Lurie Cancer Center is one of only 45 National Cancer Institute-designated comprehensive cancer centers in the nation. The program is noted for its comprehensive research, distinguished and dedicated staff, world-class teaching and ongoing advancements in medical, surgical, radiation, interventional and supportive oncology care.

A range of community education and outreach programs also is made possible through the Lurie Cancer Center, including a program called Cancer Connections, which brings hundreds of patients and their families to quarterly meetings with our faculty and scientists.

I would like to congratulate all of you for your accomplishments this past year and thank you, on behalf of all of our patients with cancer and their families, for your commitment and efforts.

Sincerely,
Leonidas C. Platanias, MD, PhD
Director, Robert H. Lurie Comprehensive Cancer Center

CENTER HIGHLIGHTS

Annually, the cancer program at Northwestern Memorial has more than 5,000 inpatient admissions and provides comprehensive care in state-of-the-art facilities that include the following:

- Comprehensive radiation oncology facilities in the Galter Pavilion, Prentice, Lake Forest, and Grayslake include seven linear accelerators, Gamma Knife Perfexion, brachytherapy, intraoperative radiation therapy, brain and body radiosurgery, image-guided radiation therapy (IGRT), intensity-modulated radiation therapy (IMRT), 3-D treatment planning and hyperthermia capabilities. More than 27,000 treatments were delivered to more than 2,300 patients.
- 90 inpatient beds for hematology/oncology patients with a dedicated unit for stem cell transplantation in Northwestern Memorial Hospital's Prentice Women's Hospital.
- 30 dedicated inpatient surgical oncology beds in the Feinberg Pavilion and 18 dedicated inpatient surgical oncology beds in Prentice.

Comprehensive outpatient care services are provided in the Lurie Cancer Center's three locations on the 21st floor of Galter, Northwestern Medicine Developmental Therapeutics Institute in Olson, and the Maggie Daley Center for Women's Cancer Care in Prentice, serving nearly 13,000 new patients annually.

All locations provide a full range of cancer treatment services and a model program of supportive oncology services including social work, psychology, psychiatry, nutritional support, health education, rehabilitation, integrative medicine and patient navigation services.

Regular multidisciplinary conferences provided prospective treatment planning for patients in the following areas:

- Breast cancer
- Gynecologic oncology
- Genitourinary cancers
- Hematologic diseases
- Head and neck cancers
- Neurological oncology

A wide range of education, support and outreach programs include the following:

- Professional education programs included the 16th annual Lynn Sage Breast Cancer Symposium, seventh annual Radiosurgery Symposium and the 17th annual Oncology Nursing Conference, as well as annual programs in Basic Sciences, Pain and Palliative Care, Lymphoma and ASCO and ASH Reviews.
- A full complement of patient education and support services was offered, including support groups, inpatient case management and comprehensive outpatient supportive oncology services. In addition, the Cancer Connections program held

- three times per year provided patients and families the opportunity to learn about health and wellness during and after cancer treatment and also to make contact with a variety of local support organizations.
- Survivorship programs were offered, including a late effects clinic (STAR Program), providing specialty services to adult survivors of pediatric cancer; a program addressing the special survivorship needs of breast cancer patients (SUCCEED); and a new program focused on the adolescent and young adult survivor population.

Community education and outreach programs were offered, including numerous disease-oriented presentations, the annual Breast Cancer Town Hall Meeting and cancer survivorship initiatives, including the 21st Annual Cancer Survivors' Celebration and Walk on the Chicago lakefront with nearly 5,000 participants.

The Lurie Cancer Center also sponsored and helped coordinate community programs focused on cancer health disparities including a Regional Symposium on Minorities, the Medically Underserved and Cancer in conjunction with the Intercultural Cancer Council; a State of the Cancer Union/Minority Report; and an ACS program on The Impact of Health Care Reform in the Latino Community.

The Northwestern Medicine Cancer Quality Committee is a multidisciplinary team of caregivers who represent all of the oncology departments across the Northwestern Medicine Campus. This committee reports up to the Committee on Cancer Committee. Their goal is to review data and processes and develop projects to improve care for the cancer patient at Northwestern Medicine.

In 2014 this committee identified that the Robert H. Lurie Comprehensive Cancer Center Infusion Center had an opportunity to improve the time a patient was checked in for their appointment to when they were roomed in a bay to receive their scheduled treatment. The data showed that about half of the patients were roomed before or within 15 minutes of their scheduled appointment time which caused patient dissatisfaction and a cascade effect on delaying more appointments throughout the day.

The criteria used was patient rooming times. A process map outlining patient flow and a tracking system were developed to identify areas where rooming delays occurred. A new workflow was developed, paper orders were eliminated, and a prospective report to identify missing labs were developed. Medical Record communication was streamlined, and a new patient and staff scheduling system was implemented. This project improved the patient room times to 15 minutes or less from 56.1% of the time to 84.6% of the time.

Multiple new faculty recruitments to multidisciplinary care and research teams occurred. Key change occurred in the leadership, as we have appointed a new Director. Leonidas Platanius, MD, PhD, has been appointed director of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University, a position he has served in interim since January.

Dr. Platanius joined Northwestern University Feinberg School of Medicine in 2002, as the Lurie Cancer Center's first Deputy Director and the Jesse, Sara, Andrew, Abigail, Benjamin

and Elizabeth Lurie Professor of Oncology in Medicine-Hematology/Oncology.

“Leon has already contributed greatly to the Lurie Cancer Center, through both his leadership and his scientific achievements,” said Eric G. Neilson, MD, vice president for Medical Affairs and Lewis Landsberg Dean. “As permanent director, he will continue in that vein, driving the center’s expansion and maintaining its reputation as a premiere venue for research, clinical care and collaboration.”

Dr. Platanius will oversee both the clinical operations in the Lurie Cancer Center and growing basic science research programs, including programs to translate basic and clinical research into personalized medicine.

“I am very excited about the future of the Lurie Cancer Center and of Northwestern Medicine,” said Dr. Platanius. “We are developing programs that bridge basic science and clinical care and will establish Chicago as a global leader in the delivery of personalized cancer treatment. We are extremely fortunate to have the enduring support of remarkable philanthropic partners in all our endeavors, and I am particularly grateful to Ann Lurie whose continuous passionate commitment to the Lurie Cancer Center has a profound impact on cancer research and the clinical care of our patients.”

Before arriving at Feinberg, Dr. Platanius was the chief of the Division of Hematology/Oncology at the University of Illinois at Chicago. He earned his medical degree from the University of Patras Medical School in Greece before taking on a research fellowship at the National Heart, Lung, and Blood Institute at the National Institutes of Health (NIH). He completed a residency in internal medicine at the State University of New York, Downstate Medical Center, and a fellowship in hematology-oncology at the University of Chicago Hospitals.

Dr. Platanius’s molecular biology and biochemistry research, spanning more than 20 years and highlighted in more than 250 published papers, focuses on signaling pathways in cancer cells and developing therapies that target those pathways to treat malignancies. He is well known for his work involving cytokines, which are specific proteins within the blood that have the ability to fight cancer.

“The Lurie Cancer Center has been instrumental in establishing Northwestern Medicine’s recognition as a leading destination for cancer treatments,” said Dean M. Harrison, President and Chief Executive Officer of Northwestern Memorial HealthCare. “We look forward to working with Dr. Platanius in his new leadership role and continuing to advance Northwestern Medicine’s reputation for innovation and excellence in cancer care.”

Among his many career honors, Dr. Platanius received the Seymour & Vivian Milstein Award for Excellence in Interferon and Cytokine Research in 2013. A member of various scientific societies, Dr. Platanius served as President of the International Society for Interferon and Cytokine Research in 2010-2011. He currently serves on the board of directors of the International Cytokine Society.

He is currently an associate editor of *Leukemia and Lymphoma* and the *Journal of Interferon and Cytokine Research* and he sits on the editorial board of the *Journal of Biological Chemistry*. He has been a chair or member of many review committees at the NIH, the Department of Defense, the Department of Veterans Affairs and the Leukemia and Lymphoma Society of America.

Dr. Plataniias's research is funded by four R01 grants from the National Cancer Institute (NCI) and a Merit Review grant from the Department of Veterans Affairs. He is also the principal investigator of a NCI T32 training grant in signal transduction and cancer and of the American Cancer Society Institutional Review Grant, which provides funding for junior investigators at Feinberg.

"I am very pleased that Leon was selected to carry forward the strong traditions of the Robert H. Lurie Comprehensive Cancer Center as its new director," said [Ann Lurie](#), President of Lurie Holdings, Inc. "I am sure he is the right leader for these exciting times. He will be an exceptional advocate for the serious work ahead to find more enduring cures for cancer."

The Lurie Cancer Center was established in 1974 and dedicated to Robert H. Lurie in 1991. In 1997, the NCI gave the center the highly competitive "comprehensive" title, reflecting its dedication to the utmost standards of cancer research, patient care, education and community outreach. Through its affiliations with four Chicago hospitals, the Lurie Cancer Center treats more than 10,000 new cancer cases each year.

See more at:

http://cancer.northwestern.edu/news/plataniias_newdirector#sthash.JRJkONKD.dpuf

The Lurie Cancer Center remains the only Illinois member of the National Comprehensive Cancer Network (NCCN), a consortium of 23 of the nation's leading cancer centers committed to the development of cancer treatment guidelines and enhancing access to the most advanced treatment options for patients.

The over 280 members of the Lurie Cancer Center annually generate \$175 million in extramural cancer-relevant research funding. The largest portion of this funding comes from the NIH, including \$40 million from the NCI.

Through the Clinical Research Office (CRO) of the Lurie Cancer Center, a comprehensive clinical trials program is available to patients. Staffed by over 60 full-time employees, the CRO conducts and coordinates First-in-Humans, Phase I through Phase III clinical trials sponsored by federally funded national cooperative groups and the pharmaceutical industry as well as investigator-initiated institutional trials developed by faculty at Feinberg.

Physicians affiliated with Northwestern Memorial and the Lurie Cancer Center regularly play leading roles in national cooperative group studies and in working to develop, test and accelerate access to new treatments. In fiscal year 2014, a more than 4000 patients at Northwestern Memorial were enrolled in over 270 interventional therapeutic and nontherapeutic clinical trials.

CENTER HIGHLIGHTS

Radiation Oncology Updates

1. Dr. Joy Coleman joined NLFH Radiation Oncology.

Joy Coleman, MD, has joined the Department of Radiation Oncology at Northwestern Lake Forest Hospital as a member of Northwestern Medicine's Regional Medical Practice. Coleman's expertise is in using new and highly-precise radiation techniques that maximize the impact of therapy while minimizing the effects radiation can have on healthy tissues and organs

Her expertise also includes recent developments in stereotactic radiosurgery including Cyberknife Robotic Radiosurgery, Gamma Knife Radiosurgery, and Linear Accelerator Based Radiosurgery all of which are non-invasive alternatives to surgery that deliver beams of high dose radiation to tumors with extreme accuracy. She is excited about helping grow the Linear Accelerator Based Radiosurgery program at Northwestern Lake Forest.

2. Clinical installation and programmatic use of the Generation 4 Clarity Transperineal Ultrasound for Prostate Cancer: This non-invasive unit allows real-time observation of the location of the prostate in 4-D space, allowing for unprecedented accuracy in the delivery of radiation therapy to this organ. Northwestern Lake Forest hospital is honored to be the first clinical site globally to have this cutting edge technology.

Lung Cancer Screening Program

Lung Cancer Screening Program has been generously funded by Larry and Pam Zall beginning in January 2014. Michael Ankin, MD, FACP, FCCP, serves at the program director. Eric Hart, MD, a board-certified radiologist at Northwestern Memorial Hospital and associate professor of Radiology at the Feinberg School, serves as the screening radiologist. Of particular note, Dr. Hart served as the principal investigator for The National Lung Screening Trial (NLST), a national cancer screening trial that was sponsored by the National Cancer Institute (NCI) and was conducted jointly by the American College of Radiology Imaging Network and the Lung Cancer Study Group.

Karin Rogers, BSN, as the Thoracic Nurse Navigator. In 2014, the program facilitated **100** patients through the lung cancer screening process. The team provided community education through marketing efforts with physician relations- visiting offices, events, schools and public awareness. Karin partnered with the Lake County Tobacco Action Committee, to work on educating the community on smoking cessation resources in our area. The program offers free smoking cessation management, along with recommendations for group sessions, support groups and local resources. The program offered radon education, awareness and test kits.

Expansion of Northwestern Medicine Medical Oncology Program

Lake Forest, Ill. – Northwestern Medicine Women's Health and Cancer Care Center has opened a new integrated infusion center at Lake Forest Hospital. The infusion center is the new home for the patient-centered, multidisciplinary team of physicians, nurses, social workers, case managers and nurse navigators working together to ensure Lake Forest

Hospital patients receive the highest quality of care in a comforting environment.

The new infusion center includes seven semi-private infusion bays, one private treatment room, and five exam rooms. Infusion services are administered by certified oncology-trained infusion nurses. The breast care resource center and oncology nurse navigators are in a shared corridor, bringing all the caregivers related to breast and oncology care into one area of the hospital.

New Northwestern Medical Group Medical Oncologists

Lake Forest Hospital's new medical oncologists Neal Christiansen, MD, and Valerie Nelson, MD, MBA, as well as gynecologic oncologist Alok Pant, MD, will see patients for office visits and oversee infusion services for patients receiving chemotherapy and blood transfusions. Tara Breslin, MD, breast surgeon and medical director of the hospital's breast care program, will continue to see patients in the clinic for evaluation and treatment of breast cancer and benign breast problems. All four physicians are members of Northwestern Medical Group and are faculty at Northwestern University Feinberg School of Medicine, bringing access to clinical trials to Lake Forest Hospital patients.

PROGRAM HIGHLIGHT

Program Highlight

Colorectal cancer – which includes cancers of the colon and rectum – is the third most common cancer in both men and women, and the second leading cause of cancer-related deaths in the United States. Fortunately, it's also one of the most treatable. Ninety percent of colorectal cancer cases are curable if caught early. That's why regular colonoscopy screenings are essential for anyone age 50 and over.

When Hinsdale-resident Greg Donnelly turned 50, he knew something wasn't right, so he followed his physician's advice and scheduled his first screening colonoscopy. The procedure revealed a mass in Greg's colon, roughly the size of a peach. He was scheduled for surgery the very next day. The diagnosis: stage 4 colon cancer that had spread to the liver.

Overwhelmed by his diagnosis and determined to find the best possible treatment, Greg began reading everything he could about colon cancer. "What I quickly realized was that all of the literature I was reading was authored by Dr. Al Benson with Northwestern Medicine. So I decided if he's the person writing the book on colon cancer, that's the man I want on my team."

The Colorectal Cancer program at Northwestern Medicine offers highly specialized comprehensive care for the treatment of both early stage and advanced disease. The cornerstone of the program is its experienced multidisciplinary team of caregivers, which includes specialists in Medical Oncology, Surgical Oncology, Radiation Oncology, Interventional Radiology, Gastroenterology and Endoscopy, as well as dedicated pathologists, advance practice and infusion nurses, and a colorectal cancer research nurse. Each week, this team – comprised of some of the country's leading colorectal cancer experts – meets to review patient cases, discuss complications and determine the most effective courses of treatment.

"To have a robust Colorectal Cancer program, you not only need to have experts in all of the disciplines, but you need to have collaboration, communication and mutual respect," says Al Benson, MD, one of four medical oncologists who specializes in colorectal cancer. "These are essential to providing exceptional care, and that's what we have here. Because our team works so closely together, we can deliver comprehensive multidisciplinary care for even the most complex colorectal cancer cases."

Detection and Treatment

In addition to nationally recognized experts and multidisciplinary collaboration, Northwestern Medicine offers some of the most advanced detection methods and treatment protocols. Our dedicated endoscopists employ colonoscopy techniques exceed industry standards and improve detection rates by as much as 11 percent. We also provide endoscopic management of large polyps, as well as advanced screenings to detect micro-satellite instabilities and secondary cancers in patients with genetic disease.

"When tissue is biopsied, our pathologists perform a highly specialized evaluation of the tumor," says Scott Strong, MD, FACS, FASCRS, chief of Gastrointestinal and Oncologic Surgery. "That coupled with genetic testing can identify inherited cancers, which can change the surgical approach. Patients with genetic disease need more than the typical operation

because now they are at greater risk for future cancers, not only of the colon and rectum but of the upper gastrointestinal tract as well. Our endoscopists and surgeons are skilled at finding those cancers.”

For the treatment of colorectal cancer, Northwestern Medicine offers a comprehensive minimally invasive surgical program that includes a team of board-certified colorectal surgeons and surgical oncologists who have extensive experience in complex cases. Our dedicated fellowship-trained interventional radiologists specialize in targeted radiation and chemotherapy protocols, including liver-directed therapies that are designed to shrink metastatic tumors, making it possible to surgically remove or ablate any remaining cancerous cells.

“We have the surgical and interventional radiological expertise to manage complex tumors and liver metastases,” says Mary Mulcahy, MD, a medical oncologist who also specializes in colorectal cancer. “We also have the systemic therapeutic options for both early stage and advanced refractory disease. Our multidisciplinary team considers more than just a procedure or treatment, they work together to develop a plan of treatment that’s best for both the patient as well as the disease.”

Supporting our oncologists, surgeons and radiologists is a team of dedicated infusion and advance practice nurses who have extensive experience with the latest colorectal cancer regimens, as well as symptom and side-effect management. These skilled nurses work closely with our physicians to provide personalized care to each patient.

“Our expertise extends to the day-to-day management of patient symptoms,” says Sheetal Kircher, MD, a medical oncologist who specializes in colorectal cancer. “Our dedicated nurses receive specialized training, and are experienced in both inpatient and outpatient care. With this comprehensive multidisciplinary approach, along with the technologies and procedures we can provide, we have been able to improve survival rates. Patients treated at Northwestern Medicine will always remain at the forefront of cancer care.”

Research and Support

The entire Colorectal Cancer care team also works closely with researchers from the Northwestern Medicine Developmental Therapeutics Institute, as well as with leading industry organizations such as the National Cancer Institute (NCI) and the National Foundation for Cancer Research, to identify and treat patients who may be candidates for clinical trials involving new drugs and therapeutic regimens. The team is currently involved in a trial to assess the effectiveness of neoadjuvant chemotherapies as an alternative to radiation. Medical Oncologist Halla Nimeiri, MD, is conducting extensive research in molecular profiling to identify specific tumor biomarkers to develop personalized treatment strategies for maximum effectiveness. For patients with genetic disease, research is underway studying the potential use of immunotherapy medications.

“Research plays a significant role, especially for patients with metastatic disease,” says Victoria Maurer, MSN, RN, OCN, a clinical research associate with the Robert H. Lurie Comprehensive Cancer Center of Northwestern University. “As a NCI-designated comprehensive cancer center, we not only develop national clinical trials but we have access to large-scale studies at other institutions. These clinical trials open up new treatment options that can extend and improve the lives of patients with colorectal cancer.”

The program also provides resources to address each patient's unique quality-of-life concerns. In addition to a complete complement of financial, nutritional, psychological and alternative therapeutic services. To assist patients and their families during treatment, we also provide survivorship and palliative care to extend support after treatment has ended. Dr. Kircher heads the Survivorship Institute of Northwestern Medicine, where patients who have completed treatment can seek care and guidance for managing long-term complications, as well as any survivorship issues they may have. "We marry survivorship clinical care with research so we can create a rich, granular resource to better understand the latent, long-term risks of treatment, and to provide patients with the added support and care they need to enhance their quality of life and improve outcomes."

The Northwestern Medicine Palliative Care program, led by Dr. Mulcahy, is another resource for patients to ensure the best quality of life throughout the course of their illness. "A cancer diagnosis is a life-altering event," she says. "It's important to help patients evaluate what brings value to their lives, to discuss what's important to them, and then to help them share that with their families. The level of care we provide at Northwestern Medicine goes beyond oncology. It's individualized care that encompasses physical, emotional and social needs, all in an effort to provide the best quality of care and the best quality of life."

Impacting Every Day

Our nationally recognized team of colorectal cancer experts is doing more than writing the book on colon cancer, they are intimately involved in developing international standards for treatment regimens, pioneering advances in targeted therapies, conducting research and designing clinical trials for new treatment regimens, and providing ongoing care that extends beyond the scope of clinical treatment. Our goal is not only to advance knowledge across the spectrum of care but to provide patients like Greg Donnelly with the most advanced detection methods, the most effective treatment options and the most comprehensive support services available to help make every day feel everyday again.

"There is no doubt in my mind that I am receiving the most effective treatment available for this disease," Greg says. "Dr. Benson and his team are some of the finest and most caring people I will ever know. I feel that they honestly care about me. Dr. Benson is brilliant. This is more than just a career to him; it's a calling. I want to work with people who have that kind of passion because it gives me the passion I need to fight."

Greg's colorectal cancer team is having tremendous success fighting Greg's cancer. With three surgeries and liver-targeted treatments, his stage 4 disease has been reduced from multiple active tumor sites to a single 2 mm "speck" that is being controlled and managed with chemotherapy. Today, Greg is symptom-free and is actively living his life to the fullest. "When I began practicing medicine 30 years ago, the median survivorship for patients with metastatic colon cancer was 10 months," says Dr. Benson. "Today, we're seeing patients live three, four, five years. That success can be attributed to the targeted treatments we now use, and many of those treatments were developed with guidance from the experts at Northwestern Medicine."

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Al Benson, MD, a medical oncologist on the medical staff at Northwestern Memorial Hospital and professor in [Medicine-Hematology/Oncology](#) at Northwestern University Feinberg School of Medicine

Mary Mulcahy, MD, a medical oncologist on the medical staff at Northwestern Memorial Hospital and associate professor of Medicine-Hematology/Oncology, Radiology and Surgery-Organ Transplantation at Northwestern University Feinberg School of Medicine

Sheetal Kircher, MD, MSc, a medical oncologist on the medical staff at Northwestern Memorial Hospital and assistant professor in Medicine-Hematology/Oncology at Northwestern University Feinberg School of Medicine

Scott Strong, MD, chief of Gastrointestinal and Oncologic Surgery at Northwestern Memorial Hospital and James R. Hines Professor of Surgery at Northwestern University Feinberg School of Medicine

The Tumor Registry is an integral component of the Cancer Program at Northwestern Memorial Hospital. Under the direction of the Committee on Cancer, the registry collects, analyzes and maintains pertinent patient data required for reporting to the Illinois State Cancer Registry, the National Cancer Database and the American Cancer Society. This data is used for evaluating the effectiveness of current therapeutic interventions and providing direction for future therapies. The data is also used for cancer incidence and outcome reporting.

The Cancer Program at Northwestern Memorial Hospital is accredited by the American College of Surgeons Commission on Cancer. The registry has a reference date of 2000.

2014 REGISTRY ACTIVITIES AND ACCOMPLISHMENTS

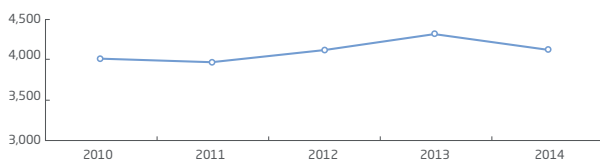
- Added 4,170 new cases of cancer to the registry
- Successfully follows 52,000 patients per year

TOP 10 SITES FOR 2014

MALE AND FEMALE	Northwestern Memorial Hospital (n=3,163)	United States* (n=1,125,680)
Breast	32%	21%
Prostate	13%	21%
Lung	11%	20%
Melanoma	11%	7%
Lymphoma	7%	7%
Blood and Bone Marrow	7%	5%
Thyroid	6%	5%
Kidney/Renal/Pelvis	5%	5%
Brain, Malignant	4%	2%
Bladder**	4%	7%
	100%	100%

*American Cancer Society Facts and Figures 2014

TOTAL ANALYTIC CASES 2010 TO 2014



Since 2010 there has been a 4% increase in the number of analytic cases seen at Northwestern Memorial Hospital.

PRIMARY SITE TABULATION FOR 2014 ANNUAL REPORT

PRIMARY SITE	TOTAL	CLASS		SEX		% OF CASES
		A*	NA**	Male	Female	
ALL SITES	4,534	4,170	364	1,914	2,620	100%
ORAL CAVITY	99	95	4	67	32	2.20%
Lip	1	1	0	0	1	
Tongue	34	34	0	22	12	
Oropharynx	1	1	0	1	0	
Hypopharynx	2	1	1	2	0	
Other	61	58	3	42	19	
DIGESTIVE SYSTEM	546	515	31	295	251	12.00%
Esophagus	44	44	0	34	10	
Stomach	58	56	2	29	29	
Colon	128	117	11	62	66	
Rectum	87	82	5	48	39	
Anus/Anal Canal	25	23	2	15	10	
Liver	73	68	5	48	25	
Pancreas	81	78	3	38	43	
Other	50	47	3	21	29	
RESPIRATORY SYSTEM	386	354	32	177	209	8.50%
Nasal/Sinus	8	8	0	4	4	
Larynx	18	17	1	16	2	
Lung/Bronchus	351	320	31	152	199	
Other	9	9	0	5	4	
BLOOD & BONE MARROW	211	151	60	122	89	4.70%
Leukemia	140	96	44	79	61	
Multiple Myeloma	64	51	13	38	26	
Other	7	4	3	5	2	
BONE	23	21	2	14	9	0.50%
CONNECT/SOFT TISSUE	64	57	7	38	26	1.40%
SKIN	354	339	15	190	164	7.80%
Melanoma	339	325	14	181	158	
Other	15	14	1	9	6	
BREAST	1018	975	43	7	1,011	22.50%
FEMALE GENITAL	242	233	9	0	242	5.30%
Cervix Uteri	37	36	1	0	37	
Corpus Uteri	130	127	3	0	130	
Ovary	57	52	5	0	57	
Vulva	8	8	0	0	8	
Other	10	10	0	0	10	
MALE GENITAL	437	392	45	437	0	9.60%
Prostate	409	368	41	409	0	
Testis	24	20	4	24	0	
Other	4	4	0	4	0	
URINARY SYSTEM	297	267	30	202	95	6.60%
Bladder	134	115	19	95	39	
Kidney/Renal	153	142	11	102	51	
Other	10	10	0	5	5	
BRAIN & CNS	354	321	33	145	209	7.80%
Brain (Benign)	14	13	1	7	7	
Brain (Malignant)	140	114	26	77	63	
Other	200	194	6	61	139	
ENDOCRINE	239	219	20	79	160	5.30%
Thyroid	186	168	18	49	137	
Other	53	51	2	30	23	
LYMPHATIC SYSTEM	222	192	30	113	109	4.90%
Hodgkin's Disease	41	36	5	18	23	
Non-Hodgkin's	181	156	25	95	86	
UNKNOWN PRIMARY	29	28	1	19	10	0.60%
OTHER/ILL-DEFINED	13	11	2	9	4	0.30%

Number of cases excluded: 4

This report EXCLUDES CA in-situ cervix cases, squamous and basal cell skin cases, and intraepithelial neoplasia cases.

*Analytic (A) are newly diagnosed cases that have received all or part of first course treatment at Northwestern Memorial.

**Non-analytic (NA) are cases that received all first course of treatment elsewhere and came to Northwestern Memorial for subsequent treatment.