



# 2015 Cancer Program

*Annual Report on 2014 Data*

 Advocate  
Christ Medical Center

Inspiring medicine. Changing lives.



## Cancer Report 2015

*A message from the Chair of the Cancer Committee, Thomas Hoeltgen, MD and the Director of the Cancer Institute, Adam I. Riker, MD, FACS*

*Introduction by Thomas M. Hoeltgen, MD and Adam I. Riker, MD, FACS*

The cancer program at Advocate Christ Medical Center continues to offer the highest quality, most comprehensive and compassionate cancer care for all of our patients in the region. As such, we are pleased to present our 2015 Annual Report and the 2014 clinical data of our cancer patients. We will further highlight some of the accomplishments of our cancer care teams and their absolute commitment to providing the best possible care and support for all our cancer patients and their loved ones. Once again, this past year has been one of significant growth within the Cancer Institute and in several areas of our cancer programs.

Highlighted below are a few of the accomplishments of the Cancer Institute at Advocate Christ Medical Center:

- March 31, 2015 marked our one-year anniversary to the opening of our Outpatient Pavilion (OPP). Happy Birthday to our Cancer Institute's new home on the top floor of the OPP. This state-of-the-art facility is where our collaborative team of oncology physicians and healthcare professionals deliver a wide array of evidence based, comprehensive and compassionate care, tailored to each and every patient.
- Although the Commission on Cancer has continuously accredited Advocate Christ Medical Center's Cancer Program, this year we are proud to have obtained *Academic Comprehensive Cancer Program* accreditation status. This is a step forward in our accreditation category based on facility type, program structure, services provided and the number of cases accessioned each year.
- Under the lead of Dr. Barbara Krueger, the Breast Program Director at Advocate Christ Medical Center our breast program has obtained National Accreditation Program for Breast Centers (NAPBC). This accreditation acknowledges our program's commitment to providing the highest quality, multidisciplinary, and patient-centered care related to the evaluation and management of breast disease.
- Our breast oncology fellowship program continues with the successful recruitment off our fourth fellow, scheduled for graduation in July, 2016.
- The established Nurse Navigator Program has expanded services to include implementing best practices in navigation, survivorship, and psychosocial care to better manage the complexities of

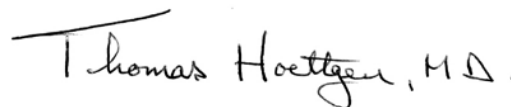
cancer and the treatment continuum for our patients. Due to these expanded services, an additional Nurse Navigator has been added to the program.

- The Multidisciplinary Oncology Clinic (MDOC) has been available for a number of years servicing our breast cancer patients. We are proud to announce that this year we have expanded our services to include a multidisciplinary lung clinic. This clinic welcomes patients for a variety of purposes whether they are newly diagnosed or seeking a second opinion the patient will be seen by the team and leave with a comprehensive treatment plan. Refer to *Thoracic Oncology Program* section for more information in regard to this service.
- Low-dose computed tomography has shown high sensitivity and acceptable specificity for the detection of lung cancer in high-risk persons. Advocate Christ Medical Center is proud to have implemented our Lung Cancer Screening Program. Age, total exposure to tobacco smoke, and years since quitting smoking are important risk factors for lung cancer and are used to determine eligibility for this screening.
- Clinical trials is an important option for cancer patients in every stage of disease and in dozens of cancer types. Clinical trials offer a chance to receive investigational medicines or procedures that the experts and your physician think might improve the treatment of cancer.
- Gilda's Club and American Cancer Society services have expanded into the outpatient pavilion, better serving cancer patients and their families – offering hope, support, and education.
- Hosted the 10<sup>th</sup> annual "Paint the Town Pink," a breast health community education program featuring among others, presentations by breast program director, Dr. Barbara Krueger, and other specialists.
- Participation in the 3<sup>rd</sup> annual running event: March4Meg 5K Run/Walk in honor and memory of Meg Moonan who died from metastatic melanoma in 2012. Partnership continues with the March4Meg 5K Run/Walk and the
- The annual Cancer Survivors' Day celebration was celebrated this year in the new outpatient pavilion. Over 200 Cancer Survivors and their loved ones celebrated life with attention centered on, "Your Path to Wellness." The day's journey encompassed healthy cooking demonstrations, relaxation techniques, and activities that focus on mind, body, and spirit.

These are a few of the highlights for 2015. Our team of dedicated healthcare professionals is committed to providing evidence based, patient-centered, and comprehensive care. We wish to acknowledge and thank the medical staff, nurses, ancillary staff members, and cancer registry team on their accomplishments during the past year. Our constant purpose is to bring the best treatments and services to our patients and their families. We hope you enjoy reading this report, which underscores our relentless commitment to state-of-the-art personalized and individualized care.



Adam I. Riker, MD, FACS  
Director, Cancer Institute at Advocate Christ Medical  
Center



Thomas M. Hoeltgen, MD  
Chair, Cancer Committee

## 2015 Cancer Committee Members

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Deborah Oleskowicz, MS, CGC	Genetics Counselor, Cancer Institute
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Deborah Stlaske MSN, APN, AOCNS	Cancer Institute, Quality and Accreditation Coordinator and Interim Manager Cancer Registry
Danielle Swets	Hospital Manager, American Cancer Society
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Faisal Vali, MD	Chair, Radiation Oncology
Jami Walloch, MD	Pathology/Co-Chair, Breast Conference, Pathology
Laura Wrona, RN, BS, CCRC	Manager, Office of Clinical Research and Regulatory Affairs
Ghassan Zalzaleh, MD	Medical Oncology



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# *Everything I Need... Close to Home*





## Clinical Programs

### Breast Cancer Program

The Breast Cancer Program is the largest and most mature program at Advocate Christ Medical Center, treating patients for the past 15 years. Much of this success is due to the tremendous leadership of the medical director for the program, Barbara Krueger, MD. Over the years, she has worked with partners in cancer care to develop a comprehensive approach to the management and treatment of the breast cancer patient, an approach often termed “multidisciplinary” or the team approach to treatment.

The team features cancer specialists across the spectrum of cancer care—from medical oncologists, radiation oncologists and plastic surgeons to breast nurse navigators, advanced practice nurses and genetic counselors. Dr. Adam Riker, a surgical oncologist who specializes in breast surgery, melanoma and sarcoma helped further strengthen the program over the past few years.

One of the centerpieces of this program is the multidisciplinary breast oncology clinic, which is held every Friday and where up to six breast cancer patients can each be seen by all of

their care providers in a single day. Patients come to be seen for a variety of reasons. Some are newly diagnosed and are here to be treated, while others simply want a second opinion for their breast cancer treatment plan. Regardless of why they come, they are assured that they will leave with a comprehensive treatment plan encompassing all specialties involved. As part of the team approach, the comprehensive plan is discussed with each of the referring physicians, so that everyone involved understands the treatment plan for each patient evaluated.

An exciting clinical trial that is an option for certain breast cancer patients was recently approved. This clinical trial is available for breast cancer patients who are candidates for breast conservation therapy with lumpectomy. The trial examines the use of a single- dose of radiation therapy (instead of the standard six weeks of radiation therapy following surgery), which is delivered in the operating room at the time of removal of their breast cancer with a lumpectomy. This technology is called intra-operative electron radiation therapy (IOERT), capable of delivering a single-dose of highly concentrated beams of radiation directly to a tumor cavity, maximizing the amount of surrounding healthy breast tissue that is spared. If successful, it has the potential of drastically changing the current paradigm of treatment for patients with breast cancer who are undergoing



a lumpectomy, potentially providing for surgical removal of the cancer and delivery of their radiation therapy to the breast within the operating room on the same day.

### Gastrointestinal (GI) Cancer Program

An individual who chooses Advocate Christ Medical Center is actually choosing an entire team of doctors and cancer specialists. This oncology team has one goal in mind: for the patient to achieve outstanding outcomes while maximizing their quality of life. Individuals and their families have access to a multidisciplinary team of physicians, specialists and supportive services. A patient's multidisciplinary team includes highly qualified and knowledgeable individuals experienced in surgery, medical oncology, radiation oncology, gastroenterology, interventional radiology, certified oncology nursing, patient navigation, genetics, oncology research, nutrition, palliative care and cancer survivorship. The specialists work closely with referring physicians to create an individualized treatment plan for each patient diagnosed with gastrointestinal or hepatobiliary cancer.

Gastrointestinal cancers treated at Christ Medical Center include: esophageal, pancreatic, stomach, hepatobiliary, colorectal and anal. All diagnoses are discussed at our multidisciplinary case conference. The use of cutting-edge technology, such as endoscopic ultrasound for diagnosing and staging cancers of the esophagus, stomach, rectum, and pancreas, to liver directed therapy, as well as our surgeon's expertise in minimally invasive and robotic surgery has projected Christ Medical Center as the leader in treating gastrointestinal cancers for the Southland region.

In 2015, more than 322 robotic surgical procedures have been performed in the specialties of gynecology, urology, thoracic, gastrointestinal and colorectal cancers.

### Thoracic Oncology Program

The thoracic oncology program at Advocate Christ Medical Center is among one of the largest and most comprehensive thoracic oncology program in the state of Illinois. The thoracic cancer program combines use of minimally-invasive techniques and leading-edge technology with extensive knowledge of cancer treatment options. We are a national leader in CyberKnife Radiosurgery for lung cancers, including research projects on the national level for the Society of Thoracic Surgery.

This year, we have been able to expand our services to include a multidisciplinary lung clinic. This clinic welcomes patients for a variety of purposes whether they are newly diagnosed or seeking a second opinion. The patient will be seen by the team including a medical oncologist, radiation specialist, thoracic surgeon, nurse navigator and palliative care clinician. The patient will leave with a comprehensive treatment plan involving all needed specialists and most importantly what the patient desires. This plan is then communicated to the referring physician. Another new addition is our lung screening program. The National Lung Screening Trial (NLTS) primary results has shown 20% fewer lung cancer deaths among trial participants screened with low-dose helical CT. In February 2015, CMS (Medicaid and Medicare) decided that lung screenings would be a new benefit offered to its beneficiaries. Private insurances have been quick to add this benefit as well. Lung screening is done with the purpose of finding lung cancers at an earlier stage thus providing improved outcomes.

In the United States, lung cancer is a leading cause of cancer-related deaths, but early diagnosis offers hope. Utilizing the skills of our

thoracic surgeons and interventional pulmonologists who use radial endobronchial ultrasound and navigational bronchoscopy they are able to diagnose, stage, prepare and treat distal lung lesions that might not be accessible using conventional methods. This again helps to diagnose and develop a treatment plan.

Weekly interdisciplinary lung conference enables a team of specialists, including board-certified interventional pulmonologists, medical oncologists, radiation oncologists, thoracic surgeons, pathologist, research nurse, thoracic navigator and palliative care team member to review each case and outline a course of treatment. Using national guidelines, the team creates a customized plan for each patient. Dr. Paul Gordon, a board-certified thoracic surgeon, leads our thoracic oncology program. This program includes the experienced esophageal surgery team for esophageal cancers. Utilizing minimally invasive techniques of VATS (video assisted thoroscopy) and robotic

surgeries, our patients are provided a less invasive surgery and quicker recovery.

### Gynecologic Oncology Program

The gynecologic oncology interdisciplinary team treats cancers of the uterus (endometrium), ovary, cervix, vulva, vagina, peritoneum, and fallopian tube.

The team, guided by Patrick Lowe, Nikki Neubauer, MD and Alfred Guiraguis, MD, provides comprehensive, multidisciplinary care for women with known or suspected gynecologic cancer. Treatment plans offer placement of brachytherapy devices and other innovative modalities, as well as surgical procedures like radical pelvic exenteration and gastrointestinal, urological, and reconstructive surgery.

The Cancer Institute participates in the Gynecologic Oncology Group (GOG), a national research organization funded by the National Institutes of Health to provide patients access to cutting-edge therapies.



*Our physicians, who represent a variety of specialties—bring a team-approach philosophy to the treatment of skin cancer patients.*

### **Genitourinary (GU) Cancer Program**

At Advocate Christ Medical Center's Cancer Institute, patients have access to the full spectrum of treatment for genitourinary cancers, including prostate, kidney, testicular, penile and bladder cancers. When a patient is diagnosed with a genitourinary cancer, experience matters. Fellowship-trained urologists at the Cancer Institute see more newly diagnosed cases and perform more procedures than most medical centers in this area—more daVinci robotic prostatectomies, more laparoscopic nephrectomies and more cystectomies. High volumes translate into better patient outcomes.

Among a wide range of minimally invasive procedures performed in the genitourinary cancer program are da Vinci robotic prostatectomy, robotic partial nephrectomy using Firefly™ technology to precisely define the margin of the tumor, and robotic cystectomy to treat urologic cancers with minimal incisions and faster recovery. We also offer incisionless advanced technologies, such as Image Guided Radiation Therapy and cryoablation for prostate and kidney tumors to provide treatment options without major surgery.

### **Neurologic Oncology Program**

In collaboration with Advocate Christ Medical Center's highly advanced Neurosciences Institute, the Cancer Institute's neurologic oncology program offers a unique combination of advanced diagnostics, evidence-based care, clinical trials and cutting-edge treatment technology. The program's exceptional interdisciplinary team of neurologists,

neurosurgeons, medical oncologists, radiation oncologists, advanced practice nurses in oncology, and a neuropathologist treat a wide range of neurologic cancers in both adult and pediatric patients—from primary and metastatic brain tumors to spinal cord and nervous system cancers, as well as the neurologic complications of cancer.

Neurologic-oncology case conferences are held regularly in order for the clinical caregivers to share findings, discuss collectively different approaches to care and coordinate a plan for the best treatment options for patients.

### **Melanoma Program**

Under the leadership of Adam I. Riker, MD, FACS, a Fellow of the American College of Surgeons and founding member of the Society for Melanoma Research, the melanoma program combines its extensive team experience in skin cancer treatment, including sentinel lymph-node mapping procedures, complex surgical approaches and plastic surgical reconstruction, with early diagnosis and prevention of melanoma and other skin cancers. The program also offers a growing portfolio of melanoma-specific clinical trials for patients in stages III and IV of disease.

The melanoma program specializes in the comprehensive management of patients with cancers of the skin, including melanoma, basal and squamous cell carcinomas and dermatofibrosarcoma protuberans of the skin. Our physicians, who represent a variety of specialties—surgical oncology, medical oncology, radiation oncology, interventional radiology, dermatology, dermatopathology and

plastic surgery, bring a team-approach philosophy to the treatment of skin cancer patients.

## Cutting-Edge Technology

### Technology

As part of its comprehensive care programs for cancer patients, the Cancer Institute uses the latest technologies designed to enhance diagnosis, make treatments more effective, reduce pain and speed recovery.

### IOERT

IOERT (intra-operative electron radiation therapy) is an advanced system for delivering radiation therapy in the operating room. This cutting-edge technology is one of only a few like it in the country. It is capable of delivering a concentrated beam of radiation directly to a tumor site during cancer surgery, while sparing healthy tissue. Until now, patients needing radiation therapy would first undergo surgery then come back once healed to start a course of radiation treatment. This technology will allow a surgeon and a radiation oncologist to deliver a full dose of radiation into the tumor bed in the operating room immediately after the tumor has been removed.

Use of IOERT not only is timesaving, but lifesaving in its effectiveness in treating cancer patients. Physicians can move normal tissue out of the field during surgery, allowing the radiation oncology team to give intense radiation to the tumor bed without damaging the surrounding normal tissue. In selected cases, neither radiation nor chemotherapy would be required following the surgery. IOERT technology is being used to treat early breast cancer; eventually it will be used for other cancers, including cancers of the stomach and pancreas.



### CyberKnife®

Like IOERT, CyberKnife® is capable of delivering highly precise doses of radiation. However, the technology is utilized by physicians on an outpatient basis to treat patients who have hard-to-reach tumors, complex vascular malformations and other disorders that are difficult to treat using more standard therapies. The technology consists of a lightweight linear accelerator and image-guided system that delivers multiple, high-energy beams from various points outside the body. These beams become powerfully effective when they converge with pinpoint accuracy at the site of the tumor. Because of the technology's effectiveness, the number of required radiation treatments often can be dramatically reduced. Patients undergoing CyberKnife® therapy normally do not require anesthesia and can return to work or other everyday activities almost immediately.

The technology is proving particularly invaluable for elderly patients who, because of age or other medical conditions, will not tolerate standard surgery. It also is giving options—and hope—to patients whose conditions have been untreatable in the past.

Although the technology may eventually prove effective in delivering radiation to abnormalities found almost anywhere in the body, including the stomach, pancreas, head and neck, physicians at the Cancer Institute currently are using the system primarily to treat lung

cancers. In fact, results of the Institute's work indicate that CyberKnife® is 85 percent to 90 percent effective in controlling local lung tumors.

## Imaging

With the opening of the new Advocate Christ Medical Center Outpatient Pavilion, world class imaging for cancer patients includes:

- State-of-the-art MRI systems designed with large bore openings and ultra-short gantries to minimize patient claustrophobia. All of the systems use the Caring Suite room concept, which offers pleasing aesthetics (ex: lighting, visual art, movies and music) to reduce anxiety for patients
- CT (computed tomography) systems that deliver 30% to 40% less radiation than conventional CT imaging systems.
- A PET/CT system that is combined with advanced tumor-tracking software to assist physicians in gauging the effectiveness of cancer therapy by automatically measuring and assessing the size of the tumor during treatment.

## Interventional Radiology (IR)

Interventional radiology is a medical specialty that integrates clinical and imaging-based diagnosis with minimally invasive therapy. The specially trained teams of board-certified physician subspecialists, nurses and technologists in interventional radiology perform minimally invasive diagnostic tests and targeted therapies, using X-ray, computed tomography (CT), ultrasound, and magnetic resonance imaging (MRI). Many of the procedures done in IR today required traditional surgeries only a few years ago.

Applying state-of-the-art techniques, interventional radiologists guide needles, small tubes (catheters), laser devices or other tiny

instruments to deliver treatments to specific areas throughout the body. These treatments are generally easier for patients to tolerate because the procedures require no large incisions, pose reduced risk, cause less pain and generally result in reduced recovery time. Many of these treatments can be done on an outpatient basis.

In cancer treatment, interventional radiology is proving useful in cryoablation therapy (freezing tumor cells) in kidney and lung cancers; radiofrequency ablation (delivering cell-killing heat) in treatment of lung, liver and kidney cancers; chemo-embolization (delivering high-intensity chemotherapy treatment to a tumor); yttrium transarterial radiation therapy (using minimally invasive techniques to deliver radioactive microspheres to liver tumors); and port placement.

Most IR therapies are performed either for patients who are not good candidates for surgery or in conjunction with operative procedures.

## Robotic Surgery

Robotic-assisted surgery has had a significant impact on the minimally invasive surgical approach to patients with gynecologic malignancies in the United States. The **da Vinci Si® Surgical System** was cleared for use by the U.S. Food and Drug Administration in 2005 for gynecologic surgery. Robotic technology incorporates three-dimensional stereoscopic vision and wristed instrumentation that allows for better dexterity and precision than can be achieved with traditional laparoscopy. Robotic surgery has applications in the treatment and management of uterine, cervical, and some ovarian cancers. Peer-reviewed medical journals have reported improved surgical outcomes when a robotic surgical approach is used to treat uterine,

cervical and some ovarian cancers as compared to the traditional open surgical approach. A robotic surgical approach is associated with a shorter hospital stay, less blood loss, fewer surgical complications and a quicker recovery.

The Cancer Institute at Advocate Christ Medical Center has two state-of-the-art **da Vinci<sup>®</sup> Surgical systems** with a dual console system. The hospital is one of only a few across the country to have a **da Vinci<sup>®</sup> Surgical Simulator**. This system allows surgeons to incorporate advanced surgical simulation training to enhance patient safety and outcomes. More than 520 robotic surgical procedures have been performed using this technology in the specialties of gynecology, urology and thoracic surgery.

## **Clinical Research/Trials**

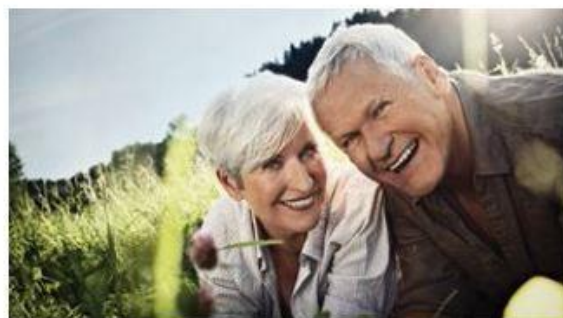
The Cancer Institute at Advocate Christ Medical Center's involvement in clinical trials provides access to a wide range of new, experimental drugs or treatments without having to leave the community for cancer care. Christ Medical Center manages a robust portfolio of clinical trials covering a vast number of disease sites and cancers. Most

patients are referred to these clinical trials through their physician or disease-specific conferences, which are held on a regular basis. These meetings provide a forum where cancer care team members discuss patients and identify those who might potentially benefit from a clinical trial. Once the potential clinical trial is discussed with the patient, the patient makes the final decision about whether or not to participate.

The Cancer Institute at Advocate Christ Medical Center participates in studies sponsored by the National Cancer Institute through groups such as the Eastern Cooperative Oncology Group, the Radiation Therapy Oncology Group, the Gynecological Oncology Group, the National Surgical Adjuvant Breast and Bowel Project, and the American College of Surgeons Oncology Group.

The Cancer Institute strives to use research as a tool to increase its patients' options through clinical trials and increase the level of care through process improvement studies and evidence-based practice.

By participating intensively in clinical trials, the Cancer Institute is advancing the body of knowledge in cancer medicine and making a difference in the lives of cancer patients.



*The Cancer Institute has four patient navigators, who act as liaisons between patients and the patient care team in order to help coordinate care and ensure all health care needs are met.*

## **Oncology Nurse Navigation**

A diagnosis of cancer brings many challenges for patients and their loved ones. It is common to feel overwhelmed by the amount of new information and decisions to be made. Understanding of the “What comes next?” is where the disease-specific patient navigators at Advocate Christ Medical Center come into play. These highly qualified, knowledgeable patient navigators and oncology certified nurses provide disease-specific focus to their patients, and are available to assist and navigate the patient with one-on-one support through the cancer experience.

Some of their clinical responsibilities to patients include, but are not limited to:

- Streamlining and coordinating timely access to the patient’s care
- Assessing physical, social, emotional, cultural, spiritual and financial needs
- Guidance through the complex treatment “maze” and lessening any confusion about the processes involved
- Identifying and eliminating barriers to treatment
- Ensuring patients receive a treatment plan that is understandable, feasible and within national guidelines
- Providing education and directing patients and families to available and reliable resources and support services
- Facilitating access to clinical trials and second opinions upon request

- Coordinating information pertinent for multidisciplinary conferences and clinics
- Creating and presenting the patient with a survivorship care plan upon completion of treatment which summarizes medical care received and provides information for navigating life after treatment.

Oncology Nurse Navigators help coordinate care and lessen the burden patients and families may experience throughout the cancer continuum.

The Cancer Institute currently has four oncology nurse navigators who act as liaisons between patients and the multidisciplinary team. These nurse navigators work with patients and their families facing a cancer diagnosis involving, but not limited to, breast, lung and gastrointestinal.



Tracy McCarthy, RN, BSN, OCN  
Breast Cancer



Patrice Stephens, APN  
Breast Cancer



Patricia Mullenhoff, APN  
Lung Cancer



Kelly Post, RN, MSN, OCN  
Gastrointestinal Cancer

## **Adult Oncology Pharmacy Services**

The Adult Oncology pharmacy services at Advocate Christ Medical Center are spearheaded by a nationally certified oncology pharmacist who works closely with other members of the health care team. The oncology pharmacist is involved in optimizing outcomes by providing evidence-based patient-centered medication therapy, serves as a resource on the optimal use of medications to treat cancer patients, provides training and education and is involved in the development and maintenance of oncology medication related electronic health record order sets.

Patients treated for their cancer diagnosis at Christ Medical Center receive their medications upon a thorough review by chemotherapy competent pharmacists. The Outpatient Infusion Center is equipped with a state-of-the-art pharmacy to provide safe and effective medications.

## **Genetics Cancer High Risk Assessment Program**

Genetics has a powerful role to play in the prevention and treatment of cancer. Most cancer

occurs as the result of an interaction between environment, lifestyle and genetic factors. Approximately 5-10% of cancer is caused by an inherited genetic change. Identifying individuals and their family members with an inherited predisposition toward cancer aids in establishing tailored treatment, surveillance and prevention. Knowing an individual has an increased risk of cancer based on their personal, family history and/or genetic test results can result in an improvement in their health and quality of life.

Christ Medical Center's Cancer Institute established a Genetics Cancer Risk Assessment Program in 2008 to support cancer patients and their family members. Our program offers hereditary cancer risk assessment, genetic counseling and genetic testing performed by our board certified and licensed genetic counselors.

In 2005, the genetic counselors provided consultation to more than 662 new patients. They attended the breast, gynecology oncology and GI case conferences and offered expert opinions during case reviews. Because of the tremendous growth in genetics, another counselor was hired in 2015. The genetic counselors are active members of the medical





center's Cancer Committee. In addition, they provide numerous educational offerings to a variety of audiences, including medical students, residents, physicians, nurses, support groups and the community at large.

The genetic counselors have expanded their services to include seeing patients at Advocate Good Samaritan Hospital, Advocate South Suburban Hospital and Advocate Trinity

Hospital. They attend case conferences, are a part of these hospital's Cancer Committees and provide educational opportunities to physicians, nurses, patients and the community.

*Genetic Cancer Risk Assessment Program  
Coordinators:*

- Deborah Oleskowicz, MS, LCGC
- Cristina Ruiz, MS, LCGC
- Emily Bryant, MC, LCGC

## **Outpatient Infusion Center**

The Outpatient Infusion Center initially opened as a two-chair capacity room over 25 years ago located on the inpatient unit. It has since grown over the years to a twenty-five treatment bay and three fast track chairs located in the new state-of-the-art Outpatient Pavilion. The Infusion Center accommodated 9,727 patient visits in 2015.

The Infusion Center provides infusion therapy as well as other treatment modalities to oncology and other patients on an outpatient basis. The department serves as an intermediary care site between the physician office and the acute care institution.

Care provided to outpatients in the Infusion Center includes but is not limited to administration of intravenous medication (including chemotherapy and biotherapy), administration of injectable medication, care and maintenance of venous access devices, phlebotomy services when appropriate,

apheresis services, and blood product transfusions. Additional services include, but are not limited to patient assessment and education, family education, symptom management related to disease and/or treatment, emotional/spiritual/psychosocial support, and nutritional counseling.

The Infusion Center is staffed six days per week for a full capacity of patients. The nurses that serve in the infusion center have over 100 years of combined oncology experience and are 90 percent Oncology Certified. The infusion center maintains a consistent patient satisfaction score above 90 percent.

## **Cardio-Oncology Services**

The Cardio-Oncology service at Christ Medical Center, one of only a few in the country, features a multidisciplinary approach to caring for persons at risk for cardiovascular disease due to the toxic effects of therapies received during cancer treatment.

The Cardio-Oncology service will support those being treated for cancer with patient education and monitoring, during and after treatment, with the goal of preventing or minimizing heart damage.

Early detection and advances in cancer treatment mean more people are surviving their cancer than ever before. While this is certainly good news, it is tempered by the growing evidence of treatment-induced cardiomyopathy—a condition in which the heart muscle is damaged causing a problem with the heart's ability to pump blood through the body—and possible heart failure.

Dr. Sunil Pauwaa, FACC, a cardio-oncologist, and his team help lessen heart risks with the Cardio-Oncology program.

If you have cancer or are a cancer survivor, you

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could be at risk for heart disease due to the treatments used to fight the cancer. The specialists with the Advocate Heart Institute at

Christ Medical Center's Cardio-Oncology service are dedicated to working with cancer patients of all ages to lessen their cardiotoxicity (the degree to which certain cancer drugs can harm the heart during cancer treatment) and their cardiovascular risks after successful cancer treatment.

## ***Pastoral and Spiritual Services***

The Office for Mission and Spiritual Care at Advocate Christ Medical Center represents a diversity of denominations and faith communities and provides spiritual care and support for oncology patients as well as all patients their families, and loved ones.

Professional chaplain staff offer specialized spiritual care twenty-four hours a day seven days a week throughout Christ Medical Center.

Advocate Health Care has a rich tradition of providing care for the whole person: body, mind, and spirit. As our hospital has seen many changes over the years, Mission and Spiritual Care continues to respond with new ministries in meeting the ever-changing spiritual needs of our patients and communities.

Members of our spiritual care team are available on request to everyone. All of our spiritual care teams are ordained ministers and able to offer prayer, pastoral counseling, and worship services.

## ***Palliative Care***

The Palliative Care Team at Advocate Christ Medical Center provides a consultative service for patients and families living with cancer and other chronic disease or serious illness. These

patients may have significant physical, psychological, social and spiritual needs that can get overlooked in an acute care setting that is focused more on curative measures rather than comfort care.

The palliative care team consists of specialized clinicians including board certified palliative medicine physicians, advanced practice nurses, registered nurse, medical social worker, and chaplains.

The purpose of the Palliative Care team is to provide symptom management and to assist patients and families with defining clear goals of care in order to improve the patient's quality of life.

The palliative care team works with the oncology and attending physician and other members of the interdisciplinary team to insure that the care being provided and recommended is consistent with the patients and families wishes. They meet with patients and families to discuss the diagnosis and the treatment options. They assist with developing a plan of care focused on the patient's goals and needs, discuss advanced directives and provide symptom and disease management. The services that the palliative care team offer, can provide an extra layer of support during treatment. Symptom management is the cornerstone of palliative care and can be provided alone or in conjunction with curative care.

Once the palliative care team is consulted, they are available to meet with the patient and family during the hospital stay. Once the patient is discharged, follow-up can continue in the outpatient palliative care clinic setting. Homebound patients can also continue receiving palliative care in their home.



## **ACS Patient Navigator**

Since positioning a clinical navigator at Advocate Christ Medical Center in October 2011, the American Cancer Society (ACS) has added a personal touch to the services that it provides patients through its partnership with the Cancer Institute.

The ACS navigator, who is available full time Monday through Friday and has a background in social work, meets personally with people facing cancer and their families. This includes patients receiving treatment on an outpatient basis such as chemotherapy and radiation, as well as patients hospitalized in the medical center's cancer unit. The ACS navigator also works closely with the team of nurse navigators and inpatient social workers. The ACS navigator meets with people at the beginning, middle or end of treatment, and is able to provide educational and resource materials, ACS events and resources, as well as community and national support groups and services.

Starting in June 2015, Christ Medical Center became an official Community Wig Boutique site. The navigator and ACS volunteers fit women and men for wigs. ACS proudly gives out one wig free of charge to anyone going through cancer treatment. For over 100 years, ACS has worked relentlessly to save lives and create a world with less cancer. Together with millions of our supporters worldwide, we help people stay well and get well, find cures, and fight back against cancer.

## **Gilda's Club Chicago Partnership**

Now in their second year of operation at the Outpatient Pavilion, Gilda's Club Chicago (GCC) at Advocate Christ Medical Center (ACMC) is an integral part of the cancer center.

In 2015, they served more than 500 patient and family member visits. GCC at Christ Medical Center provides "free support for the whole family, the whole time" throughout their cancer experience.

Located on the ground floor of the Outpatient Pavilion near the café, GCC's signature Red Door gives easy access to those receiving care at the medical center, as well as resources to the entire Southland community. Ninety percent of people with cancer experience some distress. GCC addresses this right on campus by offering patients a community of support. From networking groups to mind-body activities and family movie nights, the Clubhouse staff and volunteers are dedicated to providing a warm and welcoming place for all participants. GCC at Christ Medical Center is a special place that includes a demonstration kitchen, group rooms, conference room and a unique space for kids called "Noogieland." One of their most popular offerings is Cancer Survivor Boot Camp, a twice a week exercise program for cancer survivors. This is just one of many healthy lifestyle programs offered.

Christ Medical Center generously provides the Clubhouse space as part of an overall commitment to quality cancer care, including holistic treatment for patients and their families. As part of the partnership, educational lectures led by doctors and other clinical staff have been hosted at the Clubhouse. Staff also routinely refer patients and families to the program.

GCC hosted more than 2800 visits to the Clubhouse in 2015, and they will continue to expand their program in 2016. Plans include the addition of more activities focused on families and children including “Kid Support”, a support group for any child who has been touched by cancer, including siblings, kids, and grandkids. All programs are funded through donations from individuals, sponsorships and corporate gifts

## ***Quality and Accreditation Coordinator***

Advocate Christ Medical Center emphasizes quality and evidence-based patient centered care. We are dedicated to improving the quality of life of our cancer patients following current national standards of care, research, education, prevention, screening, and surveillance measures.

Our administration feels so strongly in regard to

practicing the highest standards of care that the Cancer Institute now has a dedicated Quality and Accreditation Coordinator. Although our Cancer Institute has been accredited by the Commission on Cancer for many years, our program has since been elevated to an academic comprehensive cancer program.

The role of Deb Stlaske, Quality and Accreditation coordinator, is to work closely with the Institute’s multidisciplinary team, providing oversight and coordination of the required best practice standards that drive our evidence-based, comprehensive, and compassionate care. While our patient’s cancer victory is the goal at the forefront, our accreditation achievements help us deliver the highest quality care on the path to that goal.

## ***Outpatient Pavilion***

The Outpatient Pavilion, which opened in March 2014, enables us to serve the community better by centralizing our outpatient services in a single, facility that offers modern, high-tech space and equipment for surgical procedures and patient clinic visits. The building houses the Cancer Institute, the Advocate Heart Institute, Neurosciences Institute, Advanced Imaging Center and outpatient surgery services.



Opening this pavilion has helped us in our mission to provide the highest quality of care with the best clinical outcomes to those we serve.

From advanced treatment to compassionate caring support programs, our full range of Cancer Institute services at the Advocate Christ Outpatient Pavilion includes:

- An infusion center with semi-private patient rooms
- Genetic risk assessment and counseling for families
- A survivorship program, which offers a supportive environment that nurtures patients from diagnosis to treatment and well beyond
- Multidisciplinary programs that provide the best options in the fight against cancer

The Cancer Institute located on the eighth floor of the Outpatient Pavilion, is a nationally recognized program equipped with the latest diagnostic and state-of-the-art treatment options. Each year, a little over 2,000 newly diagnosed

cancer patients entrust their care to us, making the Cancer Institute one of the most experienced cancer treatment centers in Illinois.

## ***Program Registry***

The Cancer Registry at Advocate Christ Medical Center has a beginning reference date of January 1, 2002.

Currently there are over 19,000 patients in the Cancer Registry database being maintained and followed by five certified tumor registrars. The Cancer Registry is responsible for and has maintained lifetime follow-up on all analytic patients at a rate of 90% for all patients diagnosed within the past 5 years and a rate of 80% for all patients within the database.

Cancer Registry Accomplishments for 2015:

- Reports all required cancer cases to the Illinois State Cancer Registry within six months of diagnosis.
- Submitted data to the National Cancer Data Base (NCDB) in a timely error free manner.
- Maintains the Rapid Quality Reporting System (RQRS) per the Commission on Cancer guidelines.
- Annually perform and meets required quality reviews of analytic cases

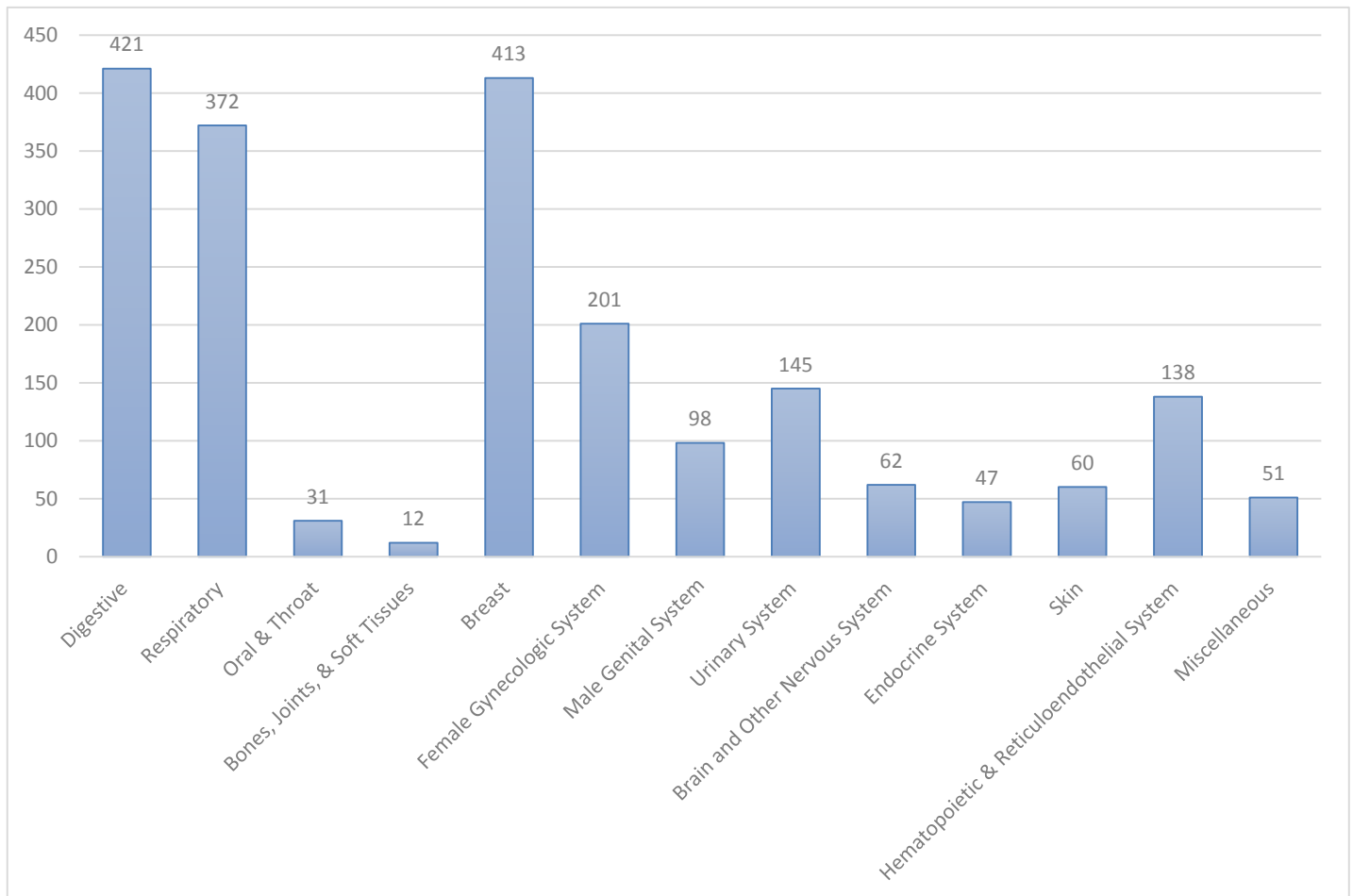


# Program Statistics

## Cancer Registry Data 2011 – 2014

Primary Site	2011	2012	2013	2014
Breast	398	441	473	391
Lung	344	365	339	329
Colorectal	171	167	164	196
Prostate	100	99	101	75
Brain	85	95	61	20
Hematopoietic	45	99	48	44
Other	770	735	7000	892
<b>Total</b>	<b>1,913</b>	<b>2,001</b>	<b>1,984</b>	<b>1,947</b>

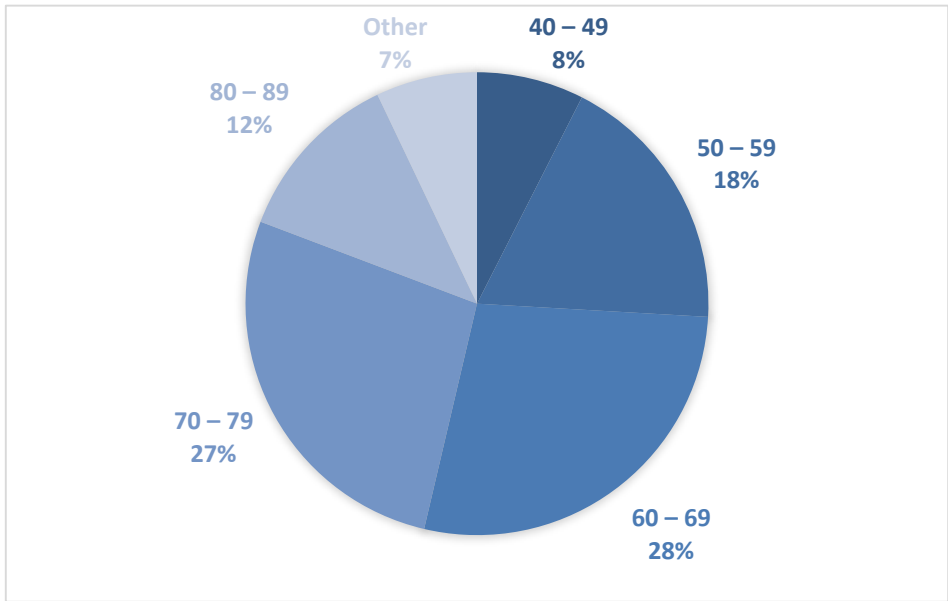
## Primary Cancer Sites - 2014



### Age at Diagnosis (in years)

Age at Diagnosis (in years)	Count (N)	Percent (%)
40 – 49	146	7.49%
50 – 59	359	18.42%
60 – 69	541	27.76%
70 – 79	528	27.09%
80 – 89	237	12.16%
Other	138	7.08%
<b>Total</b>	<b>1,949</b>	<b>100.00%</b>

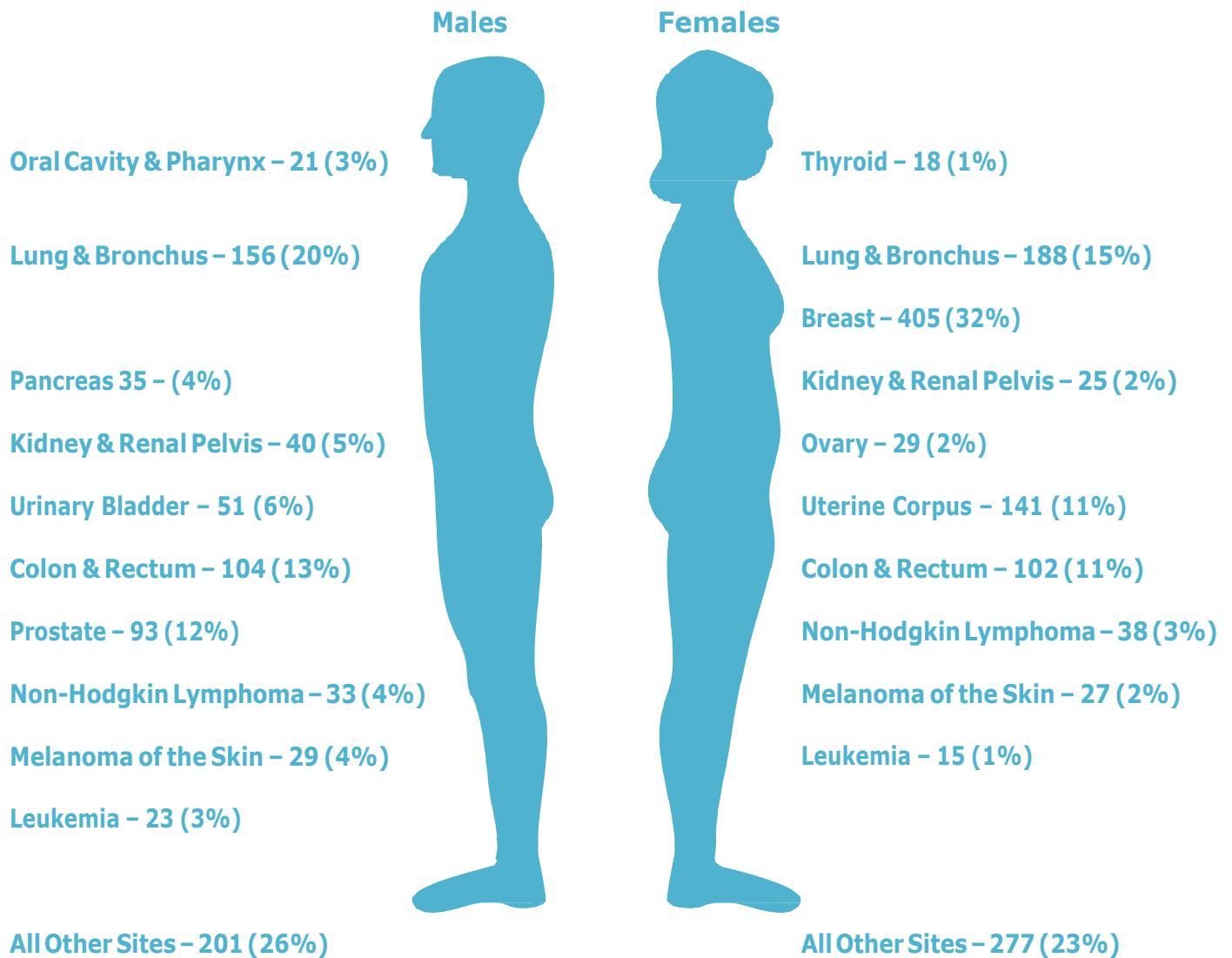
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Top Sites Comparison					
<b>Breast</b>	<b>Christ</b>	<b>NCDB</b>	<b>Lung</b>	<b>Christ</b>	<b>NCDB</b>
	(n=393)	(n=217,075)		(n=332)	(n=112,614)
<b>Stage</b>	<b>(%) 2014</b>	<b>(%) 2013</b>	<b>Stage</b>	<b>(%) 2014</b>	<b>(%) 2013</b>
<b>0</b>	20%	21%	<b>0</b>	0%	0%
<b>I</b>	42%	42%	<b>I</b>	28%	28%
<b>II</b>	22%	24%	<b>II</b>	10%	10%
<b>III</b>	8%	8%	<b>III</b>	22%	19%
<b>IV</b>	6%	4%	<b>IV</b>	36%	40%
<b>NA</b>	1%	0%	<b>NA</b>	0%	0%
<b>Unknown</b>	1%	1%	<b>Unknown</b>	4%	3%
<b>Colon</b>	<b>Christ</b>	<b>NCDB</b>	<b>Corpus Uteri</b>	<b>Christ</b>	<b>NCDB</b>
	(n=151)	(n=68,986)		(n=131)	(n=396,73)
<b>Stage</b>	<b>(%) 2014</b>	<b>(%) 2013</b>	<b>Stage</b>	<b>(%) 2014</b>	<b>(%) 2013</b>
<b>0</b>	13%	6%	<b>0</b>	0%	1%
<b>I</b>	26%	20%	<b>I</b>	67%	69%
<b>II</b>	17%	25%	<b>II</b>	8%	5%
<b>III</b>	16%	26%	<b>III</b>	14%	12%
<b>IV</b>	25%	19%	<b>IV</b>	6%	7%
<b>NA</b>	3%	0%	<b>NA</b>	0%	0%
<b>Unknown</b>	0%	4%	<b>Unknown</b>	5%	6%
<b>Bladder</b>	<b>Christ</b>	<b>NCDB</b>			
	(n=77)	(n=49,571)			
<b>Stage</b>	<b>(%) 2014</b>	<b>(%) 2014</b>			
<b>0</b>	47%	49%			
<b>I</b>	21%	22%			
<b>II</b>	21%	13%			
<b>III</b>	1%	4%			
<b>IV</b>	4%	7%			
<b>NA</b>	3%	0%			
<b>Unknown</b>	3%	4%			



## 2014 Summary by Body System and Sex



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## Quality Outcome Study

### Review of compliance with NCCN guidelines for treatment of patients with Acute Myeloid Leukemia. (AML)

by Ghassan Zalzaleh, MD, medical oncologist and hematologist

**Study Intent:** Affiliated Oncologists, LLC, identified an opportunity to analyze evidence based treatment compliance for our Acute Myeloid Leukemia (AML) patient population at Advocate Christ Medical Center. The question we're asking for the purposes of this study is "Are we compliant with the NCCN guidelines for the treatment of AML up to and including referral for transplant"?

Acute Myeloid Leukemia, also known as acute myelogenous leukemia, acute myelocytic leukemia, acute granulocytic leukemia, or acute non lymphocytic leukemia, is a cancer of the myeloid line of blood cells, characterized by the rapid growth of abnormal white blood cells that accumulate in the bone marrow and interfere with the production of normal blood cells. AML is the most common acute leukemia affecting adults, and its incidence increases with age. The treatment of this patient population requires highly specialized physicians and nurses as well as facilities with comprehensive, sophisticated support systems.

The American Cancer Society estimates about 19,950 new cases of AML will be diagnoses in the United States and will result in about 10,430 deaths in 2016.

NCCN, National Comprehensive Cancer Network, Guidelines are widely recognized and used as the standard for clinical practice in oncology by clinicians and payors.

**Three Phases of AML Treatment Guidelines:** There are three phases of treatment for patients with AML. It's the responsibility of the Section of Hematology Oncology to follow the clinical pathways per NCCN guidelines in order to achieve and maintain remission thus increasing disease free survival time.

#### 1) Induction Chemotherapy

Most initial treatment decisions for AML are based on age, history of prior myelodysplasia or cytotoxic therapy, and performance status. Induction chemotherapy will be initiated. Doctors commonly combine two or more chemotherapy drugs to treat AML. Each type of drug works in a different way to kill the cancerous cells. Combining drug types can strengthen their effectiveness. The intent of traditional induction chemotherapy is to produce a major reduction in the leukemic burden and to restore normal hematopoiesis.

#### 2) Post induction test / Consolidation Chemotherapy

To judge the efficacy of the induction therapy, a bone marrow aspirate and biopsy should be performed 14 to 21 days after the start of therapy. Patients with AML, who achieve a CR (complete remission) with standard induction chemotherapy will receive further consolidation with the same treatment regimen or other appropriate chemotherapy regimens depending on the initial disease type and likelihood of recurrence. (Low, medium or high risk) Patients who achieve CR but have high risk genetic abnormalities may be considered for upfront allogeneic bone marrow transplant.

#### 3) Post remission Surveillance and Therapy for Relapsed AML

Monitoring complete blood counts, including platelets, every 1 to 3 months for the first 2 years after patients have completed consolidation therapy, then every 3 to 6 months thereafter up to 5 years is recommended. Bone marrow evaluation should be performed only if the hemogram (cbc) becomes abnormal. If the bone marrow aspirate and biopsy shows recurrence, allogeneic bone marrow transplant should be considered.

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While Advocate Christ Medical Center does not have a Bone Marrow Transplant Program, the physicians comply with the NCCN guidelines to provide safe, effective clinical care for patients through the first two phases of therapy. There is close collaboration with the hospitals and physicians we refer to for bone marrow transplant.

**Methods:** Affiliated Oncologists, LLC completed a retrospective review of 61 adult cases of AML diagnosed at Advocate Christ Medical Center January 2012 and December 2015. A comparison was made between evidence based guidelines and outcomes data for patients treated at Advocate Christ Medical Center for AML.

**Analysis:** Of the 61 cases in the study 18 patients were under 60 years of age and 43 were older than 60 years of age. While the literature shows that there is a slightly higher incidence in males our data shows that 29 patients were male and 32 were female. Table 1

61 patients were diagnosed with AML between January 2012 and December 2015. 45 of the 61 patients completed induction therapy. Of the 16 patients that did not complete the induction therapy; 1 expired, 8 had significant co-morbidities and were not eligible for treatment, and 5 refused. 2 patients were unable to complete the full course of treatment due to adverse effects.

34 of the 45 patients continued on to the consolidation phase of treatment. Of the 11 patients that did not completed consolidation therapy; 4 refused and 7 remained in remission following induction therapy.

14 of the 34 patients were referred to bone marrow transplant therapy programs. Of the 20 that were not referred; 3 expired, 4 refused, 3 were unable to complete consolidation therapy due to adverse effects of treatment and 10 remained in remission.

**Table 1**

	<u>Sex</u>
<b>Male</b>	29
<b>Female</b>	32
	<b>61</b>
	<u>Age at Dx</u>
<b>&lt; 60</b>	18
<b>&gt;60</b>	43
<b>Total</b>	<b>61</b>

**Table 2**

		<b>Induction</b>				
	<b>yes</b>	<b>no</b>	<b>total</b>	<b>% completed</b>	<b>% not completed</b>	
<b>&lt;60</b>	17	2				
<b>&gt;60</b>	28	14				
<b>completed</b>	<b>45</b>	<b>16</b>	<b>61</b>	<b>74%</b>	<b>26%</b>	
		<b>Consolidation</b>				
	<b>yes</b>	<b>no</b>	<b>total</b>			
<b>&lt;60</b>	15	1				
<b>&gt;60</b>	19	10				
<b>completed</b>	<b>34</b>	<b>11</b>	<b>45</b>	<b>76%</b>	<b>24%</b>	
		<b>Ref for BMTX</b>				
	<b>yes</b>	<b>no</b>	<b>total</b>			
<b>&lt;60</b>	10	4				
<b>&lt;60</b>	4	16				
<b>completed</b>	<b>14</b>	<b>20</b>	<b>34</b>	<b>41%</b>	<b>59%</b>	

Table 3

		<b>Induction</b>					
<b>Age</b>	<b>expired</b>	<b>co-morbidities</b>	<b>pt. refused</b>	<b>failed induction</b>	<b>failed consolidation</b>	<b>in remission</b>	
<b>&lt;60</b>				2			
<b>&gt;60</b>	1	8	5				
		<b>Consolidation</b>					
	<b>expired</b>	<b>co-morbidities</b>	<b>pt. refused</b>	<b>failed induction</b>	<b>failed consolidation</b>	<b>in remission</b>	
<b>&lt;60</b>			1				
<b>&gt;60</b>			3			7	
		<b>Refer to Transplant</b>					
	<b>expired</b>	<b>co-morbidities</b>	<b>pt. refused</b>	<b>failed induction</b>	<b>failed consolidation</b>	<b>in remission</b>	
<b>&lt;60</b>			1			3	
<b>&gt;60</b>	3		3		3	7	
	<b>4</b>	<b>8</b>	<b>13</b>	<b>2</b>	<b>3</b>	<b>17</b>	<b>47</b>
	<b>9%</b>	<b>17%</b>	<b>28%</b>	<b>4%</b>	<b>6%</b>	<b>36%</b>	<b>####</b>

**Summary:** Affiliated Oncologists follow evidence based guidelines 100% of the time. Treatment of patients at Advocate Christ Medical Center is concordant with NCCN guidelines. 66% of the study patients successfully completed concordant treatment. The remaining patients were treated following evidence based guidelines however were unable to continue treatment for various valid

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