







2017 Cancer Program



Providing advanced cancer care in our community today

The Jewish Hospital MERCYHEALTH

2017 Cancer Program ANNUAL REPORT

Letter from Pat Davis-Hagens The Jewish Hospital Cancer Committee Cancer Conferences Community Outreach Lung Cancer Screening Data Summary and Cancer Sites **Cancer Resources** Skin Cancer Care Statistics Blood Cancer Care Innovative Facilities Clinical Research/Outcomes Patient Story: Jen Breast Cancer Care & Women's Health Physician Spotlight: Neil Kundu, MD Patient Story: Diane GI, Liver & Pancreatic Cancer Care Physician Spotlight: Shyam S. Allamaneni, MD Nurse Navigator: Mark Kroger, RN Patient Story: William **Oncology Radiation** The Gamma Knife® Patient Story: Ruth and Vivien Neuro-oncology Care Patient Story: Ray Colon Cancer Care Patient Story: Susan Physician Spotlight: Cory D. Barrat, MD Patient Story: Sana Physician Spotlight: John P. Cullen, MD Nurse Navigator: Nikki Miller, RN, BSN Letter from Jon Labbe/Mercy Health Foundation Donating to Cancer Care Programs Honoring Our Donors Appendix - OHC Clinical Trials

2 The Jewish Hospital – Mercy Health

4				
5				
6				
7				
8				
9				
10				
11				
11				
12				
12				
13				
14				
15				
16				
17				
18				
18				
19				
20				
21				
22				
24				
25				
26				
27				
27				
27				
28				
28				
28				
29 70				
30				
31				
32				



Pat Davis-Hagens President and CEO The Jewish Hospital — Mercy Health

The Jewish Hospital

MERCYHEALTH

FRIENDS AND COLLEAGUES,

It's my privilege to share The Jewish Hospital's 2017 Cancer Program Annual Report. It provides an overview of recent achievements in our cancer programs as well as data from the Cancer Registry. This year we would like to continue providing additional information about new services we offer and stories from our patients and caregivers.

Our Cancer Care Program at The Jewish Hospital continues to strive for and achieve recognition for excellence. In 2017, the Blood Cancer Center became the second program in the nation to be awarded The Joint Commission's Gold Seal of Approval® for Leukemia care. In early 2017 the Blood Cancer Center also received re-certification for The Joint Commission's Gold Seal of Approval® for Bone Marrow Transplant care.

Our Cancer Care Program strives to provide the latest in innovative technology available on the market. In 2017 we strengthened our neuro-oncology program through a partnership with Mayfield Brain and Spine and investment in the Brainlab Airo® intra-operative CT and navigation system. This is the first system of its kind to be installed in Ohio and provides our surgeons state-of-the-art technology when performing delicate cancer operations.

At The Jewish Hospital our team is committed to patient-centered care and in 2017 launched the I Know program for breast care patients. This program is the first in the Tri-State area to provide 24-hour turn-around-time from the point of breast biopsy to communication of the results to patients who agree to participate. This new program alleviates the stress and mental anguish patients endure as a result of waiting for biopsy results from the physician.

Through our affiliation with OHC (Oncology Hematology Care), clinicians and patients benefit from access to a nationally recognized clinical trials program conducted in our community. This research will allow us to find new cures for cancer and advance our knowledge of individualized cancer treatments.

Beyond our clinical expertise and modern technology critical to the treatment of cancer, our patients tell us how much they love how they're treated. At The Jewish Hospital, patients are in the center of all we do. We strive to ensure the best possible outcomes with respect and compassion. We're honored that patients entrust us with their care during a critical time in their lives.

The Jewish Hospital Cancer Committee

Supporting The Jewish Hospital's commitment to providing safe, quality care and services is The Jewish Hospital Cancer Committee. The committee consists of a multidisciplinary team comprised of hospital employees, staff physicians and members from the American Cancer Society. The committee meets quarterly to monitor the performance of the hospital's cancer program and to review available services and programs. If any gaps in service are identified, the team sets goals to fill them and oversees resulting care-improvement initiatives. The cancer committee is dedicated to ensuring that The Jewish Hospital's cancer program exceeds patients' expectations and provides the highest level of patient-centered care.

PHYSICIAN MEMBERS

Karyn M. Dyehouse, MD, Chair Medical Oncology, OHC

Shyam Allamaneni, MD Surgical Oncologist & Cancer Liaison Physician

Tim Braverman, MD Pathology

Elizabeth H. Levick, MD Radiation Oncology, OHC

Elizabeth Weaver, MD Diagnostic Radiology CANCER PROGRAM

Tara Mink, MBA, BSN, RN Program Administrator

Deb Powell, BSN, RN, OCN *Quality Improvement*

Lyn Sontag, PsyD, ASPP Psychosocial Services

Elaine Wiseman, BS, CTR *Cancer Registry Quality*

> Tim Braverman, MD Cancer Conference

Mary Lou Cieslak, RN Community Outreach

Missy Brauckmann Clinical Research



ALLIED HEALTH MEMBERS

K-Lynn Andrews Rehabilitation Services

Kat Muncy, RN Navigation

Mike Devoe, PharmD *Pharmacy*

Casey Faber *American Cancer Society*

Kim Gelhaus, RD Dietary / Nutrition

Rebecca Ingram, RT Imaging

Elizabeth Stein, Chaplain Cert *Pastoral Care*

Kitty Tierney, BSN, RN, OCN, BMTCN Nursing

Jennifer Hopper, MS, CGC Genetics

Samantha Tabor-Tebelman, MSW Case Manager

Julie Workman, MD Palliative Care



The Jewish Hospital — Mercy Health Cancer Conferences

Cancer Conferences provide a multidisciplinary format for the development of a plan of care for the cancer patient. The conferences are integral to improving care and providing education to physicians and hospital staff. Consultative services and education are optimal when physicians representing all oncology-related disciplines participate in the discussion. Patient identities are kept confidential.

The Cancer Conferences are prospective, patient-oriented and multidisciplinary by design. Medical Oncology, Radiation Oncology, Diagnostic Radiology, Pathology, and General Surgery specialties are present to discuss diagnostic evaluations and possible treatment options for the types of cancers presented at the conferences. Physicians from all specialties, including Medical and Surgical residents, are invited to attend.

Treatment options that are based on national guidelines and AJCC staging are the foundations of the discussions. National Comprehensive Cancer Network (NCCN) Practice Guidelines in Oncology, information on open clinical trials, NCDB and cancer registry data are provided for the cancer sites presented.

In 2016 more than 850 new cancer cases were accessioned into our cancer registry, 751 of which were analytic cases.

CANCER CONFERENCES

The **Blood Cancer Center Multidisciplinary Team Meeting** is held each Wednesday.

The Brain Tumor Center Mulitdisciplinary Team Meeting is held on the second and fourth Tuesday of the month.

The **Breast Cancer Conference** is conducted weekly on the first four Wednesdays of the month.

The **General Cancer Conference** is held on the second Tuesday of every other month.

The **GI Cancer Conference** is held on the second and fourth Fridays of the month.

The **Thoracic Cancer Conference** is held on the first and third Fridays of the month. The cancer program also offers educational programs to the community we serve, sponsors support groups, and, in affiliation with OHC, offers access to clinical trials (see the Appendix for a listing of OHC clinical trials).

The Blood Cancer Center's relationship with the Center for International Blood and Marrow Transplant Research (CIBMTR) and the National Marrow Donor Program (NMDP) ensure blood cancer patients have access to diagnosis and treatment, specific clinical trials and the opportunity to participate in cutting edge hematology research.

Accredited by the Joint Commission, The Jewish Hospital is committed to providing outstanding quality of care, services and outcomes, as evidenced by the many accreditations and awards it has earned. Since 1979, the hospital has been accredited with commendation by the American College of Surgeons Commission on Cancer. It has received special recognition for its quality nursing care, excellent compliance with cancer pathology protocols and high clinical trial enrollments. The Blood Cancer Center has been recognized for excellence by the Foundation for the Accreditation of Cellular Therapy (FACT). FACT accredits bone marrow transplant programs that demonstrate exceptional patient care quality. These, and the many other accreditations and certifications earned by The Jewish Hospital, demonstrate a culture dedicated to medical and operational excellence.



Community Outreach

In 2017, the Health collaborative released the Community Health Needs Assessment. The comprehensive report provides data from 23 counties in southwest Ohio, northern Kentucky and southeast Indiana to identify the most serious health risks in our region. Based on the data, The Jewish Hospital cancer programs conducted outreach to increase breast screenings and lung CT screenings.

2017 COMMUNITY OUTREACH SUMMARY FOR THE JEWISH HOSPITAL

Lung CT Screenings	174
Warren County - New breast screenings	52
Warren County - Total breast screenings	822
Hamilton County - Total breast screenings	6252
Total number of community outreach events	133
Total attendees	27,360
Total FTEs	149
Total hours worked	410.5
Total employee volunteers	130
Total hours of service	1173
Total hours of service	366.5







2017 Cancer Program Annual Report 7

2016 Findings of patient lung screenings at The Jewish Hospital

Lung cancer is a significant health problem in the U.S. Approximately 235,000 new cases are diagnosed each year, and nearly 170,000 people with lung cancer die annually. In Ohio alone, nearly 10,000 individuals will be diagnosed with lung cancer and almost 8,000 a year will die as a result. The mortality rate from lung cancer in Mercy Health – Cincinnati's four-county service area (Hamilton, Clermont, Butler and Warren counties) averages 58 per 100,000.

The United States Preventative Services Task Force has recommended that people at risk for lung cancer receive low-dose CT scanning for early detection of lung cancer to help reduce the number of lung cancer deaths. Yearly lung cancer screenings are recommended for people ages 55–79 years old who have smoked a pack a day for 30 years and either continue to smoke or who have quit in the last 15 years.

A study of the effectiveness of lung cancer screening was recently conducted by the National Cancer Institute. The initial results of this eight-year National Lung Screening Trial (NLST) prove that low dose CT scans can help save the lives of people at high risk for lung cancer. The trial found 20% fewer deaths among participants screened with low dose CT.

Nurse navigators play a vital role in the Mercy Health Lung Cancer Screening Program. The navigator coordinates the care of the screening patient to ensure continuity and quality care. While a patient can be referred to the program through a variety of providers, their referral into the program opens the door to a continuum of services for pulmonary health and primary care. The navigator screens the patient and ensures adherence to screening guidelines. The navigator ensures patient follow up with yearly screening and monitoring CTs. By sending reminder letters and making phone calls to patients and PCPs, the navigator will increase the return screening rate. Twenty-five percent of patients requiring a 3-6 month follow-up returned due to nurse navigator intervention.



THE JEWISH HOSPITAL - MERCY HEALTH INITIATED ITS LUNG CANCER SCREENING **PROGRAM IN 2014, RESULTS FOR 2014 ARE PRESENTED BELOW.**

2014

Total lung screenings	84
Results: normal/yearly follow up only (LRAD 1-2)	54
Results: recommended follow up in 3–6 months (LRAD 3–4)	30
Cancer detected	2
Stage 2	1
Stage 4	1
*Current smoker	39

From a patient point of view, screening gives them peace of mind. They appreciate the extra time and attention the navigator takes to explain test results and their monitoring plan. As part of an effective screening program, we offer smoking cessation services to all patients who currently smoke.

The navigator is a complement to the medical team, ensuring follow up, tracking data for program quality management, and enhancing the patient perspective. Collectively the navigator can elevate the health of our patients as we strive to "Be Well." It is what we were meant to do.

2016 Cancer Data Summary and Comparisons

In the U.S. in 2016, top cancer sites in men were prostate (21%), lung (14%), colon/rectum (8%), Non-Hodgkin lymphoma (5%) and liver at 3%. For women, the top cancer sites were breast (29%), lung & bronchus (13%), colon/rectum (8%), female genital (7%) and Non-Hodgkin lymphoma at 4%.

At The Jewish Hospital, the top cancer sites in 2016 were: breast (241 cases/31%), blood and bone marrow (95 cases/12%), lung (76 cases/10%), skin (49 cases/6%) and lymph nodes (45 cases/6%).

Distribution of cases by gender reveals that breast cancer is the top site for females (50%) while blood and bone marrow (18%) is the top sites for males. The table demonstrates the percentage of cases seen at The Jewish Hospital compared to the national average incidence for each cancer site.

2016 TOP CANCER SITES BY SEX UNITED STATES vs THE JEWISH HOSPITAL - MERCY HEALTH

Male	
Blood & bone marrow	
Prostate	
Skin	
Lung & bronchus	
Non-Hodgkin lymphoma	
Colon & rectum	
Kidney	
Bladder	
Stomach	
Liver	

Female

Breast Lung & bronchus Blood & bone marrow Colon & rectum Brain/other nervous system Non-Hodgkin lymphoma Skin Female genital

Kidney

Bladder

US	тјн
4%	18%
21%	13%
6%	12%
14%	11%
5%	8%
8%	6%
5%	5%
7%	4%
4%	3%
3%	1%

US	тјн
29%	50%
13%	9%
3%	9%
8%	6%
	5%
4%	4%
3%	4%
7%	2%
3%	2%
	1%

THE JEWISH HOSPITAL -MERCY HEALTH PERCENTAGE OF NEWLY **DIAGNOSED CASES IN 2016**

Breast	31%
Blood and bone marrow	12%
Lung	10%
Skin	6%
Lymph nodes	6%
Brain and nervous system	5%
Prostate	5%
Colon	4%
Kidney	3%
Pancreas	3%
Bladder	2%
Stomach	2%
Esophagus	1%
Liver	1%
Unknown primary	1%
Other oral cavity	-1%
Other digestive organs	-1%

American Cancer Society. Cancer Facts & Figures 2016. Atlanta: American Cancer Society; 2016.

Cancer Information Resources

The Jewish Hospital – Mercy Health Cancer Program is committed to making a difference in our community. While we offer many educational and screening programs to the community, we want to be sure patients, families and community members are looking at the best sources of cancer information when searching online. Listed below are websites we consider credible and reliable.

AMERICAN CANCER SOCIETY **PROGRAMS AND SCREENING GUIDELINES** cancer.org

or call 800-ACS-2345 (800-227-2345)

INFORMATIONAL WEBSITES

National Cancer Institute 800-4-CANCER or cancer.gov

People Living with Cancer: The official patient information website of the American Society of Clinical Oncology cancer.net/portal/site/patient

National Comprehensive Cancer Network nccn.org/patients

American Cancer Society 800-ACS-2345 or cancer.org

National Library of Medicine nlm.nih.gov/medlineplus/healthtopics.html

US TOO! International, Inc. ustoo.org

National Coalition for Cancer Survivorship canceradvocacy.org

Leukemia and Lymphoma Society lls.org

Ohio Department of Health odh.ohio.gov

Cancer Support Community cancersupportcincinnati.org

Cancer Family Care cancerfamilycare.org

CLINICAL TRIAL INFORMATION

American Cancer Society, Clinical Trials Matching **Service** (a free, confidential program) 800-303-5691 or visit cancer.org

National Cancer Institute (NCI) website cancer.gov/clinicaltrials/search

Coalition of Cancer Cooperative Group cancertrialshelp.org

OHC Clinical Trials OHCare.com/patient- resources/ clinical-trials/#clinical-trials

REFERENCES/SOURCES

American College of Surgeons American Cancer Society National Cancer Institute Electronic Registry System

Skin Cancer Care at The Jewish Hospital – Mercy Health

Our Team

The Dermatology Department at Mercy Health Physicians is comprised of a team of specialists dedicated to offering the most up to date and comprehensive skin cancer care for patients.

Our team includes 6 specialty trained dermatologists who screen thousands of patients each year for skin cancer with the goal of diagnosing skin cancer at its earliest manifestation. Diagnostic care includes photography, dermatoscopy, and skin biopsies. Dr. Allamaneni, surgical oncologist works closely with dermatologists to provide surgical resection of skin cancers and sentinel lymph node biopsy when indicated.

Services Performed

Skin cancer excision and repair, destruction/curettage, topical chemotherapy, photodynamic therapy, oral targeted therapies, and Mohs micrographic surgery.

Treatment plans are individualized for each patient taking into consideration the tumor (including size and histopathologic characteristics), location on the body, and medical comorbidities. Patient care is enhanced by close collaboration and communication among our dermatology experts. Our dermatologists closely collaborate with a fellowship trained dermatologic surgeon who has specialized training in skin cancer management techniques.

Follow up skin cancer screenings allow for close surveillance for new tumors and recurrences and are tailored to patient risk factors and prior tumors.

Precancerous lesions (actinic keratoses) are also treated to remove ultraviolet induced skin damage in an effort to mitigate risk of malignant transformation. Lesions are treated with destructive measures, topical chemotherapy creams, and photodynamic therapy.





Rachel Gustin MD

Emily Eisher MD

2017 STATISTICS

In 2017, 2,114 tumors were detected/diagnosed by our general dermatologists:

1483 Basal cell carcinomas

502 Squamous cell carcinomas

30 Invasive melanomas

95 Melanoma in situ

Other tumors: atypical fibroxanthoma, Merkel cell carcinoma

Total skin cancer excisions: 430

Destruction of skin cancers: 1,246

MOHS NUMBERS FOR 2017

There were 959 Mohs micrographic surgery cases in 2017 with 1206 tumors treated

58% male patients

42% female patients

Our oldest patient was 96 years of age

Our youngest patient was 22 years of age

PATIENT SATISFACTION

Patient satisfaction is of one of our primary concerns in helping patients navigate a diagnosis of skin cancer. Our department consistently achieves high levels of satisfaction in patient surveys.





Jacqueline Fisher DO Pamina Kim MD





Emily Moosbrugger MD

The Blood Cancer Center at The Jewish Hospital – Mercy Health

Healing power close to home

The Blood Cancer Center at The Jewish Hospital provides cutting-edge treatment and excellent outcomes for patients. It provides the most advanced adult blood and bone marrow transplant program in the Tri-State, nationally recognized and accredited by the Foundation for the Accreditation of Cellular Therapy (FACT). The center also earned the Gold Seal of Approval[®] from the Joint Commission, a disease-specific care certification for both Bone Marrow Transplant and Leukemia in 2017.



Mercy Health partners with OHC (Oncology Hematology Care), the largest group of independent medical oncologists, hematologists, radiation oncologists and gynecologic oncologists in Greater Cincinnati, to provide the highest quality of care for patients. These providers work with Mercy Health's multidisciplinary team of healthcare professionals to provide comprehensive, coordinated treatment and support at The Jewish Hospital.

Innovative facilities with a caring touch

Created for patient and family convenience, the 28-bed step-down and intensive care unit located on the third floor of the new, state-of-the-art patient tower at The Jewish Hospital – Mercy Health is designed to make every aspect of treatment as stress free as possible. All the services patients need are located on site, many of them on the same floor.

The inpatient unit includes:

- 22 private HEPA-filtered patient rooms with private bathrooms
- Six full intensive care unit rooms, large enough to handle all equipment needed by a patient with complications requiring closer monitoring
- Full cardiac monitoring capabilities in all rooms
- · Cable television and HDMI connectivity in each room
- Laundry facilities
- A Nutrition Center/kitchen for families and patients stocked with a wide variety of soups, snacks and frozen items

- Spacious accommodations for family members including fold out beds in all rooms
- Free wireless internet access
- A family room equipped with DVDs, books, magazines, puzzles, games, and a large screen TV
- A stationary bike and treadmill available for patients who wish to get more vigorous exercise while in the hospital
- A viewing area for patients to visit with children and family members who may not be able to safely enter the unit
- A family waiting room just outside the unit equipped with a microwave, recliners and couches, laundry facilities, lockers and a restroom with shower facilities.

The unit's capabilities provide for all patient needs including any complications. Patients remain in the Blood Cancer Center for their entire treatment with nurses and other caregivers who understand the care of this complex patient population.

Clinical research and outcomes

In Summer 2018, CAR-T therapy will be available at the Jewish Hospital-Mercy Health Blood Cancer Center with two new FDA approved commercial CAR-T products. In addition, Jewish Mercy Health and Oncology Hematology Care will be collaborating on a new CAR-T clinical trial for aggressive B-Cell Non-Hodgkin Lymphoma. The physicians and scientists can remove T-cells from a person's blood, genetically alter them, and infuse them back into the patient so they can attack the cancer cells. CAR-T therapy is a promising new anti-cancer therapy with the possibility to improve patient-specific cancer treatment in a unique and profound way.

OHC in collaboration with Mercy health offers a wide variety of clinical trials for multiple tumor types including breast cancer, lung cancer, lymphoma, kidney cancer, leukemia and myeloma. In 2017, 217 patients were enrolled on 37 different clinical trials.

The Blood Cancer Center at The Jewish Hospital participates in trials conducted by (and report our research outcomes and data to):

- Eastern Corporative Oncology Group (ECOG)
- National Marrow Donor Program (NMDP)
- American Society for Blood and Marrow Transplantation (ASBMT)
- Ohio Bone Marrow Transplant Consortium
- Blood and Marrow Transplant Clinical Trials Network (BMTCTN)
- Southwest Oncology Group (SWOG)
- Center for International Blood and Marrow Transplant Research (CIBMTR)

Outcomes

Among the nation's leaders in survival outcomes, the Blood Cancer Center is the place where expert treatment, compassionate care and world-class facilities meet to produce extraordinary outcomes. Based on a report from the Center for International Blood and Marrow Transplant Research (CIBMTR), The Jewish Hospital's Blood Cancer Center patient survival rate is comparable to noted bone marrow transplant centers such as Cleveland Clinic, MD Anderson and Ohio State.

Transplant Center

Cleveland Clinic
Indiana University
Ohio State
Duke University
The Jewish Hospital
MD Anderson
Penn State
Franciscan Health
University of Louisville
Sarah Cannon
University of Kentucky
Mt Sinai

Cancer Treatment Centers of America

CIBMTR data - One year survival (First allogeneic transplant 1/2013 - 12/2015) Source: bloodcell.transplant.hrsa.gov accessed 5/31/2018

# pts report outcomes		Predicted 1yr survival %
210	70.9%	63.4 - 75.5%
188	70.1%	65.2 - 77.4%
377	68.2%	64.9 - 73.7%
251	66.4%	59.7 - 71%
110	66.2%	61.8 - 78.3%
1061	63.2%	61.4 - 66.9%
197	61.9%	62.8 - 74.9%
89	61.5%	60.8 - 79%
70	60.9%	57.3 - 77.4%
65	58.5%	58.4 - 79.7%
96	57.3%	57.5 - 75.6%
120	50.0%	51.1 - 67.5%
30	43.3%	49.2 - 81.9%
	12 (2015)	



"It was difficult letting other people take care of me, but they proved time and time again that they are truly unmatched in their ability to remain kind and patient while still delivering evidence-based care."



2017 was a rollercoaster of a year for our family. Having never experienced a cancer diagnosis within our immediate or extended family, we were shocked to learn that my dad's enlarged lymph node was actually due to diffuse large b-cell lymphoma.

As a nurse practitioner, myself, I mostly tried to stay out of his medical business and just remain in the role of the supportive daughter. We learned that his cancer was resistant to the R-CHOP regimen and I decided that I needed to meet this oncologist face-to-face when he suggested an autologous stem cell transplant. In July 2017, we found a large tumor in my chest. Dr. Essell didn't blink before taking on my case, as well. Soon after, I was diagnosed with Hodgkin's Lymphoma and began chemotherapy.

My first round of chemotherapy was on Friday, August 4. Not knowing what to expect, I took the weekend off and planned to return to work on Tuesday. Well my body wasn't having it, so I was forced (by my husband) to go to the clinic to get fluids. Fate would have it that my dad was having his stem cell transplant that day, and so instead of missing it due to work, I was able to get wheeled right from the clinic on over to the BCC unit to see him get his last of ten bags of stem cells!

In November, we found out that my cancer, too, was resistant to chemotherapy and had come back with a vengeance, I have to admit that I wasn't surprised. I was told that I, too, would require an autologous stem cell transplant as my best chance at a cure.

Today, my dad has been given a clean bill of health - we are officially using the word "remission" when referring to his disease. Hopefully I will continue to be just like my dad so that we can both officially say that we BEAT lymphoma.

Obviously none of this would have been possible without our unbelievable support network; Dr. Essell, Diane, and Maria served as reliable and caring experts throughout the entire process - I can't speak for my dad on this, but they helped me to understand that while I might know a lot about healthcare I needed to take a step back and allow myself to just be a patient. It was difficult letting other people take care of me, but they proved time and time again that they are truly unmatched in their ability to remain kind and patient while still delivering evidence-based care.



The Breast Cancer Center & Jewish Women's Center at The Jewish Hospital — Mercy Health

I Know program launched

The Jewish Hospital Breast Cancer Center (JHBCC) is proud to introduce the new I Know program in 2017. This program allows the patient to continue from screening mammography to biopsy (if necessary) within the same visit alleviating the anxiety of waiting. All biopsy results are reported to the patient within twenty-four hours by our breast navigators or our physicians, also easing worry and fear. We have successfully decreased the turnaround-time from biopsy to results provided to patients from baseline of 55-hours to 22-hours. To date, more than 4,000 women have participated in the I Know program.

Advanced diagnosis for early detection

The Jewish Hospital Breast Cancer Center (JHBCC) is staffed by professionals including board-certified and breast fellowship trained radiologists, dedicated breast surgeons, licensed mammography technologists, certified breast ultrasound technologists and National Consortium of Breast Centers (NCOBC) certified breast navigators.

The JHBCC is accredited by the National Accreditation Program for Breast Centers (NAPBC), a program of the American College of Surgeons and an indicator of guality. It is also recognized as a Center of Excellence by the American College of Radiology.

SERVICES OFFERED

The JHBCC offers a full range of services including digital mammography, 3D/CV mammography (which allows for the lowest possible radiation dose), high-resolution ultrasound, breast magnetic resonance imaging (MRI), as well as a full complement of biopsy techniques using stereotactic, ultrasound and MRI guidance.

The breast cancer specialists recognize the importance of providing a multi-disciplinary team approach when caring for patients. Mercy Health breast surgeon, Anna Sobolewski, MD and boardcertified pathologist Timothy S. Braverman, MD, along with board-certified lead interpreting radiologist, Elizabeth Weaver, MD meet with OHC board-certified medical oncologist Karyn M. Dyehouse, MD and OHC board-certified radiation oncologist Elizabeth H. Levick, MD at weekly

multidisciplinary cancer conferences. These conferences including pathologists, gynecologists, certified breast navigators, infusion room nurses, social workers, patient advocates and genetic counselors provide an opportunity for health professionals to discuss diagnosis and treatment options for individual patients to optimize their care.

Working together to improve outcomes

Mercy Health is now offering patients requiring surgery for breast cancer a new device that can help improve the treatment of breast cancer called BioZorb[®]. This innovative device guides physicians to deliver more precise radiation treatment after lumpectomy of the breast has removed the cancer. "The Biozorb[®] device allows for more accurate targeting of postoperative radiation treatments." said Dr. Anna Sobolewski, breast surgeon.

A breast cancer diagnosis can threaten not only a woman's life, but also her self-confidence. With new surgical techniques, surgeons are now able to achieve optimal cosmetic results and improved quality of life for breast cancer patients. By performing Hidden Scar Breast Cancer Surgery, our surgeons effectively treat cancer while preserving the natural shape of the breast, leaving no visible reminder behind. As stated by Dr. Anna Sobolewski, "Using Hidden Scar breast surgery, we can hide the

surgical scar in a less conspicuous area and preserve a natural looking breast. "Patients should not have to be reminded of their breast surgery whenever they look in a mirror."

Because early diagnosis ensures a better outcome for patients, the center offers a Heredity Risk Assessment Program. We have performed screening mammograms and risk assessments for over 26,500 women to date and over 3,000 have been identified as high risk. A genetic counselor is available on site for genetic counseling and testing. Since this testing can reveal the presence of potential genetic problems our breast surgeons offer high risk breast clinics for patients requiring closer care.

The JHBCC offers guidance through navigation services to our patients. Our certified breast navigators coordinate care through the diagnostic period, educate and comfort patients during treatment, assist in coordinating interdisciplinary care and track patients through post treatment.

PHYSICIAN SPOTLIGHT

Dr. Neil Kundu

Originally from Cleveland, Dr. Neil Kundu completed a 6-year accelerated combined BS/MD in his home state of Ohio. He holds undergraduate degrees from Youngstown State University in Biology and Chemistry with dual minors in Psychology and



Developmental Psychology. He then completed his medical education at Northeastern Ohio Universities College of Medicine.

Dr. Kundu completed both his General Surgery Residency and Plastic Surgery Fellowships at the Cleveland Clinic Foundation. During this time, he was elected administrative chief resident in both programs, obtained an academic appointment at the Lerner College of Medicine/Case Western Reserve School of Medicine as a Clinical Instructor of Anatomy, was a member of the face/abdominal wall transplantation teams, and was voted as the Cleveland Clinic Department of Plastic Surgery Resident of the Year in 2014.

Dr. Kundu uses state-of-the-art surgical techniques for breast reconstruction candidates.

Deep Inferior Epigastric Perforator (DIEP) flap construction is the most state-of-the-art and effective technique for using your own tissue is microsurgical breast reconstruction. It is ideal for women with excess abdominal fat who prefer an alternative to implant-based breast reconstruction producing a more natural look and feel.

Benefits of the DIEP flap procedure:

- Feels more natural than an implant
- Ages like a natural breast
- May be firmer with a more youthful appearance
- Can be done any time after a mastectomy, including nipple-sparing mastectomy
- Can be done on both breasts at the same time
- Can avoid some of the long-term issues associated with implants
- Minimizes the potential for abdominal wall hernias or "bulges" that can occur with non-microsurgical TRAM procedures
- Can be used to repair previous reconstructions to provide a more natural-looking results
- May improve the contour of the abdomen, much like a tummy tuck

The Jewish Hospital Women's Center offers high risk assessment services and counseling.

The Breast Cancer Center extends more than \$8000 a year in low-cost or free screening mammograms to low income families. Our accredited mobile mammography program reaches 10,000 women per year.

2017 BY THE NUMBERS

Warren County - New breast screenings	57
Warren County - Total breast screenings	822
Hamilton County - Total breast screenings	6252
Total number of health fairs	41
Total attendees	4747
Screenings performed at these health fairs	843
Total paid hours worked	339
Total volunteer hours worked	425
Total hours of service	764



Anna Sobolewski, MD Karyn Dyehouse, MD Elizabeth Levick, MD



Elizabeth Weaver, MD Timothy Braverman, MD

Dianne Hardin: Breast cancer survivor

My journey with Mercy Jewish Women's Center actually started eight to ten years ago, when I first started having my baseline mammogram. I watched the evolution of the women's center. Due to my health issues I am religious about having my mammogram. I am there on day 366 every year. I have always had a high level of confidence over the last 8 years, having all my films read in one place. As my level of confidence in the center increased, my anxiety decreased. But, the evolved process of results before I leave is not only comforting but relieved my anxiety completely.

This year, I walked in at 9:30 for a routine screening mammogram. By 12:30 that morning I had not only completed my screening mammogram, but additional views and two biopsies. It was an overwhelming experience, but one I would not have done any different. The nurse, Mary Lou and ultrasound tech Amanda made me feel like I was the most important person at the center. The radiologist not only read my images, but he integrated himself into my care. Each image was fully explained to me.

It was heartbreaking to be called by 10:30 the next morning with positive results. But, I had an emotional link with Mary Lou (nurse navigator) already due to the continuation of care the day before. She had held my hand and comforted me. She and I walked through my results, scheduled my appointment with a breast surgeon, and made a plan for her to call me for the next six weeks to help navigate me through my new journey. I knew this was a cohesive team and "felt they had me". While I was figuring out what am I going to do next, you guys already had it figured out. What a comfort!

Surgical Oncology at The Jewish Hospital—Mercy Health

Value Statement and Commitment to Quality-of-life treatments

The goal of The Jewish Hospital team dedicated to GI, Liver and Pancreatic Oncology is to enhance patients' quality of life with a treatment plan that focuses on both the patient and referring physician by coordinating treatment strategies designed to offer optimal outcomes for those suffering with GI, liver/ pancreas disease and cancer. Through integrated clinical practice, education and research, we hope to inspire hope and well-being by providing the best care to every patient.

New era at Jewish Hospital in the treatment of patients with cancer of the gastro-intestinal area - Robotic cancer surgery.

Shyam S. Allamaneni, MD is a board certified surgeon who specializes in surgical oncology with a focus on the gastrointestinal (GI) tract, including the esophagus, stomach, small intestines, liver, pancreas and gall bladder.

Working with an experienced multidisciplinary team at The Jewish Hospital, Dr. Allamaneni provides guidance and surgical management of

more advanced diseases always with the goal of achieving clear and clean margins of the cancer.

Dr. Allamaneni performs minimally invasive surgical techniques Robotically and/or laparoscopically. Performing surgery robotically allows Dr. Allamaneni to view 3-D images of the body. The robot allows for small, more precise hand movements in ways that the human hand is not

Dr. Allamaneni's specialties include:

- Esophageal cancer
- Stomach and small intestine cancer
- Primary Liver cancer
- Metastatic cancer to liver
- Gallbladder and biliary tract cancer
- Pancreatic cancer
- Colon cancer
- Anal and rectal cancer
- Adrenal gland tumors
- Neuroendocrine tumors
- Squamous cell carcinoma
- Basal cell carcinoma
- Melanoma
- Sarcoma
- Various secondary malignancies

18 The Jewish Hospital – Mercy Health

capable of utilizing 360 degree movements. These precision-based procedures target tumors while creating smaller incisions resulting in quicker recoveries. We are using robot to perform surgery on patients with various cancers including gastric, liver, pancreas, small bowel, colon, retroperitoneal and adrenal tumors.

No two cancers are alike. Dr. Allamaneni and the multi-disciplinary team welcomes the opportunity to talk to fellow physicians, patients, and their families about potential approaches to cancer treatment. He not only does this in the tristate area but also across the world.

The multi-disciplinary team is composed of surgeons, oncologists, gastroenterologists, nurse practitioners, pathologists, radiologists, nurse navigators, nurses, and physical and occupational therapist. Other disciplines may be consulted as each patient has unique needs. The team is at the forefront of cancer care, providing care to complex oncological patients. The team meets on Fridays discussing the complexities and treatment options for the patients. Close contact with the patients, monitoring their health throughout the entire treatment journey, before, during and after surgery is the foundation of the multi-disciplinary oncology surgery team. One of the key players is the nurse navigator.

"When my grandfather was diagnosed with cancer I knew he was going to have a rough road ahead of him. As a nurse on the fourth floor progressive care unit I have had great experiences with Dr. Allamaneni and his patients. His skill and wonderful bedside manner, along with all of the fantastic nurses, were the reason our family chose The Jewish Hospital for my grandfather's surgery." Again I can't thank you enough for all you have done and continue to do for my family! You're the best!

Cassie Schulman, RN

Nurse navigator supports patients and their families throughout their treatment for cancer

Mark Kroger plays a vital role within the multidisciplinary team as the nurse navigator. In his role he provides care coordination, education and support to patients and their families through each phase of cancer care. This service empowers patients to make informed decisions during a critical time in their life.

As a cancer survivor. Mark appreciates the concerns and anxieties patients may have as they progress through their cancer care. His friendly, non-threatening approach is evident with every interaction he has with patients and their families. He frequently checks on them at home, in the office, in the hospital and again after they are discharged home. Mark loves his job and treats his patients like they are part of his family.

2017 Cancer Program Annual Report 19

William Duncan: My journey with stomach cancer

After experiencing several days of nausea, chills, night sweats and abdominal distention, William Duncan was admitted in early June 2017 for a gastrointestinal hemorrhage with melena. An esophogastrodudenoscopy (EGD) and endoscopic ultrasound (EUS) revealed a 2cm ulcerated mass in his stomach and he was diagnosed with gastric adenocarcinoma at 84-years old. The patient and his family were worried about treatments given his age although he was functionally active so they sought the opinion of a surgical oncologist.

They did not need to search for too long as his granddaughter is a nurse who works at The Jewish Hospital knew the successful outcomes for Dr. Allamaneni's patients. Dr. Allamaneni discussed with William his options and ultimately decided together to proceed with surgery. William and his family were happy to know that he was a candidate for robotic surgery given his age. On July 17th, 2017 Dr. Allamaneni performed a robotic assisted subtotal gastrectomy with lymph nodes removal. William did remarkably well and was discharged home with no complications.

Today, Mr. Duncan reflects on his experience with Dr. Allamaneni and his team at The Jewish Hospital--Mercy Health with gratitude - "Dr. Allamaneni and his staff were great. They checked on me often even after I was discharged from the hospital. I am grateful for everything they have done for me and my family." When asked how he is feeling now William replied "It feels like I've never been sick at all." Almost one year from his surgery, Mr. Duncan enjoys all the activities that he did before surgery. He says - "Robotic surgery did help me to recover quickly". He shows his small scars to his family and friends proudly and is without recurrence of cancer at this time.

There are a variety of treatments included in the treatment of gastric cancer. Surgical procedures may include removal of the total stomach called a total gastrectomy or a partial removal of the stomach called a subtotal gastrectomy. Studies have shown that the results are better when both the surgeon and the hospital have extensive experience in treating patients with stomach cancer. At Jewish Hospital, Dr. Allamaneni's team has extensive experience in caring for a patient and family diagnosed with stomach cancer.





Average age at

6 out of 10

years or older

people diagnosed with

stomach cancer are 65

1/95 males

will develop stomach

cancer in their lifetime

diagnosis is

68

By the numbers:

26,240 stomach cancer incidences. 16,520 males

9,720 females

10,800 stomach cancer associated deaths

1/154 women will develop stomach

cancer in their lifetime

American Cancer Society

The Jewish Hospital — Mercy Health Oncology Radiation department

Precise, specialized treatments for lung cancer

Lung cancer is by far the leading cause of cancer death among men and women; about one out of four cancer deaths are from lung cancer. The most prevalent type of lung cancer is non-small cell lung cancer (NSCLC). Depending on the stage of the cancer and other factors, treatment options for people with NSCLC can include surgery, radiofrequency ablation, radiation therapy, chemotherapy, targeted therapies and immunotherapy.

The Jewish Hospital – Mercy Health Oncology Radiation department offers leading edge treatment and works with the patient to determine which type of treatment is best for their diagnosis. Types of radiation treatment offered include 3-D Conformal, Gamma Knife[®] Radiosurgery, Intensity Modulated Radiation Therapy (IMRT), Image Guided Radiation Therapy (IGRT) and Stereotactic Body Radiation Therapy (SBRT).

Before treatments start, The Jewish Hospital and The evolution of radiation therapy has made OHC multi-disciplinary radiation team will take dramatic strides when it comes to its application careful measurements to determine the correct and treatment of many cancers. The ability to target angles for aiming the radiation beams and the a tumor with enhanced precision and sparing of proper dose of radiation. This planning session, healthy surrounding tissue has resulted in improved called simulation, usually includes getting imaging patient outcomes and a reduction in side effects tests such as CT scans. that can occur from the treatment. OHC board-Instead of giving a small dose of radiation each day certified radiation oncologists Dr. Peter Fried, Dr. for several weeks, SBRT uses very focused beams Elizabeth Levick, Dr. Marc Mosbacher and Dr. David Pratt support the team at The Jewish Hospital treatments. Several beams are aimed at the tumor

of high-dose radiation given in fewer (usually 1 to 5) - Mercy Health Radiation Oncology Department. from different angles. To target the radiation Radiation therapy is a type of cancer treatment that precisely, the patient is put in a specially designed uses ionizing radiation to destroy or slow the body frame for each treatment. This reduces the growth of cancer cells. The most commonly used movement of the lung tumor during breathing. Like radiation therapy is external beam radiation therapy other forms of external radiation, the treatment (EBRT). In external radiation treatments, a beam of itself is painless. radiation is administered to a precise part of the Results with SBRT for smaller lung tumors have body, using a machine called a linear accelerator.

been very promising. Some studies show local control rates up to 90 percent compared to surgical **Stereotactic Body Radiation Therapy** intervention and lower complication rates. In (SBRT) for early stage lung cancer addition, studies are being conducted that evaluate SBRT treatment of tumors that have spread to other External beam radiation, in particular SBRT, is most parts of the body, such as the bones and liver. SBRT often the modality of choice for early lung cancer, techniques also have been shown to help doctors especially non-small cell lung cancer (NSCLC) and treat lung cancers more accurately while lowering is sometimes used if the cancer has spread to other the radiation exposure to nearby healthy tissues. organs. Depending on the stage of NSCLC and other factors, radiation therapy might be used:

- As the primary treatment (sometimes along with chemotherapy), especially if the lung tumor can't be removed because of its size or location, if a person isn't healthy enough for surgery, or if a person doesn't want surgery
- After surgery (alone or along with chemotherapy) to try to kill any small areas of cancer that surgery might have missed
 - Before surgery (usually along with chemotherapy)to try to shrink a lung tumor to make it easier to operate on
 - To treat a single area of cancer spread, such as a tumor in the brain or an adrenal gland (this might be done along with surgery to treat the main lung tumor)
- To relieve (palliate) symptoms of advanced lung cancer such as pain, bleeding, trouble breathing, or problems caused by spread to other organs such as the brain



The Gamma Knife[®] team at The Jewish Hospital — Mercy Health

The Gamma Knife® team at The Jewish Hospital – Mercy Health has treated more than 660 patients with a variety of brain tumors and other lesions of the brain. Today, it remains Greater Cincinnati's only Gamma Knife[®], one of only 300 Gamma Knife[®] treatment locations in the nation. Patients have traveled to The Jewish Hospital for treatment from as far away as Montana and Virginia.

Gamma Knife uses precise, high-intensity gamma rays to treat lesions in virtually any location in the brain with ultra-high precision and minimal effect on healthy tissue. When a small tumor is being treated, a single dose of radiation is given in a single session using a rigid frame. When a large tumor is being treated, radiation is given in 5 treatments using a mask system. The ICON promises accuracy to .5 millimeters while delivering a radiation dose to healthy tissue that is two to five times lower than competing technologies. The ICON's frameless "mask" option enables treatment of previously challenging tumors, including large lesions. Gamma Knife[®] can also be used to treat other neurological conditions and vascular disorders. Gamma Knife[®] procedures last several minutes to several hours depending on the size of the area needing treatment and most patients can go home the same day. Because Gamma Knife® procedures are incision-free, patients benefit from guicker recovery times as well as reduced chance of infection.



GAMMA KNIFE® CASES		
Total Cases to date	660	
2016 Framed Cases	159	
2017 Framed Cases	174	
2017 Frameless Cases	18	

The Gamma Knife[®] team, including physicists and nurses, is supported by neurosurgeons Dr. Ronald Warnick and Dr. George Timothy Mandybur, as well as OHC board-certified radiation oncologists Dr. Peter Fried, Dr. Elizabeth Levick, Dr. Marc Mosbacher and Dr. David Pratt. Our team of experts work collaboratively to create the patient's treatment plan and perform the procedure. Together, they have treated patients with:

- Brain metastases, cancer that has spread to the brain from elsewhere in the body
- Trigeminal neuralgia, a painful condition of the nerve responsible for most facial sensation that is sometimes called the "suicide disease" because of the excruciating pain it causes
- Meningiomas, a series of tumors that arise from the meninges or membrous tissue that surrounds the central nervous system
- Hematology Care) and co-director of the Gamma Knife[®] program at The Jewish Hospital. "It's very • Acoustic neuromas, tumors that grow on the satisfying to know that with this innovative tool, nerve connecting the ear to the brain we've helped hundreds of people."
- Pituitary tumors known as adenomas
- The neurological disorder known as essential tremors
- Glioblastomas, which are common, aggressive brain tumors
- Hemangioblastomas, which are tumors of the central nervous system.



- The Gamma Knife[®] also is used to address arteriovenous malformation (AVM). AVM is an abnormal tangle of arteries and veins that disrupts normal blood flow in the brain. Most people don't know that they have
- an AVM until they experience symptoms such as headaches, seizures, weakness, numbness, deteriorating vision or hemorrhage. The Gamma Knife[®] procedure cuts off the arteries that feed the AVM.

"The Gamma Knife® at The Jewish Hospital continues to have a strong beneficial impact on the men and women suffering from a range of disorders, including tumors and lesions impacting the skull, sinuses, eyes and neck and the nerves and arteries that support them," said Peter R. Fried, MD, radiation oncologist with OHC (Oncology

Gamma Knife® treatment has little risk of potential morbidity, such as hemorrhage and infection, which are associated with conventional surgery. More than 30 years of clinical studies documented in more than 2,500 published medical papers reveal the effectiveness of Gamma Knife® surgery.

Ruth & Vivien's story: Meningioma tumors

Ruth has six small meningioma tumors on the lining of her brain. Her daughter Vivien has three. But neither woman seems very concerned. "Neither one of us considers the tumors to be a big deal," says Vivien, "especially now that they can be treated with the Gamma Knife™."

Ruth and Vivien do not currently require treatment for the tumors, according to their doctor, Ronald Warnick, MD, a neurosurgeon at Mayfield Brain & Spine and Co-Director of the Gamma Knife Center at The Jewish Hospital – Mercy Health, But if the tumors grow and treatment is required, the mother-daughter pair knows what lies ahead. Both have already undergone stereotactic radiosurgery for a previous meningioma, and both know how remarkably fast and painless the treatment is.

"The procedures that they do sound scary, but they aren't," Ruth says. "When you go in for Gamma Knife, they put that frame on to stabilize your head. Between the treatment planning stage and the actual treatment, they give you breakfast. It was no big deal."

Says Vivien: "I was back to normal as soon as I left." Ruth and Vivien's comfort stems partly from the benign nature of their tumors.

Meningioma tumors arise from membranes (meninges) that surround the brain and spinal cord. Most meningioma tumors grow slowly, and doctors typically monitor them with annual MRI scans. If the tumors grow too large, they may press on brain tissue and impact nerves and blood vessels, making treatment necessary.

"The doctor says anytime you have a brain tumor, benign or not, it will eventually kill you if it keeps growing," Ruth says.

Ruth, now in her 80s, was 60 years old when her first tumor was removed. The tumor, which had been discovered four years earlier during a test for another medical issue, had grown to the size of a small egg. Ruth underwent traditional surgery at Mayfield, and the tumor was removed through a sizeable opening (a craniotomy) in her skull. She had a second tumor removed five years later, though this time technological advances allowed her surgeon to make a much smaller craniotomy. By the time Ruth required treatment for a third meningioma, Gamma Knife was available.

By coincidence, Vivien required treatment at the same time, as a meningioma that was once the size of a pea



had grown to the size of a grape. The mother-daughter pair had Gamma Knife radiosurgery one month apart, and Dr. Warnick's office affectionately called them "the Gamma Girls."

During treatment, hundreds of low-dose beams of radiation were aimed at their tumors, converging on a single point to kill the tumor cells while sparing healthy cells nearby. Radiation works by damaging DNA inside the cells, making them unable to divide and grow. Over time, the tumor cells die off, and the mass becomes imperceptible on future brain scans.

Vivien says her brain tumor diagnosis has changed her perspective on life. "Things happen, and you just take it in stride," she says. "You deal with whatever is in front of you and don't worry about it."

The initial diagnosis is scary, they both agree. "But after the initial shock, it's not something to worry about, because it's easily treatable," Vivien says. "They can see it if it does grow."

Observes Ruth: "I was fortunate to have this type of tumor, because they can do something about it. Anymore, I don't have to really worry about it. I have regular scans. Everything is OK right now."

The women's shared routine extends to their follow-up appointments, which they schedule back-to-back. Dr. Warnick sees them in the same exam room, starting with Ruth and then segueing to Vivien.

Both women praised their clinical team. "The entire staff is up front and explains everything they know about your condition as well as all treatment options," Vivien says. "It's a team that really cares about what they do. I would like to thank all of them, but especially Dr. Warnick, because I felt very confident that I understood what was going on with me as well as the options available. I know that he's going to tell me everything that he will do, and that he will do a good job."

Cindy Starr

Neuro-oncology at The Jewish Hospital – Mercy Health

The Jewish Hospital partners with Mayfield Brain and Spine to provide a full spectrum of neurooncological care. The hospital serves as Mercy Health – Cincinnati's neurosurgery center of excellence. The neuro-oncology program at The Jewish Hospital is committed to providing caregivers with the best available technology. promoting continuous improvement, ensuring patient safety and achieving patient satisfaction. Working in partnership with The Blood Cancer Center, radiation oncologists and neurooncologists, the neurosurgery team cares for patients with a wide range of neuro-oncologic diseases, including primary brain tumors, meningioma, metastatic disease to the central nervous system and blood cancers (lymphoma and leukemia).

Highlights of the program include:

Mercy Health recently invested in the Brainlab Airo Kennedy, and Mitch Rupard. They bring years of intra-operative CT and navigation system, the first experience to the team. They will be available on such system to be installed in Ohio. The acquisition week days for inpatient consults and management ensures that The Jewish Hospital's surgeons are of floor and ICU patients. supported by state-of-the-art technology when performing delicate cancer operations. The newest There is 24/7 Neurology coverage through Leica operative microscope provides surgeons real Riverhills, the team is led by Dr. Blake Smith and a time intraoperative naviga-tion and, through use of newly hired Neurology NP, Christina Vest. Dr. Smith the recently FDA approved drug 5-ALA, they can rounds in hospital on most weekdays. better visualize aggressive brain tumors while they are being removed.

The Jewish Hospital offers the benefits of the Gamma Knife[®] radiosurgery suite, updated to ICON Gamma Knife Technology allowing for fractionated treatments. This technology allows surgeons to provide safe, precisely targeted radiation treatment for metastatic and primary disease involving the central nervous system, as well as adjuvant radiation following tumor removal surgery.

The continuum of tertiary care at The Jewish Hospital also includes expertise from dedicated specialists in oncology hematology care and area neuro-oncologists, who oversee the chemotherapy phase of treatment for patients. Through its partnership with neurosurgical provider Mayfield Brain and Spine, The Jewish Hospital also has made significant investments in education. A hands-on "Neuro 101" course to more than 50 nurses who work on the neurosurgical floor, in the ICU and in

the operating room. The course was part of a continuing initiative to grow a culture of excellence in neuroscience care. "A patient-focused culture of precision, teamwork and compassion is critical in creating a safe environment for complex neurooncology patients, especially in the peri-operative setting," said Dr. DiNapoli,

The program is led by Drs. Vincent DiNapoli and Ronald Warnick. Dr. Zachary Tempel, who joined Mayfield Brain and Spine, has recently been appointed director of spinal surgery. He specializes in complex spinal reconstruction for degenerative disease, spinal deformity, scoliosis and oncologic procedures. We have recruited Dr. Yair Gozal who is completing a fellowship in skull base and neurooncology, he will be joining Mayfield and the team at Jewish in early August.

There are currently 3 neurosurgery NPs hired by Mercy for Jewish Hospital. Andrea Stoll, Erin





Yair Gozal, MD, PhD Blake Smith, MD





Vincent DiNapoli, MD Ronald Warnick, MD Zachary Tempel, MD





Ray Wene: Cancer patient

Our journey began on June 24, 2017, when my husband, Ray, was late for a real estate closing appointment that was taking place at Mercy West Hospital. When he finally showed up, Ray's clients, who had gotten to know him during their time working together, recognized that Ray's behavior was abnormal. He was late, which is rare, but he was also acting strange, and that was enough for his clients to ask if they could take him down to the emergency room. Thankfully, Ray agreed.

I met Ray in the ER as soon as I could. When I arrived, I spoke with the ER staff and told them that it was possible that Ray had a stroke. He had recently been diagnosed with diabetes, and my first inclination was that the diagnosis and this episode must be related. With that information, the staff instantly took Ray in for a CT scan. The results were clear—and they changed everything.

Ray did not have a stroke that day. What he did have was something totally different: a 4.5cm x 2.5cm tumor on his left front lobe. Ray was quickly transported from Mercy West to Jewish Hospital for further evaluation and care. As soon as we arrived, Ray was taken straight to the intensive care unit. As you can imagine, at this point I was in complete shock and functioning fully on autopilot. Ray's change in behavior was due to pressure and swelling on his brain, and during our time at the hospital, he was floating in and out of awareness of what was going on. His care team put Ray on steroids reduce the swelling, and he was taken for an MRI, where we met Dr. DiNapoli and Andrea Stoll. We instantly felt a connection with both. Dr. DiNapoli had the best bedside manner and was genuinely concerned about Ray. Andrea was a guardian angel, at least to me. She made sure I understood what was being said and she comforted me-something that feels nearly impossible to do in a situation as overwhelming and emotional as ours was that day.

We spent a week in the ICU. The residents and nursing staff were amazing. They were patient with us and welcomed our constant flow of visitors with open arms, which is amazing since our room was like a revolving door of friends, family, and loved ones. We quickly became friends with two of our nurses, Rachel and Bill. They were both amazing to us during our time in the hospital. When Andrea would come to check in on us or share more information, she always had a warm smile on her face and made me feel at ease during a time of great uncertainty. To top it off, Dr. DiNapoli is the most amazing surgeon! Not only did he contribute to saving my husband's life; he made sure we were comfortable and understood the details of the surgery and his care afterward, too.

As I look back on the day of Ray's surgery, I can still see the look on Dr. DiNapoli's face and the sadness in his eyes when he told us the tumor was a glioblastoma. or GBM, a very difficult type of cancer to treat. The team got right to work helping us create a care plan. When the physical therapist recommended inpatient physical therapy for Ray before he could come home, Ray and I decided that it was important to us to spend as much time at home as possible with our two children. When Andrea came in to take out Ray's drain tube. I spoke to her about our wishes to do as much care at home as possible. She told me not to worry about it; she would talk to Dr. DiNapoli and we would work it out. I know that Andrea truly cared about our wants and needs, and she advocated for us when it mattered most. Andrea made it possible to allow Ray to come home, and we will forever be grateful for that additional time as a family. As a testament to the personal care we received, Bill, one of Ray's nurses, gave us his personal cell phone number and asked us to text him on the day of Ray's surgery so he could know the outcome while he was away from work. Bill came to the hospital that afternoon to check on both Ray and me, and I feel in my heart that lifelong connections were made that week. Andrea answered every text message I sent her after we were discharged, and Dr. DiNapoli is still an active part of Ray's care. We greatly value his opinion and the love and support of Ray's entire care team.

We cannot say enough about the staff at Jewish Hospital. From the cleaning crew to the nursing staff. we have made some true friends, and that has made all the difference. Jewish Hospital will always hold a special place in my heart. Every time I drive past the hospital (which is often!), I think of our experience and how blessed we were to have landed there for Ray's care. God had His hand on us and led us to Jewish with the amazing staff and doctors! Forever grateful!

Ray and Tina Wene

Colon Cancer Care at The Jewish Hospital – Mercy Health

Susan Strong: My colon cancer journey

I was diagnosed with cancer during a routine screening colonoscopy. Within a few days, I was meeting with an oncologist, discussing treatments and surgery. It was all very overwhelming. The thought of a major surgery to remove the tumor was scary. Dr. Barrat came recommended by my oncologist. I had many questions that I wanted to discuss with him, prior to meeting him. He quickly returned my call and took his time answering my questions and allaying my fears. His calm, confident, kind personality reassured me that I was making the right decision in choosing my doctor.

From my first appointment, through surgery and follow up appointments, Dr. Barrat continued to confirm that I had made the right choice. He was so knowledgeable about my diagnosis, and had the necessary skills and sense of humor to make me feel at ease. He kept in contact with my oncologist, reviewed my case with the Tumor Board, took extra time with me to discuss surgery plan, the testing that he recommended and outcomes, and even called me the night before surgery to discuss any more questions that I had. Throughout my stay at the hospital, he stopped in to see me daily, even on days that I'm sure he didn't have to be there.

Dr. Barrat is a dedicated doctor. He considers what is best for quality of life and me. For over a year. Dr. Barrat has been a part of my life, and I will be forever grateful to him. After radiation, surgery and chemotherapy, I am now cancer free and thankful to be enjoying life.







PHYSICIAN SPOTLIGHT

Cory D. Barrat, MD is board-certified in Colon & Rectal Surgery, and General Surgery. He focuses on diseases of the colon, rectum, anus, and

small intestine, including surgical and nonsurgical treatment options. He has a special interest in colon and rectal cancer, and

embraces advanced minimally invasive surgical modalities, such as robotic and laparoscopic surgery, to help his patients recover faster, with less pain and less downtime.

Dr. Barrat works very closely with medical oncologists, radiation oncologists, radiologists, pathologists, gastroenterologists, and nurse specialists as part of a multidisciplinary cancer team at the Jewish Hospital. He actively participates in a biweekly multidisciplinary tumor board discussion. He ensures that every patient receives personalized and state of the art medical and surgical care. He strives to make sure patients and families feel comfortable with all aspects of their treatment plan, and have all of their questions answered. He takes pride in his ability to communicate with patients, families, as well as the primary care physicians, and with the help of Nikki Miller, RN, BSN, who serves as the Colorectal cancer nurse navigator, he ensures his patients are well taken care of physically, mentally, emotionally, and spiritually.





John P. Cullen, MD boarded in both General and Colorectal Surgery. He specializes in the treatment of intestinal cancer. inflammatory bowel disease, and

Dr. Cullen is trained in the latest laparoscopic and endoscopic techniques care while minimizing recovery time.

Dr. Cullen works with a team of nurses and physicians from other specialties to provide comprehensive cancer care on complex cases. He completed his medical education at the University of North Carolina. Following that he completed General Surgery residency at University of California San Diego and a fellowship in Colon and Rectal Surgery

is a surgeon double perianal problems.

promoting excellent cancer

at the Cleveland Clinic.

Dr. Cullen has published several peer reviewed articles and book chapters and has presented his research on minimally invasive surgery across the United States and Europe. He was named one of Cincinnati's top doctors in 2017 by Cincinnati magazine.

Jon Labbe

President, Mercy Health –

Cincinnati Foundation



DEAR FRIEND OF MERCY HEALTH,

For many patients, gratitude is part of the healing process. Patients and their family members are generous in expressing their appreciation for the compassionate care and state-of-the-art treatments provided at The Jewish Hospital–Mercy Health to improve or save their lives.

Last year, I received a call from a family that was thankful for the care they received, and wanted to help. We set up a meeting to discuss their experience during their time at The Jewish Hospital's Blood Cancer Center. After a great, candid conversation about the strong bond between care teams, patients, and families, we agreed to create the Blood Cancer Center Experience Enrichment Fund. The fund is one of three at the Blood Cancer Center, and is designed to support our team to provide outstanding, highly skilled care for all we serve. Donations provide meals and materials for monthly caregiver support groups, advance initiatives that enhance the inpatient experience, provide grants for continual nurse education so our patients can receive the best care, and much more.

Although the donors wish to remain anonymous for purposes such as this, they do continue to actively engage with our medical staff, nursing team and foundation help listen to and support needs that may be supported through the fund. Last year alone, the fund grew through additional contributions from across the city to \$75,000. Distributions supported nurses going to conferences so they could come back and share best practices with their colleagues, and even provided funding to supporting the redesign of welcome materials so they are more family friendly. This connection back to the Blood Cancer Center is important not only to this family, but to the nurses and doctors as well.

In this year's Cancer Report, it's my privilege to recognize the individuals who, in 2017, made donations to support cancer related programs at The Jewish Hospital including the Mobile Mammography Program, the Blood Cancer Center, Experience Enrichment Fund, and the Ben Jackson Memorial Fund. We extend our heartfelt appreciation for their desire to help others and to support the physicians, nurses and staff of The Jewish Hospital in providing outstanding cancer care and services.

Be Well,

Jon Labbe

Dr. Sana Waikhom: A patients perspective

In February of 2017, Dr. Sana Waikhom underwent a routine screening colonoscopy and was stunned to learn she had colon cancer. She felt lost, confused, and scared. She began researching online to find the right surgeon and discovered Dr. John Cullen, a Cleveland Clinic trained Colon & Rectal Surgeon at The Jewish Hospital – Mercy Health.

Upon meeting Dr. Cullen, Dr. Waikhom was impressed with his gentle approach, thorough explanation of the treatment plan, and his calm, professional demeanor. Dr. Cullen ordered several tests and scans which were scheduled and completed guickly. Within a week of her initial consult Dr. Cullen performed laparoscopic surgery to remove the cancer. The operation went well, and Dr. Waikhom was pleased to have an easy, uneventful recovery, and guick return to her normal life.

"I had to change from the role of health care provider, to putting on the shoes and gown of a patient. I feel very lucky to have found Dr. Cullen, and I consider him to be the top surgeon of the Mercy *System. He gave me hope of surviving, encouragement and* strength. I thank him for that. To find him was a blessing from God."

Nurse Navigator: Nikki Miller, RN, BSN

Nikki is an integral part of the colorectal multidisciplinary surgical team. As the nurse navigator, she works closely with the surgeons, referring physicians, oncologists, nurse practitioners, and other team members, to ensure that the patient is able to expeditiously move through their treatment course.

"My goal is to be the one constant point of contact for

patients, as they proceed through their treatment process. This includes gathering consult information, test results, scheduling procedures and imaging, and providing education to patients regarding their diagnosis and treatment plan. From the initial phone call to post-surgical care, I follow the patients, their progress, and help in any way that I can."

"I began my career as an oncology nurse, and it has always held a special place in my heart. To assist our patients in this challenging part of their lives is an absolute privilege."



MERCYHEALTH Foundation **Greater Cincinnati**

A gift of true healing

Donating to cancer care programs

At The Jewish Hospital, we provide our patients with the most advanced treatments and compassionate care regardless of their financial resources. True healing is physical, emotional and spiritual. It is more than the medical care we provide. It is helping patients get back to living their best lives.

Many patients and their family members show their gratitude for excellent care by making a charitable gift. Some are inspired to donate because they simply want to help others who are less fortunate. These donors enhance our ability to provide the best care and to offer special assistance for patients with financial hardships. All donors make a positive impact on true healing.

You can choose to make a specific impact by directing your gift to one of many cancer care programs:

- Breast Cancer Care and Women's Health
- Blood Cancer Center
- Ben Jackson Memorial Fund
- Blood Cancer Center Fund
- Patient Enrichment Fund
- General Oncology Care
- GI/Liver/Pancreas Cancer Care
- Lung Cancer Care
- Neuro-Oncology

Ways you can give to oncology programs at The Jewish Hospital

- Mail your gift in the reply envelope
- Make a gift online by visiting foundation.mercy.com/cincinnati/give
- Donate a memorial gift in lieu of flowers
- Include The Jewish Hospital cancer care programs in your will or estate plan.
 Contact Jon Labbe, Mercy Health Foundation President, for details 513-952-4018.

The Jewish Hospital — Mercy Health and The Mercy Health Foundation extend a warm and heart-felt thanks to the following donors who supported cancer care programs in 2017.

Deborah R. Adkins Linda M. Adkins Zain Ahmad Alecia's Jewelry Box Ann Ambler The Asset Advisory Group Inc. Sandra L. Banta Janet E. Beck James P. Bernard Chad Bockhorst Heather Boyd Lisa Brackmann Arnold R. Brewster Edward R. Broun Mary P. Brown Brittney N. Browne Dusti Browning John Broyles Margaret P. Bryant John J. Bultman J. B. Carney Celgene Corporation Central Coast Dive Center Ronda Christopher Chrome Divas Of Cincinnati Michelle D. Clifford Bonnie E. Cochran Susan Colding Community Foundation of West Chester/Liberty Joey W. Crose Deborah L. Davidson **DIRTT Environmental** Solutions Inc. Richard S. Doll Mark E. Douglas Alan R. Doyle Rick J. Drout John W. Dunn Patrick A. Dutson Megan Earhart **Clifton Edwards**

Linda Eichelberger James H. Essell Fidelity Charitable Gift Fund Candace L. Fischer Dave M. Flaig Anna M. Flaig The Forst Foundation Dorothy B. Francis Charitable Foundation James M. Gardner Kim Gelhaus Norbert E. Gilman William Girard Robert Gray Wendy S. Gross Judy Groszek Laura C. Haas Jennifer Haley Stephen D. Hamilton Charles R. Hartman The Healthcare Connection Inc. Heart of Gold Memorial Fund Robert E. Heidler Suzanne M. Henson Leslie S. Hillner Earl J. Hilvers Julie A. Hobart David F. Hodapp Lewis F. Hornsby Juanita Hunn Virginia B. Jackson Stephen M. Jackson Mary A. Jansen Gary M. Jansing Jazz Pharmaceuticals Tandy Jones Kevin D. Kaiser Kashi Clinical Laboratories Robert Keller Steve W. Keller Jessica Kennell

30 The Jewish Hospital – Mercy Health

Accuracy is a high priority for the Mercy Health Foundation. We apologize for any errors. Please call 513-952-4012 for corrections.

Richard G. Kline Lawrence J. Knarr Craig A. Kowalski Vanessa Kurtzer Lakeside Christian Church Seekers Class Dorothy E. Lasko Marge League Tom Leemhuis Jayne Leisring Jacqueline A. Luken Alana J. Mahdalik Karen Mathes Yushonda Y. Matthews Judy A. Middendorf Tara B. Mink Joe Moeddel Kelly R. Myers John Nienaber Raymond Noble Thomas J. Oka Dain A. Paige Jennifer L. Panzeca Dale L. Patterson Pattison Elementary School PTO Sherill Pattison Thomas E. Perazzo Lori J. Pilone Anthony P. Pilone Deborah Powell Douglas C. Prince Robert H. Reakirt Foundation, **PNC Bank Trustee** Nancy L. Reed Terrence P. Rieder Joseph Robertson Robin C. Jewelry, LLC Jessica J. Roser Joseph J. Rozier Meg B. Rusche Bogdan B. Sagatov Kathleen Scally

John G. Schardong Michael S. Schenker Scherpie's Produce & Deli Richard W. Schiebelhuth Roman J. Schneider Julie A. Schoster John T. Schraer Rosalie R. Schraivogel Patricia A. Scott Michelle Sebastiani Kimberly Shadoan **Diane Shapiro** William Shepherd Patrick C. Shryock Samantha L. Siefker Gordon Smith John M. Sparks Charles B. Spencer St. John XXIII Catholic School Ronald J. Stark Mary J. Stegman Jamie Stegman Joseph L. Stolz George Stossel Catherine Tierney Erika Turner United Bank George A. Vandal Marianne Vas Alan Vesper Nicole Vogelsang Charles F. Wiedenmann Mark S. Wietmarschen Lia E. Wilson Don C. Wood Donald R. Worz Jana L. Wylds Scott Wymer Charlene Wynn Richard D. Yenser

2017 Cancer Program Annual Report 31

Appendix – OHC Clinical Trials

SOLID TUMOR CLINICAL TRIALS

BREAST CLINICAL TRIALS

NEOADJUVANT. TNBC

Phase III. Therapeutic. Pembrolizumab provided. A Phase III Randomized, Double-blind Study to Evaluate Pembrolizumab plus Chemotherapy vs Placebo plus Chemotherapy as Neoadjuvant Therapy and Pembrolizumab vs Placebo as Adjuvant Therapy For Triple Negative Breast Cancer (TNBC).

ADJUVANT. HR+. HER2-

Phase III. Therapeutic. Abemaciclib provided. MonarchE: A Randomized, Open-Label, Phase 3 Study of Abemaciclib Combined with Standard Adjuvant Endocrine Therapy versus Standard Adjuvant Endocrine Therapy Alone in Patients with High Risk, Node Positive, Early Stage, Hormone Receptor Positive, Human Epidermal Receptor 2 Negative, Breast Cancer.

ADVANCED/METASTATIC, HR+, HER2-

Phase III. Therapeutic. Tesetaxel and capecitabine provided. A Multinational, Multicenter, Randomized, Phase 3 Study of Tesetaxel plus a Reduced Dose of Capecitabine versus Capecitabine Alone in Women with HER2 Negative, Hormone Receptor Positive, Locally Advanced or Metastatic Breast Cancer Previously Treated with a Taxane.

ADVANCED, AR+, TNBC or ER+, HER2 normal

Star (MWM open). (only Male ER+/TNBC cohort open). Phase II. Therapeutic. VT-464 provided. A Phase 1/2 Open-Label Study to Evaluate the Safety, Tolerability, Pharmacokinetics, Pharmacodynamics and Efficacy of VT-464 in Patients with Advanced Breast Cancer.

METASTATIC, REFRACTORY, HER2+

Star Seed Site. Phase II. Therapeutic. ONT-380/placebo provided. Phase 2 Randomized, Double-Blinded, Controlled Study of ONT-380 vs. Placebo in Combination with Capecitabine and Trastuzumab in Patients with Pretreated Unresectable Locally Advanced or Metastatic HER2+ Breast Cancer (HER2CLIMB).

CHOLANGIO CLINICAL TRIALS

Star (AND/BAM). Phase II. Therapeutic. INCB054828 provided. A Phase 2, Open-Label, Single Arm, Multicenter Study to Evaluate the Efficacy and Safety of INCB054828 in Subjects with Advanced/Metastatic or Surgically Unresectable Cholangiocarcinoma Including FGFR2 Translocations Who Failed Previous Therapy.

COLORECTAL CLINICAL TRIALS

(BAM). Phase II. Therapeutic. TSR-022 provided. A Phase I Dose Escalation and Cohort Expansion Study of TSR-022, an anti-TIM-3 Monoclonal Antibody, in Patients with Advanced Solid Tumors.

KIDNEY CLINICAL TRIALS

ADJUVANT

Phase II. Therapeutic. Pembrolizumab provided. A Phase III, Randomized, Double-Blind, Placebo-Controlled Clinical Trial of Pembrolizumab (MK-3475) as Monotherapy in the Adjuvant Treatment of Renal Cell Carcinoma Post Nephrectomy (KEYNOTE-564).

ADVANCED

(BAM only). Phase IB. Therapeutic. MGCD516 provided. A Phase 1/1b Study of MGCD516 in Patients with Advanced Solid Tumor Malignancies.

ADVANCED, FIRST-LINE

Phase III. Therapeutic. Lenvatinib provided. A Multicenter, Open-label, Randomized, Phase 3 Trial to Compare the Efficacy and Safety of Lenvatinib in Combination with Everolimus or Pembrolizumab versus Sunitinib Alone in First-Line Treatment of Subjects with Advanced Renal Cell Carcinoma

ESOPHAGEAL/GASTRIC CLINICAL TRIALS

METASTATIC, SECOND-LINE

Phase II. Therapeutic. Abraxane and Paclitaxel provided. A Phase II Study of nab-Paclitaxel plus Ramucirumab for the Second-Line Treatment of Patients with Metastatic Gastroesophageal Cancer.

LUNG - NON SMALL CELL CLINICAL TRIALS

NEOADJUVANT

Phase III. Therapeutic. Atezolizumab provided. A Phase III, Double-Blinded, Multicenter, Randomized Study Evaluating The Efficacy and Safety of Neo-adjuvant Treatment with Atezolizumab or Placebo in Combination with Platinum-Based Chemotherapy in Patients with Resectable Stage II, IIIA, or Select IIIB Non-Small Cell Lung Cancer.

STAGE IB-IIIA, MAINTENANCE

Phase III. Therapeutic. Atezolizumab provided. A Phase III, Open-Label, Randomized Study to Investigate the Efficacy and Safety of Atezolizumab (Anti-PD-L1 Antibody) Compared with Best Supportive Care Following Adjuvant Cisplatin-Based Chemotherapy in Patients with Completely Resected Stage IB-IIIA Non-Small Cell Lung Cancer.

Phase IIA. Therapeutic. Erlotinib, Vismodegib, Pertuzumab, Trastuzumab, and Vemurafenib provided. ADVANCED MY PATHWAY: An Open-Label Phase IIA Study Evaluating (BAM only). Phase IB. Therapeutic. MGCD516 provided. A Trastuzumab/Pertuzumab, Erlotinib, Vemurafenib, and Phase 1/1b Study of MGCD516 in Patients with Advanced Vismodegib in Patients who have Advanced Solid Tumors Solid Tumor Malignancies. with Mutations or Gene Expression Abnormalities Predictive of Response to one of these Agents. **METASTATIC, FIRST LINE** Lab only. No drug provided. The Circulating Cell-free Phase IIIb/IV. Therapeutic. Nivolumab/Ipilimumab Genome Atlas (CCGA) Study.

provided. A Phase IIIb/IV Safety Trial of Flat Dose Nivolumab in Combination with Ipilimumab in Participants with Advanced Malignancies.

METASTATIC, MAINTENANCE

Phase IIIB/IV. Therapeutic. Nivolumab provided. A Dose Frequency Optimization, Phase IIIB/IV Trial of Nivolumab Star. Phase II. Therapeutic. Rucaparib provided. A 240 mg Every 2 Weeks vs Nivolumab 480 mg Every 4 Multicenter, Open-label Phase 2 Study of Rucaparib in Weeks in Subjects with Advanced or Metastatic Non-small Patients with Metastatic Castration-resistant Prostate Cell Lung Cancer who Received up to 12 Months of Cancer Associated with Homologous Recombination Nivolumab at 3 mg/kg or 240 mg Every 2 Weeks Deficiency (TRITON2). (CheckMate 384).

METASTATIC, SECOND-LINE+

(Sitravatinib arm only). Phase II. Therapeutic. Sitravatinib provided. A Parallel Phase 2 Study of Glesatinib, Sitravatinib or Mocetinostat in Combination With Nivolumab in Advanced or Metastatic Non-Small Cell Lung Cancer (MRTX-500).

(BAM). Phase II. Therapeutic. TSR-022 provided. A Phase I Dose Escalation and Cohort Expansion Study of TSR-022, an anti-TIM-3 Monoclonal Antibody, in Patients with Advanced Solid Tumors.

NEUROENDOCRINE

Star. Phase III.Therapeutic. Lanreotide Autogel/Depot provided. A Phase 3, Prospective, Randomized, Double-Blind, Multi-Center, Study of the Efficacy and Safety of Lanreotide Autogel/Depot 120 mg plus BSC vs. Placebo plus BSC for Tumor Control in Subjects with Well-Differentiated, Metastatic and/or Unresecteable Typical or Atypical Lung Neuroendocrine Tumors (Spinet)

LUNG -SMALL CELL CLINICAL TRIALS

FRONTLINE

(BAM only). Phase I/II. Therapeutic. Rovalpituzumab Tesirine provided. A Study of Rovalpituzumab Tesirine (SC16LD6.5) in the Frontline Treatment of Patient with Delta-Like Protein 3-Expressing Extensive Stage Small Cell Lung Cancer.

MELANOMA CLINICAL TRIALS

(BAM). Phase II. Therapeutic. TSR-022 provided. A Phase I Dose Escalation and Cohort Expansion Study of TSR-022, an anti-TIM-3 Monoclonal Antibody, in Patients with Advanced Solid Tumors.

MOLECULAR PROFILING CLINICAL TRIALS

(BAM only). Phase IB. Therapeutic. MGCD516 provided. A Phase 1/1b Study of MGCD516 in Patients with Advanced Solid Tumor Malignancies.

PROSTATE CLINICAL TRIALS

Star. Phase III. Therapeutic. Atezolizumab provided. A Multicenter, Randomized, Open-label Phase 3 Study of Rucaparib versus Physician's Choice of Therapy for Patients with Metastatic Castration-resistant Prostate Cancer Associated with Homologous Recombination Deficiency (TRITON3).

(BAM only). Phase IB. Therapeutic. MGCD516 provided. A Phase 1/1b Study of MGCD516 in Patients with Advanced Solid Tumor Malignancies.

SKIN CLINICAL TRIALS

Star. Phase II. Therapeutic. Pembrolizumab provided. A Phase 2, Open-Label, Single Arm Study to Evaluate the Safety and Efficacy of Pembrolizumab in Participants with Recurrent or Metastatic Cutaneous Squamous Cell Carcinoma (R/M cSCC)

UROTHELIAL CLINICAL TRIAL

SECOND-LINE+

Star (AND only). Phase II. Therapeutic. INCB054828 provided. A Phase 2, Open-Label, Single-Agent, Multicenter Study to Evaluate the Efficacy and Safety of INCB054828 in Subjects with Metastatic or Surgically Unresectable Urothelial Carcinoma Harboring FGF/FGFR Alterations.

HEMATOLOGY CLINICAL TRIALS

ACUTE MYELOID LEUKEMIA CLINICAL TRIALS

Phase III. Therapeutic. AG-120 provided. A Phase III, Multicenter, Double-Blind, Randomized, Placebo-Controlled Study of AG-120 in Combination with Azacitidine in Subjects \geq 18 Years of Age with Previously Untreated and Relapsed Acute Myeloid Leukemia with an IDH1 Mutation Who Are Candidates for Non-Intensive Therapy.

Pending. Phase III. Therapeutic. Gilteritinib provided. A Multi-center, Randomized, Double-blind, Placebocontrolled Phase III Trial of the FLT3 Inhibitor Gilteritinib Administered as Maintenance Therapy Following Allogeneic Transplant for Patients with FLT3/ITD AML.

Phase III. Therapeutic. Pevonedistat provided. A Phase 3, Randomized, Controlled, Open-label, Clinical Study of Pevonedistat Plus Azacitidine Versus Single-Agent Azacitidine as First-Line Treatment for Patients With Higher-Risk Myelodysplastic Syndromes, Chronic Myelomonocytic Leukemia, or Low-Blast Acute Myelogenous Leukemia.

(KWD only). Phase I. Therapeutic. DSP-7888 provided. A Phase 1 Clinical Study of DSP-7888 Dosing Emulsion in Adult Patients with Advanced Malignancies.

Phase I/II. Therapeutic. INCB 53914 provided. A Phase 1/2 Study of INCB053914 in Subjects with Advanced Malignancies.

CHRONIC LYMPHOCYTIC LEUKEMIA **CLINICAL TRIALS**

PREVIOUSLY TREATED

Star. Phase III. Therapeutic. TGR-1202 provided. A Multi-Center, Open-Label, Study to Evaluate the Safety and Efficacy of Ublituximab (TG-1101) in Combination with TGR-1202 for Patients Previously Enrolled in Protocol UTX-TGR-304.

CHRONIC MYEOLOID LEUKEMIA **CLINICAL TRIALS**

Phase IV. Observational. No drug provided. Determining Change in Cardiovascular and Metabolic Risks in Patients with Chronic Phase Chronic Myeloid Leukemia Receiving BCR-ABL Tyrosine Kinase Inhibitor First-line Therapy in the United States

ESSENTIAL THROMBOCYTHEMIA CLINICAL TRIALS

Phase IV. Observational. No drug provided. Prospective Myelofibrosis Low Risk Observational Study in US Clinical Practices (MOST).

GVHD CLINICAL TRIALS

ACUTE GVHD

(KWD only). Phase III. Therapeutic. INCB039110 provided. A Randomized, Double-Blind, Placebo-Controlled Phase 3 Study of INCB039110 or Placebo in Combination with Corticosteroids for the Initial Systemic Treatment of Acute Graft-Versus-Host Disease.

CHRONIC GVHD

(KWD only). Phase III. Therapeutic. Ruxolitinib provided. A Phase III Randomized Open-Label Multi-Center Study of Ruxolitinib vs. Best Available Therapy in Patients with Corticosteroid-Refractory Chronic Graft vs. Host Disease after Allogenic Stem Cell Transplantation

HODGKIN'S LYMPHOMA CLINICAL TRIALS

Phase IV. Observational. No drug provided. Hodgkin Lymphoma Molecular Profiling and Clinical Outcome in U.S. Community Oncology Practices.

Star. Phase II. Therapeutic. Brentuximab Vedotin provided. A Phase 2 Open-Label Study of Brentuximab Vedotin in Front-Line Therapy of Hodgkin Lymphoma (HL) in Adults age 60 and Above.

MULTIPLE MYELOMA CLINICAL TRIALS

FIRST-LINE

(KWD only). Phase III. Therapeutic. Carfilzomib provided. Randomized Phase III Trial of Bortezomib. LENalidomide and Dexamethasone (VRd) Versus Carfilzomib. Lenalidomide and Dexamethasone (CRd) Followed by Limited or Indefinite DURation Lenalidomide MaintenANCE in Patients with Newly Diagnosed Symptomatic Multiple Myeloma (ENDURANCE).

MYELODYSPLASTIC SYNDROME **CLINICAL TRIALS**

(KWD only). Phase II. Therapeutic. No drug provided. Multi-Center Biologic Assignment Trial Comparing Reduced Intensity Allogeneic Hematopoietic Cell Transplant to Hypomethylating Therapy or Best Supportive Care in Patients Aged 50-75 with Intermediate-2 and High Risk Myelodysplastic Syndrome.

Phase III. Therapeutic. Pevonedistat provided. A Phase 3. Randomized, Controlled, Open-label, Clinical Study of Pevonedistat Plus Azacitidine Versus Single-Agent Azacitidine as First-Line Treatment for Patients With Higher-Risk Myelodysplastic Syndromes, Chronic Myelomonocytic Leukemia, or Low-Blast Acute Myelogenous Leukemia.

(KWD only). Phase I. Therapeutic. DSP-7888 provided. A Phase 1 Clinical Study of DSP-7888 Dosing Emulsion in Adult Patients with Advanced Malignancies.

Phase II. Therapeutic. Procinostat provided. A Two-Stage, Advanced Solid Tumors or With B Cell Lymphomas and Open-Label Followed by Placebo-Controlled Phase 2 Study of Pracinostat and Azacitidine in Patients with IPSS-R High and Very High Risk Myelodysplastic Syndromes Previously Untreated with Hypomethylating Agents.

MYELOPROLIFERATIVE NEOPLASM **CLINICAL TRIALS**

Phase I/II. Therapeutic. INCB 53914 provided. A Phase Study of INCB053914 in Subjects with Advanced Malignancies.

Phase II. Therapeutic. INCB050465 provided. A Phase 3 Study of the Safety, Tolerability, and Efficacy of INCB050465 in Combination with Ruxolitinib in Subjec With Myelofibrosis.

Phase IV. Observational. No drug provided. Prospective Myelofibrosis Low Risk Observational Study in US Clinic Practices (MOST).

Star. Phase II. Therapeutic. Ibrutinib/Placebo provided. Open-Label Phase 2 Study of Itacitinib (INCB039110) in Combination With Low-Dose Ruxolitinib or Itacitinib Alone Following Ruxolitinib in Subjects With Myelofibrosis.

NON-HODGKIN'S LYMPHOMA CLINICAL TRIA

Phase III. Therapeutic. Rucaparib provided. A Multicent Randomized, Double-Blind, Placebo-controlled Phase Study of the Bruton's Tyrosine Kinase (BTK) Inhibitor, Ibrutinib, in Combination with Rituximab versus Placebo Combination with Rituximab in Treatment Naïve Subject with Follicular Lymphoma.

RELAPSED/REFRACTORY

Phase IIIB. Therapeutic. Lenalidomide provided. A Phase 3B Randomized Study of Lenalidomide (CC-5013) plus Rituximab Maintenance Therapy Followed by Lenalidomide Single-Agent Maintenance versus Rituxin Maintenance in Subjects with Relapsed/Refractory Follicular, Marginal Zone or Mantle Cell Lymphoma.

Star. Phase IB. Therapeutic. CC-122, 123, 292 provided. Phase IB, Multi-Center, Open-Label Study of Novel Combinations of CC-122, CC-223, CC-292, and Rituxima in Diffuse Large B-Cell Lymphoma and Follicular Lymphoma.

Star. ON HOLD. Phase II. Tazemetostat provided. An Open-Label, Multicenter, Phase 1/2 Study of Tazemetos (EZH2 Histone Methyl Transferase [HMT] Inhibitor) as a Single Agent in Subjects With Advanced Solid Tumors or With B Cell Lymphomas and Tazemetostat in Combination

(KWD only). Pending. Phase III. Therapeutic. Gilteritinib With Prednisolone in Subjects With Diffuse Large B Cell provided. A Multi-center, Randomized, Double-blind, Lymphoma. Placebo-controlled Phase III Trial of the ELT3 Inhibitor ON HOLD. Phase II. Screening. No drug provided. Gilteritinib Administered as Maintenance Therapy Screening Protocol: An Open-Label, Multicenter, Phase 1/2 Following Allogeneic Transplant for Patients with FLT3/ Study of Tazemetostat (EZH2 Histone Methyl Transferase ITD AML. [HMT] Inhibitor) as a Single Agent in Subjects With

	Subjects With Diffuse Large B Cell Lymphoma.
g	Phase II. INCB50465 provided. A Phase 2, Open-Label, 2-Cohort, Multicenter Study of INCB050465, a PI3K Inhibitor, in Relapsed or Refractory Mantle Cell Lymphom Previously Treated With or Without a BTK Inhibitor (CITADEL-205).
1/2	DLBCL
2	Phase I/II. Therapeutic. INCB 53914 provided. A Phase 1/2 Study of INCB053914 in Subjects with Advanced Malignancies.
sta	FIRST-LINE DLBCL
e cal	Phase III. Enzastaurin provided. Randomized Phase 3 Study to Evaluate the Efficacy and Safety of Enzastaurin Plus R-CHOP Versus R-CHOP in Treatment-Naïve Subject with High-Risk Diffuse Large B-Cell Lymphoma Who Possess the Novel Genomic Biomarker DGM1 [™] .
. An n ILS ter, 3	(KWD only). Phase III. Therapeutic. Polatuzumab vedotin, Rituximab and Vincristine provided. A PHASE III, MULTICENTER, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL COMPARING THE EFFICACY AND SAFETY OF POLATUZUMAB VEDOTIN IN COMBINATION WITH R-CHP VERSUS RITUXIMAB AND CHOP (R-CHOP) IN PREVIOUSLY UNTREATED PATIENTS WITH DIFFUSE LARGE B-CELL LYMPHOMA (DLBCL).
	SECOND-LINE+, DLBCL
o in cts	Phase IIB. Therapeutic. TGR-1202, Ublituximab provided. A Phase 2b Randomized Study to
se	Assess the Efficacy and Safety of the Combination of Ublituximab + TGR-1202 and TGR-1202 alone in Patients with Previously Treated Diffuse Large B-Cell Lymphoma.
	TRANSPLANT CLINICAL TRIALS
nab A ab	(KWD only). Phase I/II. Therapeutic. No drug provided. A Phase 1 Non-randomized/2 Randomized Study of ProTmune (ex vivo Programmed Mobilized Peripheral Blood Cells) for Allogeneic Hematopoietic Cell Transplantation in Adult Patients with Hematologic Malignancies.
stat	(KWD only). Phase II. Therapeutic. No drug provided. Multi-Center Biologic Assignment Trial Comparing Reduced Intensity Allogeneic Hematopoietic Cell Transplant to Hypomethylating Therapy or Best Supportive Care in Patients Aged 50-75 with

Tazemetostat in Combination With Prednisolone in

Intermediate-2 and High Risk Myelodysplastic Syndrome.

The Jewish Hospital is a community hospital faithful to its Jewish Heritage and grounded in the Jewish and Catholic traditions of service to the community. Our purpose is to reveal God's love for all, especially the poor and vulnerable, through the delivery of compassionate health care services and education of health care professionals.



MERCYHEALTH

4777 E. Galbraith Rd., Cincinnati, OH 45236 | 513-686-3000

mercy.com