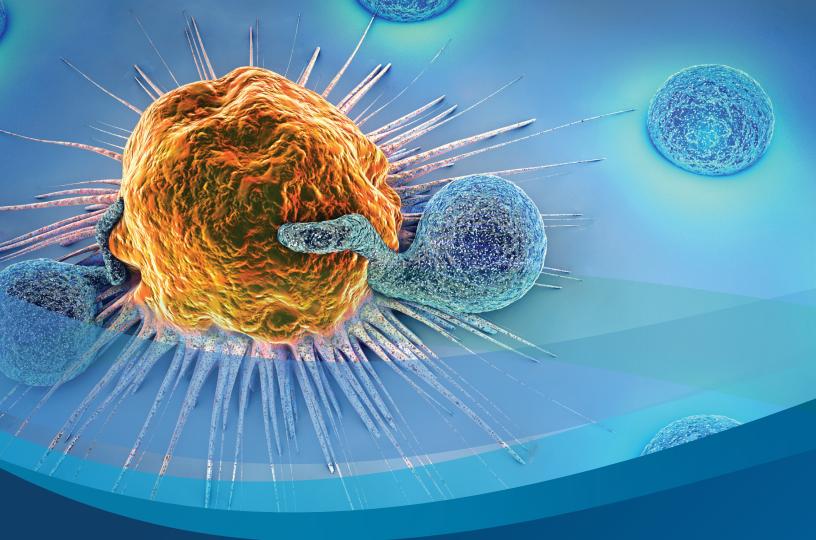




# 2020 Cancer Program

ANNUAL REPORT





Providing advanced cancer care in our community today

## 2020 Cancer Program

### ANNUAL REPORT

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



**Michael Kramer** President and CEO Mercy Health — West Hospital



Ken James CEO Mercy Health — Anderson Hospital



**Shane Knisley** President Mercy Health — Clermont Hospital



**Justin Krueger** Market President Mercy Health — Fairfield Hospital

### FRIENDS AND COLLEAGUES,

It is our privilege to jointly share the first regional Mercy Health Cincinnati Cancer Care and Oncology Annual Report. It provides an overview of recent achievements in our cancer programs as well as data from the Cancer Registry demonstrating our commitment to providing the best cancer care for others so they can be there for the ones they love. Mercy Health proudly offers advanced cancer care at the following locations across our great city: Mercy Health — Fairfield, Mercy Health — West, Mercy Health — Deerfield Medical Center, The Jewish Hospital — Mercy Health, Mercy Health — Eastgate Medical Center, Mercy Health — Anderson and Mercy Health — Clermont.

The pandemic has affected humanity across the globe including the ability for healthcare organizations to offer life-saving cancer screening and treatment measures in 2020. We lift our heartfelt prayers for all people from every nation and culture throughout the world who have suffered immeasurable loss as a result of the pandemic and share in your sadness today and in the days to come. But we also rejoice in the hope of a brighter future on the near horizon including our latest cancer care outcomes, new technology and new cancer services provided in Cincinnati to elevate oncology care in our region.

This year our cancer services have been enhanced using innovative robotic technology. This has allowed us to perform such procedures as the Whipple surgery utilizing robotics for the first time at Mercy Health. Utilizing robotics for this complex gastrointestinal surgery reduces the recovery time, pain and inpatient hospitalization resulting in a better patient experience overall. Our rectal cancer program has been surveyed for the esteemed National Accreditation Program for Rectal Cancer (NAPRC) certification. It will be one of only two programs in the state of Ohio to accomplish this prestigious designation when our certification is awarded this year. The Mercy Health breast surgeons are now utilizing the wireless breast lesion LOCalizer<sup>™</sup> system including radio frequency identification tags (RFID) for lesion localization during breast surgery which improves the accuracy of targeting small breast specimens without the need to surgically place external guide wires. This technology reduces patient anxiety and procedure time by several hours by eliminating the need for the exterior needle used for targeted small breast specimens.

2021 is a year of hope and growing for many and at The Jewish Hospital we look forward to completing an 11,675-sq. ft. patient-centered outpatient infusion, transplant and CAR-T therapy suite renovation. The renovation will include the latest in design to enhance and facilitate delivery of genomic and precision medicine, clinical trials, oncology education, oncology support groups, alternative cancer therapies and infusion patient care.

As a region, we are proud to announce our most recent endeavor to deliver an Integrated Network Cancer Program in our community. This combined effort of all our cancer care locations throughout Cincinnati will bring quality care close to home in each geographical area by one network. Coordinated service locations and processes allow our practitioners to offer comprehensive, multi-disciplinary cancer care utilizing a complete range of state-of-the-art services and equipment within one network. An integrated network also facilitates improved communication and education to the community about clinical trials and new treatment options offered throughout the network.

At Mercy Health patients are in the center of all we do. We strive to ensure the best possible outcomes with respect and compassion. We are honored patients entrust us with their care during a critical time in their lives.

## Mercy Health Cincinnati Integrated Network Cancer Committee

In 2020 the individual cancer programs at Mercy Health merged into a single Integrated Network as defined by the American College of Surgeons Commission on Cancer (CoC). The Cincinnati hospitals have maintained CoC accreditation for decades beginning with The Jewish Hospital in 1979. Since that time the programs have provided excellent care to cancer patients in the form of state-of-the-art diagnostic and surgical care, medical and radiation oncology. The program also provides oversight of the breast programs at accredited Mercy Health — Cincinnati hospital locations. The Integrated Network Cancer Committee is comprised of representation from each of the five Mercy Health — Cincinnati hospitals, The Jewish Hospital, Mercy Fairfield, Mercy West, Mercy Anderson and Mercy Clermont. Our community health partners with representatives from the American Cancer Society, the Cancer Support Community and Cancer Family Care also serve on the committee. Our team ensures all accreditation standards are met to deliver the highest quality care to our patient population.



### PHYSICIAN MEMBERS

Shyam Allamaneni, MD, Chair Surgical Oncology

Matthew Funch, MD General Surgery & Cancer Liaison Physician

Jacquelyn Palmer, MD Breast Surgical Oncology

Cory D. Barrat, MD, FACS, FASCRS Colon & Rectal Surgery

**Sean Kirby, MD** *Pathology* 

**Timothy Braverman, MD** *Pathology* 

**Robert Stevens, MD** *Diagnostic Radiology* 

Anthony Asher, MD Diagnostic Radiology

Kurt Leuenberger, MD Medical Oncology, OHC

Joseph Shaughnessy, MD Radiation Oncology, OHC

### CANCER PROGRAM COORDINATORS

Elaine Wiseman, BS, CTR Cancer Program Administrator

**Deb Powell, RN** *Quality Improvement* 

Lyn Sontag, PsyD, ASPP Psychosocial Services

**Sandra Brown, CTR** *Cancer Registry Quality* 

Mary Keefer, CTR Cancer Conference

**Eric Clayton, OHC** *Clinical Research* 

**Prasad Kudalkar, MD, OHC** Survivorship Program

### ALLIED HEALTH MEMBERS

Kitty Tierney, BSN, RN, OCN, BMTCN Oncology Nursing

Diane Kuhlman Social Work

**Rebecca Moore, CTR** *Certified Tumor Registrar* 

Laura Bange, Palliative Care

Jennifer Hopper, Genetics

K-Lynne Andrews Rehabilitation Services

Elena Stein, Pastoral Care

Judy Brandell Breast Navigation

Marquisse Watson Lung Navigation

**Casey Faber** *American Cancer Society* 

Jill Settlemyre Cancer Family Care



## Mercy Health — Cincinnati Cancer Conferences

Cancer conferences are extremely important to the care of the cancer patient at Mercy Health. Conferences provide an opportunity for the development of a plan of care for the patient with the entire physician team consulting at one time. Medical Oncology, Radiation Oncology, Gynecologic Oncology, Surgical Oncology, General Surgery, Pulmonology, Diagnostic Radiology and Pathology are all present to discuss possible treatment options for the patients presented. Physicians from all specialties including Medical and Surgical residents are invited to attend.

Treatment options discussed are based on national guidelines and AJCC cancer staging as the foundation of the discussions. Information on clinical trial options and referrals for services such as genetic counseling, rehabilitation and palliative care are also considered.

Across the five Mercy Cincinnati hospitals, 2,789 cancer patients were diagnosed or treated in 2019, with similar numbers expected from 2020. There were 1,257 cases presented at conferences in 2020, 45% of this annual case load.

Cases can be presented at a variety of conferences. There are 26 conferences each month that include specific conferences for breast, thoracic, neurologic, hematologic, gastrointestinal and all other types. We offer a virtual and in-person conference experience that allows for participation from any Mercy Health location or referring facility.

The cancer program also offers educational opportunities 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).



### **CANCER CONFERENCES**

The **Cincinnati Cancer and Cellular Therapy Center** Multidisciplinary Team of The Jewish Hospital

Meeting is held each Thursday.

The **Brain Tumor Cen**ter Multidisciplinary Team of The Jewish Hospital

Meeting is held every Tuesday of the month.

### The Breast Cancer

**Conferences** are conducted weekly on the first four Wednesdays of the month at The Jewish Hospital and bimonthly at Mercy West, Mercy Fairfield and Mercy Anderson.

**General Cancer Conferences** are held monthly at Mercy West, Mercy Fairfield and Mercy Anderson/Clermont.

The **GI Cancer Conference** of The Jewish Hospital 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 at The Jewish Hospital and monthly at Mercy Anderson Hospital.

### **Cancer Data Summary and Comparisons**

In the U.S. in 2019, the top cancer sites in men were lung, colorectal, prostate, blood and marrow. For women, the top cancer sites were breast, lung, colorectal and gynecological.

At Mercy Health — Cincinnati, distribution of cases by gender reveals that breast cancer is the top site for females (40%), while the top site for males is lung at 20%. There were 2,779 newly diagnosed / treated cases in 2019 and the top cancer sites were breast, lung, digestive, blood and marrow.

### 2019 TOP CANCER SITES BY SEX UNITED STATES vs MERCY HEALTH — CINCINNATI

Male	US	МН
Bronchus & Lung	13%	20%
Colorectal	9%	14%
Prostate	20%	12%
Blood & Bone Marrow	4%	10%
Kidney & Renal Pelvis	5%	7%
Upper GI		5%
Lymph Nodes	5%	4%
Urinary Bladder	7%	5%
CNS & Meninges		4%
Pancreas	3%	3%
Female	US	МН
Female Breast		<b>МН</b> 40%
Breast	30%	40%
Breast Lung & Bronchus	30% 13%	40% 16% 8%
Breast Lung & Bronchus Colorectal	30% 13% 7% 7%	40% 16% 8%
Breast Lung & Bronchus Colorectal GYN	30% 13% 7% 7%	40% 16% 8% 8%
Breast Lung & Bronchus Colorectal GYN Blood & Bone Marrow	30% 13% 7% 7% 3%	40% 16% 8% 8% 5%
Breast Lung & Bronchus Colorectal GYN Blood & Bone Marrow Kidney & Renal Pelvis	30% 13% 7% 7% 3%	40% 16% 8% 8% 5%
Breast Lung & Bronchus Colorectal GYN Blood & Bone Marrow Kidney & Renal Pelvis CNS & Meninges	30% 13% 7% 7% 3% 3%	40% 16% 8% 5% 3% 4%

### MERCY HEALTH — CINCINNATI NUMBER OF NEWLY DIAGNOSED/ TREATED CASES IN 2019

Breast	666
Digestive System	542
Respiratory System	518
Blood & Bone Marrow	202
Lymphatic System	96
Brain & CNS	113
Urinary System	216
Male Genital	135
Skin	57
Endocrine	24
Unknown Primary	32
Other/II Defined	6
Connect/Soft Tissue	31
Female Genital	141
Total	2779

American Cancer Society. Cancer Facts & Figures 2019. Atlanta: American Cancer Society; 2019.

## Lung Cancer Screening – Mercy Health

"Lung Cancer is the leading cause of death among both men and women in the United States. Each year, more people die from lung cancer than of colon, breast and prostate cancers combined" (American Cancer Society, 2019). Approximately 235,000 new cases of lung cancer are diagnosed each year and nearly 160,000 people with lung cancer die annually. In Ohio alone, nearly 10,000 individuals will be diagnosed with lung cancer and almost 7,000 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 48 per 100,000.

The Mercy Health - Cincinnati hospitals are proud to participate in the national effort to Return to Cancer Screening in collaboration with the Commission on Cancer<sup>®</sup>. National Accreditation Program for Breast Centers®, National Comprehensive Cancer Network® and the American Cancer Society®. The COVID-19 pandemic has greatly impacted recommended cancer screening care. According to the American Cancer Society, one third of adults failed to receive recommended cancer screening during the pandemic. In 2020 more than 600,000 people died from cancer in the U.S. The National Cancer Institute estimates that almost 10,000 excess deaths in the U.S. from breast and colorectal cancer over the next 10 years will be because of pandemic-related delays in cancer screening. Cancer screening saves lives!

The US Preventative Services Task Force (2021), recommends that people at risk for lung cancer receive low dose CT screening for early detection of lung cancer to help reduce the number of lung cancer deaths. Annual screening is recommended for the following patients:

50-80 years old

20 pack years of smoking

Former smoker who has quit within the past 15 years



2020 LUNG CANCER SCREENING DATA	EAST	FAIRFIELD	JEWISH	TOTAL
Total CT lung screenings	1009	564	323	1896
First time (baseline screens)	398	316	167	881
Yearly (annual) follow-up screens	611	248	166	1025
Results: Normal/yearly follow up only (LRAD 1-2)	853	506	288	1647
Results: Recommended follow-up in 3-6 months (LRAD 3-4)	156	58	35	249
Cancers detected	16	2	7	25
Stage 1A	6	-	5	11
Stage 1A2	2	-	1	3
Stage 1A3	_	1	-	1
Stage 1B	1	1	-	2
Stage 2A	1	-	-	1
Stage 3A	3	-	-	3
Stage 4A	-	-	1	1
Stage 4B	3	-	-	3

### Lung Cancer Screening Physicians



David Beck, MD, PhD Clermont Hospital



Amita Singh, MD

Fairfield Hospital

Mudher Al-Shathir, MD The Jewish Hospital

### Lung Nodule Navigators





Robin Saxon



Theresa Maciejewski East Market

Marquisse Watson Fairfield Hospital The Jewish Hospital

The Lung Nodule Navigators play a vital role in the Lung Cancer Screening programs. They work closely with the pulmonologists, referring physicians, oncologists and other team members to ensure that the patient can move seamlessly from screening to their treatment course. The Lung Nodule Navigators are responsible for screening patients to ensure adherence to screening guidelines. They also ensure that patients follow-up with 3-6-month follow-up and yearly screening by sending reminder letters and making phone calls to the patient and PCP.

In 2020, the Lung Nodule Navigators worked to get patients back on track with their annual screenings and recommended follow-ups after outpatient imaging was closed for several weeks due to COVID-19. Since many in person events such as smoking cessation classes have been cancelled due to COVID-19, the Lung Nodule Navigators decided to work collaboratively to offer a virtual smoking cessation program. Each Navigator attended training to become a certified Freedom from Smoking Facilitator through the American Lung Association's Freedom from Smoking program. The first virtual session of the smoking cessation program was offered in Spring 2021. In addition to working together on the virtual smoking cessation program, the Lung Nodule Navigators meet monthly to address barriers to care and work towards more standardized care of Lung Cancer Screening patients.

### PHYSICIAN SPOTLIGHT



### David Beck, MD, PhD

is a pulmonologist who specializes in diagnosing and treating lung diseases. He has a special interest in the early diagnosis of lung cancer. Only 16% of lung cancer cases are diagnosed at an early stage, when it is most likely to be curable. Dr. Beck encourages use of low dose CT for lung cancer screening and utilizes advanced bronchoscopic techniques to diagnose and stage lung cancer. He and his partners perform endobronchial ultrasound and electromagnetic navigational bronchoscopy for the safest and most effective detection of early lung cancer. Early detection and accurate staging give the best chance for survival with lung cancer.

## Patient story: My Lung Cancer Journey

It was nagging chest pain that sent John Burns to his doctor, where he would later receive a lifechanging diagnosis.

"My chest had started hurting on the right-hand side and it wouldn't stop," remembers John. "It was not hard pain, but it was a constant pain that was out of the norm and lasting longer than I thought it should have. I got worried about it."

Following an order from his primary care doctor, John had a low-dose CT lung screening at The Jewish Hospital — Mercy Health on June 18, 2020. It showed a large mass and John was referred to Mercy Health Physician and pulmonary critical care specialist Mudher Al-Shathir, MD.

Dr. Al-Shathir ordered a lung biopsy that confirmed John had stage four lung cancer. Despite this diagnosis, John remained upbeat, crediting The Jewish Hospital for saving his life and noting that his grandchildren are his motivation for living.

"It's all about your attitude," he says. "I don't look at the bad side. I see what I can do to keep it moving. My wife and grandkids depend on me and I thought about what I can do to be a better me. The answer is to not live negatively. Things don't have to be negative just because you hear you have cancer. You don't stop living right then. You continue to live. I said to myself, 'OK, so you have cancer. What's next?'"

What came next were 12 sessions of radiation and a course of immunotherapy. A scan in November showed the tumor was shrinking. His follow up scan in February indicated the lung mass had continued to shrink as a result of the treatment he received.

Along the course of his treatment, John formed a close bond with nurse Marquisse Watson, lung navigator at The Jewish Hospital.

"She told me she'd be there every step of the way and she has," he said. "I have a lot of support. That's positive, too."

Marquisse works directly with lung cancer screening patients from the time they come in for their screening through additional follow-up they may need for imaging and testing and on to oncology or surgery.

"I'm with them wherever they need to go," says Marquisse. It's natural for Marquisse to form close bonds with her patients and John has made a great impression on her.

"When he came through for screening, I called to verify his information and tell him what to expect," she says. "When a nodule was found on the scan, I got him set up with pulmonology immediately and when he came in for his biopsy, we ran into each other. He is a very sweet patient and we all could learn something from his positive attitude and outlook on life, for sure."

John has advice for people who may be experiencing discomfort and haven't yet made appointments to see their doctors.

"Go get it checked out quick. Don't sit and wait. I waited too long," he says. "If you don't find out what's wrong, you are setting yourself up to die. If there's anything or anyone precious to you, prevent it and live longer. I'd go in that direction instead of cutting life shorter."

Marquisse notes that with lung cancer, "People often don't know they have it until it reaches a later stage. We promote screening to find lung cancers early when they are at a smaller size and more easily treated. If you smoke or used to smoke, I encourage you to take the offensive and talk to your doctor about getting a lung cancer screening. We recommend that former smokers within the past 15 years or current smokers aged 55-77 with a 30-year pack history come in for screening."



## 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 five 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.

### **Services Performed**

The services offered at the Dermatology clinic include 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.



Matthew Meier, MD

Pamina Kim, MD



Rachel Gustin, MD



Emily Fisher, MD



Jacqueline Fisher, DO



Emily Moosbrugger, MD Shyam Allamaneni, MD Dena M. Elkeeb, MD

### **2020 STATISTICS**

In 2020, 7,074 tumors were detected/diagnosed by our general dermatologists:

1,432 Basal cell carcinomas

644 Squamous cell carcinomas

36 Invasive melanomas

82 Melanoma in situ

Other miscellaneous tumors: Atypical fibroxanthoma, Merkel cell carcinoma, Adnexal carcinoma etc account for remaining skin cancers treated by Mohs technique

### **2020 MOHS PROCEDURES**

1,559 tumors were treated with Mohs surgery

53% male patients

46% female patients

Our oldest patient was 102 years old

Our youngest patient was 28 years old

1,135 were basal cell carcinoma (76 infiltrative features on histology)

305 were squamous cell carcinoma

113 were squamous cell carcinoma in situ

17 other types including atypical fibroxanthoma, Tricholemmal carcinoma and others

### PATIENT SATISFACTION

Patient satisfaction is 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.

## The Jewish Hospital — Mercy Health Cincinnati Cancer and Cellular Therapy Center

The only fully FACT accredited (Foundation for Accreditation for Cellular Therapy) adult program for bone marrow transplant and CAR-T in the region with more than 30 years of experience caring for blood cancer patients.

The Cincinnati Center for Cancer and Cellular Therapy (formerly the Blood Cancer Center) recently performed its 2,500th transplant and is proud to add to its 30 plus year history of offering cutting-edge therapies to cancer patients in the region. In addition to transplants, the center now offers cellular therapies such as chimeric antigen receptor therapy (CAR-T) as a treatment modality for lymphoma and multiple myeloma. The Cincinnati Cancer and Cellular Therapy Center treats more transplant patients with blood cancers than any other center in the Tri-State thanks to its reputation as a provider of top-quality care," said OHC's James H. Essell, MD, medical oncologist, hematologist, blood and marrow transplant specialist and Medical Director of the Cincinnati Cancer and Cellular Therapy Center.

CAR-T therapy (Chimeric antigen receptor T-cell) is a ground-breaking new treatment and offers hope to patients who previously had very few options. The CCCTC (formerly the BCC) is the only fully FACT accredited (including CAR-T) adult program in the Cincinnati region offering this revolutionary therapy to patients with aggressive blood cancers.

CAR-T has shown dramatic results in patients who had few options and little hope but are now in remission. CAR-T therapy can be administered in the inpatient or outpatient setting or a combination of both depending on each patient's unique needs. CAR-T is available to patients who meet criteria for safe administration of immune effector and hematopoietic cell therapy.

CCCTC was awarded FACT Accreditation for CAR-T in Spring 2019 after completing the required minimum number of 10 CAR-T infusions. Our program was also recently recognized as a Blue



Distinction Center of Excellence for CAR-T therapy. FACT Accreditation assures patients and their referring providers that the program has demonstrated quality patient care and exceeds standards in blood cancer patient care and laboratory practices. Our continuous pursuit of providing the newest and most effective blood cancer therapy to patients right at home in Cincinnati is unwavering. Our commitment to the highest quality of cancer care delivery is a top priority of our CCCTC team at The Jewish Hospital.

## Transplant Coordinator Navigation

Receiving a life-threatening diagnosis that requires a stem cell transplant is a life shattering event. Fear, uncertainty and family upheaval compound the elements of the diagnosis. Add anxiety about the prognosis,



Margi Bryant Nurse Transplant Coordinator

treatment and recovery and the stage is now set for a transplant coordinator to step in and start the process of, you guessed it, 'coordinating'.

Transplant coordinators are navigators. Our front-line group of nurses tries to calm this initial storm and get the ship sailing in the right direction. Much of the coordination process happens behind the scenes. And what may appear to be a seamless endeavor to most actually has many factors that play into getting patients safely ready for transplant.

Education and understanding are key elements in preparing patients for transplant. Besides all the physical testing that needs to be completed, it is imperative that patients, families and caregivers learn the dynamics of the transplant process in order to be informed participants and promote successful outcomes.

Whether it is facilitating a patient collecting their own stem cells or monitoring the NMDP registry to find that perfect match or simply contacting siblings and stimulating rivalry to see just who is the best match/ donor, coordinators are constantly guiding the CCCTC team in a positive direction toward making the best decisions.



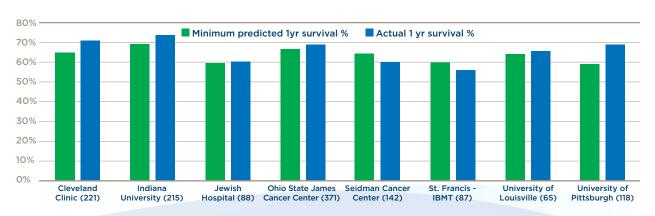
Knowledge, proficiency, teamwork, troubleshooting, kindness and empathy are just a few of the tools used by transplant coordinators to prepare a patient and their family for transplant. It is important for patients to feel confident that the coordinator is avidly working to ensure a safe and smooth transition to the next member of the CCCTC team, leading to a successful outcome.

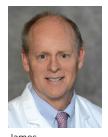
It takes a village to ensure patients get the very best care and treatment that they deserve. Transplant coordinators gain the trust and respect of CCCTC patients during this phase of the transplant process. The goal is for patients to realize they have advocates that have strived to make sure they have all the necessary testing, education, support and resources that are vital to give the patient an advantage as they continue the transplant process.

### **Outcomes**

CIBMTR data – One-year survival (First allogeneic transplant 1/2015 – 12/2017 listed alphabetically) Source: https://bethematch.org/tcdirectory accessed 2/7/2020

Among the nation's leaders in survival outcomes, the CCCTC 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 CCCTC patient survival rate is comparable to noted bone marrow transplant centers such as Cleveland Clinic, MD Anderson and Ohio State.





James Essell, MD, OHC



Edward Faber, MD, OHC



Miguel Islas-Ohlmayer, MD, OHC



Edward Broun, MD, OHC

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## A Patient's Perspective: You helped Marcus and his family during his cancer treatment

Marcus Allen was ready to give up—but donors like you stepped in to help him when he needed it most.

After initial treatments for cancer, follow up tests showed it was more aggressive than originally thought. Marcus spent an additional three weeks as an inpatient at The Jewish Hospital — Mercy Health Cincinnati Cancer and Cellular Therapy Center, already having been off work for months during his earlier treatments.

"As the breadwinner, it put a real strain on my family," Marcus said. "My wife has multiple sclerosis and takes care of our five children. I was fighting to get our basic needs met and doing everything I could to get help but had one door after another slammed in my face. My disability insurance was not enough to cover our rent and we were about to be evicted. We were on the verge of just giving up and putting it all in God's hands."

Because donors like you support the Ben Jackson Fund, the Allen family was able to receive the help they needed at that critical time.

"They helped us pay our rent and helped with grocery and fuel cards. It was awesome—the help the fund provides and the stress it took off our family was amazing."

The Allen family wants you to know how appreciative they are of your generosity.

"I can't thank them enough for what they did for my family," Marcus said. "I really want to urge people to continue giving to the fund and help more families in need."





# Mercy Health — Cincinnati Breast and Breast Cancer Care

The Mercy Health - Cincinnati hospitals are proud to participate in the national effort to Return to Cancer Screening in collaboration with the Commission on Cancer®, National Accreditation Program for Breast Centers®, National Comprehensive Cancer Network® and the American Cancer Society®. The COVID-19 pandemic has greatly impacted recommended cancer screening care. According to the American Cancer Society, one third of adults failed to receive recommended cancer screening during the pandemic. In 2020 more than 600,000 people died from cancer in the U.S. The National Cancer Institute estimates that almost 10,000 excess deaths in the U.S. from breast and colorectal cancer over the next 10 years will be because of pandemic-related delays in cancer screening. Cancer screening saves lives!

The Mercy Health — Cincinnati hospitals including The Jewish Hospital Women's Center, Deerfield Women's Imaging, Mobile Mammography units, Mercy Health — Fairfield Hospital, Mercy Health — Eastgate and Mercy Health — West Hospital offers women choices of where to receive excellent breast health care. All locations provide screening and diagnostic mammograms and breast ultrasound. Biopsy and breast localization procedures are offered at the hospital locations. These Women's Imaging Centers are staffed by board certified and breast fellowship trained radiologists, dedicated breast surgeons, registered mammography technologists and National Consortium of Breast Centers (NCOBC) certified breast navigators.

The Mobile Mammography program provides preventative screening mammograms to women in our community. This provides a way for women to obtain a screening mammogram in a private, yet convenient manner, by bringing mammography services to their workplace, health clinics or public site near their neighborhood. Additionally, special funding is available for low income women as well as under and uninsured women to cover the costs of these screening mammograms. The Jewish Hospital Women's Center, Deerfield Women's Imaging and Jewish Hospital Mobile Mammography all offer the "I Know" program to all patients. This program has the capability of taking a patient from a screening mammogram, to advanced imaging and then to a diagnostic biopsy all within the same appointment time. Biopsy results are then provided within twenty-four hours of the biopsy and an appointment with a breast surgeon is also expedited for the patient if necessary.

Our breast care centers strive to provide care and safety to our patients and staff during these unprecedented times of COVID-19. To ensure continued safety, we have installed a HEPA ventilation system to ensure proper air flow to our mobile coaches. In all the locations providing mammography, we follow strict CDC and State of Ohio guidelines for masking and social distancing requirements.

We are fully accredited by the U.S. Department of Health and Human Services Food and Drug Administration (FDA), Mammography Quality Standards Act (MQSA), American College of Radiology (ACR), Ohio Department of Health (ODH) and the National Accreditation Program for Breast Centers (NAPBC).



Scan the QR Code to see when **Mercy Health Mobile** Mammography visits your Cincinnati neighborhood and schedule your Mobile Mammogram Screening at one of the upcoming events.





Anna Sobolewski, MD Nicole Melchior, DO





Jacquelyn Palmer, MD Abigail Tremelling, MD





Elise Evans, CNP





Lvdia Hernandez, MD, FACS Cincinnati Breast Surgeons

## By the numbers:

Needle biopsy rate: 95% (NAPBC best practice is **70%**)

Breast Conserving 70% Surgery Rate: (NAPBC required is 50%)

Sentinel node biopsy considered or performed for stage 1 & 2 breast cancers is 100% as required by NAPBC standards.

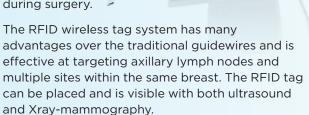
# INTRODUCING Wireless technology for breast surgical lesion localization

Mercy Health Breast Surgeons are now using the wireless breast lesion LOCalizer™ system, RFID (radio frequency identification tags) for lesion localization during breast surgery. The insertion of the RFID tags allows for both precision and ease of use for accurate excision of breast lesions.

According to Dr. Jacquelyn Palmer, Surgical Breast Oncologist, "Wireless technology has revolutionized localization for our operative patients. It has allowed for accurate targeting of small breast specimens without the need for a needle or wire. This eliminates the exteriorized needle, which can elevate anxiety and offers the ability to localize prior to the surgical day. This too, decreases anxiety while minimizing the need to be in the hospital for several hours prior to surgery."

Pamela Gibson, a surgical patient of Mercy Health – Fairfield, would agree with Dr. Palmer and shared her perspective and personal experience of both approaches to localization. "I really liked having the 'Tag' placed the week before surgery so I could just focus then on the surgery itself. It was smoother from beginning to end and gave me more comfort and peace to focus on one procedure at a time. Ms. Gibson also remarked on the significant difference in preoperative anxiety and felt very confident in the management of her care during the placement and procedure.

Prior to wireless technology, needle/guide wire localization was the standard for preoperative lesion localization in breast imaging. This method entails placing a needle/wire within the breast with the tip of the wire segment positioned adjacent to the abnormality and the end of the needle/wire remaining outside the breast. Guide wires must be inserted on the day of surgery and often results in increased patient anxiety and multiple procedures on the day of surgery. Because of the external component, the patient must not only be compliant, but care must be taken to not disturb the wire's position. A change in wire position could lead to additional complications since it is marking the target for surgery. Many patients are good candidates for breast conservation since breast cancer is more often caught at an early stage. This includes patients with adequate tumor shrinkage after neoadjuvant chemotherapy. But this also means that lesions are typically smaller and harder to locate during surgery.



LOCalizer

### This system allows for:

- A miniature RFID Tag designed to be placed into the breast at any time prior to the day of surgery.
- Real-time Distance Measurement provides distance measurement to the RFID Tag.
- Single use surgical probe (similar to a stylus) guides the surgeon toward the Tag during the operation.
- Portable handheld reader that can be placed in the sterile field and the 8mm diameter of the probe allows for small incisions.

In addition, this wireless system allows the surgeon more flexibility for the surgical approach to the incision and potentially better cosmesis. Also, the Tags can be inserted and excised at different outpatient/hospital sites. Each tag contains a unique identification number, so that in the case of multiple lesions, the surgeon knows exactly which tag corresponds to which lesion.

Once the tag has been inserted, the patient can return home and resume normal activity. The result is improved convenience for the patient, optimal coordination with radiology department personnel and radiologists prior to surgery.

## 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.

## Expert surgeons utilize robotics to perform complex gastrointestinal surgery resulting in a better overall patient experience.



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. Additionally, Dr. Allamaneni provides specialized surgical care for patients with melanoma skin cancer.

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'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



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 capable of utilizing 360 degree movements. These precisionbased procedures target tumors while creating smaller incisions resulting in quicker recoveries. We are using robotics 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 multidisciplinary team welcomes the opportunity to talk to fellow physicians, patients and their families about potential approaches to cancer treatment. He offers this opportunity not only in the Tri-State area, but also nationally and internationally.

The multi-disciplinary team is composed of surgeons, oncologists, gastroenterologists, nurse practitioners, pathologists, radiologists, nurse navigators, nurses and physical and occupational therapists. Other disciplines may be consulted as each patient has unique needs. The team is at the forefront of cancer care, providing care to complex oncology patients. The team meets weekly to discuss 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.



## **Patient story:** Robotic Whipple Surgery is a first for Mercy Health — Cincinnati

It was the beginning of February when Candace Weppler noticed that something was off with her husband Frederick.

"He was jaundiced and his urine was the color of pumpkin," she recalls. "Our primary care provider ran some tests and found that Frederick's liver was toxic."

Follow-up imaging and endoscopic procedures confirmed that Frederick had a 1.5 cm tumor in his pancreas. The gastroenterologist who found the tumor referred the couple to Mercy Health Physician and surgical oncologist Shyam Allamaneni, MD.

"He said, 'Here's the guy you want to see," said Candace and the couple met Dr. Allamaneni on February 12.

continued...

### Robotic Whipple Surgery...continued

Dr. Allamaneni told the couple that Frederick needed Whipple surgery, a procedure that treats issues related to the head of the pancreas, including pancreatitis, pre-cancerous lesions and pancreatic cancer.

Whipple surgery is complex and involves removing the head of the pancreas, duodenum, gallbladder and parts of the stomach and bile duct and reassembling the pancreatic duct, bile duct and stomach to the small bowel afterward.

Frederick would be the first patient in the Mercy Health — Cincinnati system to have robotic Whipple surgery. He underwent the procedure March 1 at The Jewish Hospital — Mercy Health.

"With the robot, I no longer need to make one big incision. Instead, I make a handful of smaller incisions for the robot's arms. The robot has wristed instruments that allow me to work in hard to access areas with precision. The robot also magnifies the small tissues. At the end of the procedure, I make a two-inch incision to remove the specimen," says Dr. Allamaneni. The Whipple surgery can take a long time and Dr. Allamaneni wasn't just concerned with Frederick's well-being during the procedure.

"He sent a nurse out with some pizza for me," says Candace. "That impressed me."

Smaller incisions have benefits for patients. They lead to a shorter recovery time of three to five days and patients should be able to eat and drink in one or two days. Smaller incisions also mean less risk of surface infection at the incision site and reduced pain following surgery.

"Except for immediately after surgery, Frederick didn't experience much pain and the only thing he's taken is Tylenol," says Candace. "He was chipper the Wednesday after surgery."

Frederick will soon meet with an oncologist to determine the next steps in his care, but he won't soon forget Dr. Allamaneni.

"I think he saved my life," says Frederick. "He's been wonderful and his staff are unbelievable and very informative."

### By the numbers:

60,430 stomach cancer incidences

31,950 males 28,480 females

**48,220** stomach cancer associated deaths

Average age at diagnosis is **70** 

### About **2/3rds**

of people diagnosed with pancreatic cancer are 65 years or older About 25% of pancreatic cancers are thought to be caused by smoking

Inherited gene changes accounts for up to **10%** of pancreatic cancers and thus knowing family history is important

American Cancer Society

## The Jewish Hospital — Mercy Health Radiation Oncology department

### Gamma Knife® Radiosurgery

The Jewish Hospital — Mercy Health Gamma Knife Radiosurgery Center is led by co-directors Ronald Warnick, MD, of Mayfield Brain & Spine and David Pratt, MD, of OHC. The center also includes neurosurgeons George Mandybur, MD and Yair Gozal, MD, PhD, of Mayfield Brain & Spine and radiation oncologists Marc Mosbacher, MD; Elizabeth Levick, MD; and Peter Fried, MD, of OHC. Specialists at the center have treated more than 1,400 brain tumor patients from across the United States since 2013 and have participated in multicenter research studies that have advanced the field of radiosurgery.

The Gamma Knife ICON® has 192 sharply-focused beams of radiation that can target tumors of any shape, size and location while sparing normal brain tissue. The ICON® offers the option to immobilize the patient with a noninvasive mask, enabling the treatment of larger tumors. Delivering a fraction of the total radiation dose on each of several days allows time for normal cells to repair themselves between treatments and may reduce side effects. "Gamma Knife's precision has revolutionized how radiation oncologists treat brain tumors," Dr. Pratt said. "We are able to spare healthy surrounding tissue, achieve excellent outcomes and offer our patients a much better quality of life."

Dr. Warnick has performed more than 3,800 radiosurgery procedures in three decades of practice. He also serves on the Boards of Directors of the NeuroPoint Alliance SRS Registry and the International Radiosurgery Research Foundation (IRRF), two national consortia devoted to research and innovation. The goals of the SRS Registry are to define national patterns of care in radiosurgery and publish patient outcomes using a real-world data set. Clinical data and images compiled through the registry will enable researchers to extract special features of tumors, such as shape and texture, that correlate with particular outcomes. The IRRF is a consortium of 30 academic and clinical centers of excellence that perform clinical research in stereotactic radiosurgery. In 2020, the Gamma Knife team contributed to five peer-reviewed journal articles through the IRRF and also published a peer-reviewed article on a novel quality management program for Gamma Knife radiosurgery. "We are committed to a collaborative research program with our national and international partners to provide innovative treatment options for our Gamma Knife patients," Dr. Warnick said.

### Enhanced neurosurgical services

## COMPLEX AND MINIMALLY INVASIVE SPINE SURGERY

In addition to brain tumor treatment, Mayfield's neurosurgery team performs a variety of minimally invasive and complex spinal procedures at The Jewish Hospital — Mercy Health. The team includes Vincent DiNapoli, MD, PhD, director of the Brain Tumor Center; Yair Gozal, MD, PhD; Arthur Arand, MD; Randall Hlubek, MD; Bradford Curt, MD; William Tobler, MD, Bryan Krueger, MD; and Robert Bohinski, MD, PhD. The complex spine procedures include multilevel fusions and reconstructions, using the most advanced technology to stabilize and straighten the spine. Each individual surgery accommodates the individual disorders and physiology of each patient and can take 12 hours or more to complete. Mayfield neurosurgeons rely on an exhaustive understanding of the physiology of the spine that informs a care plan based on each patient's individual needs, rather than a snapshot based on one area of the spine or one specific symptom. Surgical care plans are developed before the procedure to reduce risk and enhance outcomes for the patient.

### **STROKE CARE**

The Jewish Hospital — Mercy Health is a core part of a developing network of endovascular stroke centers throughout Greater Cincinnati and Northern Kentucky to provide the best and fastest stroke care. Every year, nearly 800,000 Americans die from strokes. In contrast to the traditional approach of transporting all stroke patients to one critical-care center, the network approach of hospitals treating stroke victims and those at risk of a stroke can save crucial minutes in the "door-in, door-out" that often is a key indicator of patient outcomes. Care can come through injection of a clot-dissolving drug tissue plasminogen activator, known as tPA or the surgical procedure to remove the clot called a thrombectomy. At The Jewish Hospital - Mercy Health, neurosurgeons perform these procedures with the "Thrombectomy-Ready" certification from the Joint Commission. Andrew Ringer, MD; Jonathan Hodes, MD; and Ryan Tackla, MD, form a team of Mayfield vascular neurosurgeons advancing care through clinical innovation, research and education. Dr. Ringer is co-founder of the Endovascular Neurosurgery Research Group (ENRG), a national research consortium.

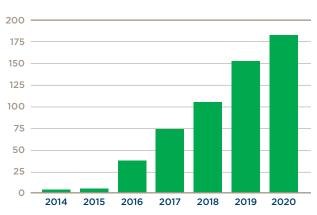


The Jewish Hospital — Mercy Health partners with Mayfield Brain & Spine, Riverhills Neuroscience and OHC to provide a full spectrum of neuro-oncological care. The hospital serves as Mercy Health — Cincinnati's neurosurgery center of excellence. The neuro-oncology program at The Jewish Hospital is committed to providing caregivers with the best available technology, promoting continuous improvement, ensuring patient safety and achieving patient satisfaction. Working in partnership with The Cincinnati Cancer & Cellular Therapy Center, radiation oncologists, otolaryngologists and neuro-oncologists, the neurosurgery team cares for patients with a wide range of neuro-oncologic diseases, including primary brain tumors (glioma), meningiomas, skull base tumors (acoustic neuroma and pituitary adenoma), metastatic disease to the central nervous system and blood cancers (lymphoma and leukemia).

### Highlights of the Neurosurgery Center of Excellence:

### The Brain Tumor Center

Referrals from physicians and hospitals throughout Greater Cincinnati and Northern Kentucky have made The Brain Tumor Center at The Jewish Hospital — Mercy Health the clear regional leader in neuro-oncology care and a growing destination for the entire spectrum of brain tumor cases. The number of brain tumor surgeries performed at the hospital has more than quadrupled since 2016 (see chart to right). Brain Tumor Center Director Vincent DiNapoli, MD, PhD, said growing The Jewish Hospital as a regional center of excellence for neuro-oncology will benefit patients and enable additional clinical innovations through outcomes-based research.



### **BRAIN TUMORS**

### Leading innovation with GammaTile

Mayfield Brain & Spine neurosurgeons continue to expand their use of the groundbreaking GammaTile® targeted radiation technology to treat brain tumors at The Jewish Hospital - Mercy Health, putting it among a distinguished roster of national health systems. In 2020 and early 2021, more Mayfield neurosurgeons expanded the use of GammaTile to patients at multiple hospitals in the region, leveraging research and clinical expertise to benefit patients. Neurosurgeons who have performed the procedure include Brain Tumor Center Director Vincent DiNapoli, MD, PhD; Yair Gozal, MD, PhD; and George Mandybur, MD. In 2020, Dr. DiNapoli was the first neurosurgeon in the country to use targeted GammaTile therapy for patients with newly diagnosed malignant brain tumors at The Jewish Hospital and the first in the eastern U.S. to use GammaTile to treat patients with recurrent malignant brain tumors. GT Medical Technologies has included Mayfield among five health systems that earned a place on its roster of Elite Distinguished Brain Tumor Specialists by performing at least 10 GammaTile procedures in 2020. Mayfield also is participating in a clinical trial of GammaTile to treat newly diagnosed metastases, the only large non-academic center in the trial. "The Brain Tumor Center at The Jewish Hospital is the leader in bringing new therapies to Cincinnati, expanding the frontiers for patent care," Dr. DiNapoli said.

### The Skull Base Surgery Program

Practitioners at the Brain Tumor Center at The Jewish Hospital – Mercy Health are committed to advancing the level of care for patients with skull base tumors through development of a multidisciplinary clinic that emphasizes clinical excellence and leading-edge research. Recognized nationally for its excellence in care delivery and patient outcomes, the Brain Tumor Center has emerged as "an intellectual and technical powerhouse with the latest technology and physicians who are leading innovation in their respective areas of expertise," Director Vincent DiNapoli, MD, PhD, said. Harnessing that collaborative power of patient care, clinical outcomes data, research and education through clinical trials and new technology will cement the center as the clear leader for neurosurgical brain tumor care and a destination for brain tumor patients throughout Greater Cincinnati and around the country.

Patient care for skull base tumors at the Brain Tumor Center is based on a team approach that prioritizes the technical skill and experience required to successfully and safely remove the tumor. Because the tumor is based in the head and neck area, the surgical team includes otolaryngologists, plastic surgeons and neurosurgeons who work together during these complex procedures. Before surgery, the neurosurgery team invests the time to explain and prepare patients so they know what to expect. A team of neurologists, a neural monitoring specialist and anesthesiologists are vital to the success of the procedure. The most common skull base pathologies, such as pituitary adenoma, meningioma and acoustic neuroma (vestibular schwannoma), also require such a multi-disciplinary approach. Our pituitary patients are evaluated by a neurosurgeon, a skull base otolaryngologist, a neuro-ophthalmologist and an endocrinologist before they are considered for surgical intervention. The team approach ensures that surgeons are skilled in the latest techniques and research and avoid excessive fatigue. Our specialists in the Skull Base Surgery program also employ intraoperative monitoring, neuro-anesthetic techniques and stereotactic guidance.

We are developing a follow-up care protocol that would include enhanced communication with the patient and a care team including neurologists and neurosurgeons, informed by extensive education and training. Our intensive care physicians, neurologists, neurosurgery advanced practitioners and nurses are dedicated to the continued education required to provide this quality of care. The Emergency Neurologic Life Support (ENLS) certification is offered to the staff routinely caring for our brain tumor patients and the team of neurology and neurosurgery advanced providers serves as an extension of our physicians and supports the patient's post-operative recovery.

Skull base tumors are located near areas that control your senses – hearing and balance, sight, smell and more. Surgical removal and follow-up care require the skill, expertise and coordinated care of a skull base neurosurgeon. The principal goal of skull base surgery is to permit access to difficult-to-reach lesions by anatomic displacement through extensive removal of the base of the skull. These techniques reduce or eliminate the need for brain retraction, minimizing injury to the brain, cranial nerves and blood vessels. Dr. DiNapoli and ENT surgeon Lee Zimmer, MD, PhD, performing an endoscopic surgery. Photo demonstrates endoscopic view of the anterior skull base including the optic chiasm, pituitary stalk and the inferior aspect of the frontal lobes during removal of a craniopharyngioma.

Minimally invasive endoscopic skull base surgery is often recommended to treat skull base tumors. An endoscope is a thin, tube-like instrument with a light and a camera. Video from the camera is viewed on a monitor. This allows for detailed exposure and removal of these lesions without external incisions. After all visible tumor is removed, the surgeon advances the endoscope into the sella to inspect for hidden tumor. Some tumors grow sideways into the cavernous sinus, a critical venous structure. It may be difficult to completely remove this portion of the tumor without causing injury to the nerves and vessels. Patients can often return home within 2-3 days of surgery. Any tumor left behind may be treated later with radiation by the radiation oncologists at OHC, Drs. Elizabeth Levick, Marc Mosbacher, David Pratt and Peter Fried.

Skull base meningioma and acoustic neuroma are tumors addressed by our lateral skull base team. These can be the most challenging operations we face. Our skull base neurosurgeons work with neuro-otology ENT surgeons to create delicate and intricate approaches through the bone of the skull. These approaches are designed to access deeply situated tumors that are closely associated with vital arteries, nerves and critical brain matter. Retrosigmoid, middle fossa and translabrynthine craniotomies are all utilized for removal of acoustic neuromas, choosing the approach that best suits the individual patient. This enables extremely high rates of facial movement preservation and total tumor removal. Orbitopterional, transpetrosal, combined petrosal, retrolabryhthine, far lateral, ELITE (extreme far lateral) and retrosigmoid approaches are employed for complex skull base meningiomas. Closely monitoring the function of cranial nerves during tumor removal is essential in preservation of function. These techniques have been developed and refined based on years of clinical experience. Investment in advanced operative microscopes/endoscopes is essential, along with proper instrumentation.



The neurosurgeons also perform awake craniotomies, usually when they are removing a tumor near functional areas of the brain that are related to speech. Operating with the patient awake and talking offers a significant advantage; it allows the surgeon to accurately test a patient's speech and to localize the areas that enable the patient to speak and write. With this knowledge, the surgeon can remove the tumor while maintaining speech function. In addition, by tracking the boundaries of the patient's speech region, they know when to stop removing tissue and can balance maximal resection of the tumor with maintenance of function, increasing the percentage of patients receiving gross total removal of their tumor in these eloquent brain areas.

Our surgeons also employ the use of MRI during the operation for low-grade glioma operations. This technique maximizes the removal of abnormal brain tissue by showing the surgeon the residual tumor during the course of the operation. Therefore, the tissue may be removed before the patient leaves the operating room.

We have invested in 5-ALA technology for removal of high-grade glioma. An FDA-approved drug is delivered to the patient prior to the operation. Once this has circulated in the blood stream, a fluorescent light is emitted by the Leica operative microscope and causes the tumor to light up within the brain. This allows the tumor to be visualized and differentiated from normal surrounding brain matter. Following surgery, the patient is treated by our multi-disciplinary team of Prasad Kudalkar, MD, neuro-oncologist, radiation oncology and neurosurgery.

## HOPE STORIES

## **Angie's story:** Brain Tumor (petroclival meningioma)

Angie's journey to brain surgery started in 2018 with a slight ringing in her ears and occasional dizziness while driving. Her ENT specialist recommended an MRI which revealed a tumor at the base of Angie's brain. Her doctors



recommended Dr. Vincent DiNapoli, MD, PhD, of Mayfield Brain & Spine, for surgery at The Jewish Hospital — Mercy Health. She was diagnosed with a petroclival meningioma, an often-benign tumor that grows from the three-layer protective membranes that cover the brain and spinal cord called the meninges. The location of Angie's tumor was especially complex, as it was pressing on the brainstem and displacing the cranial nerves responsible for swallowing, speech, facial movement, hearing and balance. She underwent the nearly 12-hour surgery in May 2019.

"I knew something was wrong, but I had no idea the diagnosis was going to be so serious," Angie said. "Dr. Dinapoli was incredible," she said. "There was a calming confidence in the way he explained how he would approach the surgery and do whatever possible to minimize the risk. I truly believe God put him in our life at the right time. He is amazing and will always hold a special place in my heart."

"Angie has been an inspirational patient," Dr. DiNapoli said. "She faced this diagnosis with unwavering grace and positivity. This tumor threatened her life and ability to continue her active lifestyle. She exemplifies the patients who drive us to pursue excellence in surgical techniques in order to provide the best possible outcomes."

### Gamma Knife radiosurgery provides relief of extreme vertigo caused by a brain metastasis

High school gymnastics coach Stacey Bailey started having episodes of dizziness in late 2019 and was treated at the Mercy Health — Anderson emergency department with Meclizine after her arrival by ambulance. At stage



four, breast cancer metastasizes or spread, to other parts of the body. Stacey's tumor markers had been inching up, but the metastases her care team was monitoring in her cervical and thoracic spine were relatively stable. Her care team ordered a brain MRI which showed "a pea sized tumor in my cerebellum," says Stacey. Stacey's radiation oncologist, Marc Mosbacher, MD with OHC, referred her to the Gamma Knife® Center at The Jewish Hospital — Mercy Health. On March 9, 2020, Stacey underwent Gamma Knife® radiosurgery to treat her cerebellar metastasis with Dr. Mosbacher and Dr. Ronald Warnick, a neurosurgeon with Mayfield Brain & Spine and Co-Director of the Gamma Knife® Center.

The Gamma Knife® is an advanced brain surgery tool that performs stereotactic radiosurgery, delivering high-energy rays from the machine to one or more tumors. The radiation beams are precisely aimed, destroying tumors but sparing health tissue nearby. There is no incision and patients like Stacey usually go home the same day. "It's amazing. It's kind of superhuman. It really was kind of a fascinating experience," says Stacey of the Gamma Knife® and the 25-minute procedure she underwent. "The staff and the nurse were wonderful and Dr. Warnick is fabulous!" she says.

### **Neuro-Oncology Team**

The program is led by Dr. Vincent DiNapoli, Director of the Brain Tumor Center, Dr. Ronald Warnick, co-Director of the Gamma Knife Program and Dr. David Pratt, OHC, co-Director of the Gamma Knife Program.



Vincent DiNapoli, MD, PhD Neurosurgeon



Ronald Warnick, MD Neurosurgeon Radiation



Peter R. Fried, MD Radiation Oncologist, OHC



Yair Gozal, MD, PhD Neurosurgeon



Marc Mosbacher, MD Radiation Oncologist , OHC



Lee Alexander Zimmer, MD, PhD Otolaryngologist, Skull Base Surgery



David Pratt, MD Radiation Oncologist, OHC



Joseph Breen, MD, Neuro-otology Surgery



Rob Stevens, MD, Neuro-radiologist, Director of Imaging at Jewish Hospital



Randall J. Hlubek, MD Neurosurgeon



Elizabeth Levick, MD Radiation Oncologist, OHC



Kudalkar, MD, Neuro

Oncologist, OHC

Dr. John Kachoris

### **Nurse Practitioners**



There are three neurosurgery NPs hired by Mercy for Jewish Hospital. Andrea Stoll, Mitch Rupard and Katie Kreimer. They bring years of experience to the team. They will be available on weekdays for inpatient consults and management of floor and ICU patients.

There is 24/7 Neurology coverage through Riverhills, the team is led by Dr. John Kachoris and Neurology NPs, Christina Vest, Erin Kennedy and Julie Zimmer. Dr. Kachoris rounds in hospital with NP team.

Front row: Katie Kreimer, Erin Kennedy, Dr. John Kachoris, Caitlin Wilschevick. Back row: Christina Vest, Julie Zimmer, Mitch Rupard, Andrea Stoll

## Colon Cancer Care at The Jewish Hospital — Mercy Health

### Colorectal Cancer Patient Encourages People to have Colonoscopy Screenings

Michael Clark, who will turn 63 in July 2021, recognizes that fear of having a screening colonoscopy may have delayed his decision to have one. He's since been diagnosed and treated successfully for stage three rectal cancer and has a message for people he encounters:

"I've been telling all the guys at work, if you haven't had a colonoscopy, go get checked. Don't let the stereotype of the colonoscopy scare you. I should have had one at 60 and probably at 55. Once I went I through it, I realized there was nothing to be afraid or scared of."

Michael has always been a healthy, active man and when he experienced a substantial loss of energy in 2019, he put it down to getting older and kept himself going through sheer force of will. Then, in March 2020, he noticed significant changes in his bowel movements.

"I knew from experience that I would have a substantial bowel movement once a day, but I kept noticing that my bowel movements were spindly and thin. I thought maybe it was because I was eating out. I started paying attention to my BMs and seeing a bit of red in my stool and I knew it wasn't tomato rinds," says Michael.

A friend at work referred Michael to a gastroenterologist and Michael had a colonoscopy in April 2020. His gastroenterologist found a stage three rectal tumor during the procedure. In stage three, rectal tumors have grown through the rectal wall and spread to adjacent lymph nodes but not to other organs. Michael's tumor was not aggressive but it had grown to cause a 75% blockage of his rectum, which impacted the shape of his stools and frequency of his bowel movements.

Michael needed to have surgery to remove the tumor and his gastroenterologist referred him to Mercy Health Physician and colon and rectal surgeon Cory Barrat, MD. Dr. Barrat reviewed and explained what he saw on Michael's CT and MRI scans and laid out their action plan, which started with Michael undergoing a course of chemotherapy and radiation to shrink the tumor before surgery.

"I was doing chemo seven days a week and radiation five days a week," says Michael, who was determined to keep living as normally as possible.

"My advice is don't watch these depressing stories about cancer. That will bring you really down and it's hard to come back. For two days after my diagnosis, I started getting really down and I decided that the main focus is stay positive and know you have a tomorrow," says Michael. "I would tell people to be strong and be ornery. You can't roll over and have



people waiting on you. You have wait on yourself. The strength of you and your mind and wanting to get out in the yard and the garage and wanting to do things is what's going to get you through it."

Michael had another colonoscopy following chemotherapy and radiation treatment and found that his tumor had shrunk substantially. Michael had surgery to remove it in October 2020. Although he should have stayed in the hospital for four days, Michael's determination to leave prevailed and he went home the next day.

"I knew it was going to be rough, but I knew I was strong minded enough to put up with it," says Michael. "It's hard getting in and out of bed after the surgery because the stomach muscles have been cut so I had a chair in the garage that let me look out the driveway."

Michael had a temporary ileostomy to allow his body to heal after surgery and after two weeks, he knew it was ready to be reversed. He continued chemotherapy treatments through January of this year. In late February, a CT scan showed that Michael was clear of cancer. In March, he had another colonoscopy and his doctor gave Michael a welcome follow-up order.

"He said, 'See you in three years."

Michael continues to heal and feels good aside from some lingering tenderness at the site of his colostomy stoma scar.

"I'm getting my vigor back," he says.

He credits his medical team and his wife for helping him get through his diagnosis and treatment.

"Dr. Barrat and his staff were an excellent team. They were there any time I needed them for anything and always called back or talked to me right then and there. I think he did a great job and I also credit my oncologist and radiologist. They shrank the tumor down to where it was operable," says Michael.

"Also, my wife was behind me 100%. She told me that if my activities were limited after surgery or if a needed a permanent colostomy bag, it was OK. It means a lot to your recovery to have that support and it allowed me to just focus one day at a time and take it as it came."

For anyone experiencing unexpected changes in their energy levels or bowel movements, Michael advises that you "be aware of yourself and how you operate. I was always go, go, go. The lack of energy was a big sign that something was wrong. The next sign was the change in my bowel movements. There's no shame in seeing a doctor and getting checked out. You may be able to avoid getting cancer and have growths treated during a colonoscopy while they are still polyps."

### National Accreditation Program for Rectal Cancer (NAPRC)

The Jewish Hospital — Mercy Health is proud to announce our Rectal Cancer Program was surveyed for the Commission on Cancer's NAPRC accreditation in March 2021.

The Rectal Cancer Program at the Jewish Hospital provides the highest standard of care for patients undergoing treatment. By utilizing evidence-based practices, state of the art procedures and NAPRC guidelines, physicians can set a clear path for patients as they navigate through the treatment course.

Our Rectal Cancer Multidisciplinary Team, led by Dr. Cory Barrat, is comprised of specialty trained and qualified physicians including board certified colorectal surgeons, medical and radiation oncologists, pathologists and radiologists. The team meets twice monthly to extensively review and formulate personalized treatment plans for each rectal cancer patient. Patients are closely monitored throughout the entire treatment course, from initial testing to follow up care and every point in between.

The Rectal Cancer Program is an innovative approach to cancer care. Moving forward, the Rectal Cancer Multidisciplinary Team at The Jewish Hospital will continue to strive to lead the way for the care of rectal cancer patients in the Cincinnati region.

### **Colorectal Surgery**

Dr. Cory Barrat (*Program Director*) Dr. John Cullen

### **Surgical Oncology**

Dr. Shyam Allamaneni

### **Medical Oncology**

Dr. Patrick Ward Dr. Cynthia Chua Dr. David Waterhouse

### **Radiation Oncology**

Dr. David Pratt Dr. Elizabeth Levick

### Pathology

Dr. Craig Isenhart Dr. Timothy Braverman

### Radiology

Dr. Robert Stevens Dr. Stephen Perlman Dr. Aditya Bahel Dr. Ian Chaves

### **Program Coordinator**



Mary Keefer, RHIT, CTR Cancer Registrar

### **PHYSICIAN SPOTLIGHT**



John P. Cullen, MD is a surgeon double boarded in both General and Colorectal Surgery. He specializes in the treatment of intestinal cancer, inflammatory bowel disease and perianal problems.

Dr. Cullen is trained in the latest laparoscopic and endoscopic techniques promoting excellent cancer care while minimizing recovery time. He works with a team of nurses and physicians from other specialties to provide comprehensive cancer care on complex cases.

Dr. Cullen 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 at the Cleveland Clinic. He 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 from 2017-2021 by *Cincinnati Magazine.* 



### Cory D. Barrat, MD, FACS, FASCRS,

is double 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 is the director of The Jewish Hospital Rectal Cancer Accreditation Program and leads a biweekly multidisciplinary rectal cancer tumor board discussion to ensure 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 their questions answered. He takes pride in his ability to communicate with patients, families, as well as the primary care physicians. He is a Cincinnati Top Doctor and has been the recent recipient for highest patient satisfaction award at Mercy Health.



**Jon Labbe** President, Mercy Health — Cincinnati Foundation



### DEAR FRIENDS,

Before being diagnosed with breast cancer, Susan Jones Satterwhite had no idea how expensive an illness like that could be.

She had insurance, but because she couldn't work during the radiation, chemotherapy and surgery she received at Mercy Health, Susan started falling behind on her bills including utilities and her mortgage. And then there were co-pays and deductibles adding up as well.

But you were there for her. Because of gifts from our donors, Susan got the help she needed with her bills, including food and gas to get to her appointments. She was able to focus on the most important thing—getting well. "I'll admit, before I got sick I wasn't sure if donations were making it to the places most needed," Susan said. "But now I can assure you they do."

Susan knows first-hand how important your contributions are and she is eternally grateful. "Without all that assistance, I don't know what I would have done," she said. "I just want donors to know this really helps. Without them, a lot of people wouldn't even be here because they wouldn't be able to afford the treatments. I was lucky because I have insurance. "I'm so happy there are people in the world who can make those contributions," Susan said. "I want donors to know that I thank them from the bottom of my heart. I appreciate them so much."

Stories like Susan's are a real-life reflection of the impact donors have across Cincinnati to support our cancer patients on their journey. Whatever the issue, wherever the care is provided, our donors walk along side of our patients, physicians and care teams in so many ways. Your gifts to our regional Oncology fund help patients like Susan focus on getting better and not stressing about how they are going to make it through.

With Gratitude,

Jon Labbe

## 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 Ils.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

### **REFERENCES/SOURCES**

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

## Appendix - OHC Clinical Trials Menu

For questions, contact Doug Hart, 513-751-2273 x42401 or douglas.hart@usoncology.com or OHCResearchNurse@usoncology.com

\*STAR studies are for malignancies with a limited population and opened when a specific patient has been identified. The opening process takes approximately two weeks.

### ANAL

20189. **STAR** - A Phase 3 Global, Multicenter, Double-Blind Randomized Study of Carboplatin-Paclitaxel With INCMGA00012 or Placebo in Participants With Inoperable Locally Recurrent or Metastatic Squamous Cell Carcinoma of the Anal Canal Not Previously Treated With Systemic Chemotherapy (POD1UM-303/InterAACT 2)

### **BILIARY**

18264. **STAR** - A Phase 3, Multicenter, Open-Label, Randomized, Controlled Study of Oral Infigratinib versus Gemcitabine with Cisplatin in Subjects with Advanced/ Metastatic or Inoperable Cholangiocarcinoma with FGFR2 Gene Fusions/Translocations

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations *(Waterhouse)* 

### **BRAIN**

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations *(Waterhouse)* 

### BREAST

17079. **Registry/Observational** - MammaPrint, BluePrint and Full-genome Data Linked with Clinical Data to Evaluate New Gene Expression Profiles: An Adaptable Registry (FLEX). (*Ward*)

19082. **No Slots Currently Available** - A Phase 1/1b, Multicenter study to evaluate the humanized anti-CD73 antibody, CPI-006, as a single agent or in combination with Ciforadenant, with Pembrolizumab and with Ciforadenant plus Pembrolizumab in adult subjects with advanced cancers (*Waterhouse*)

19001. A Phase 1/2 Study of CT7001 in Combination with Fulvestrant in Patients with Metastatic or Locally Advanced Hormone-Receptor Positive and Human Epidermal Growth Factor Receptor 2-Negative Breast Cancer (*Ward*)

19079. **STAR** - A Phase 2, Open-Label, Single-Arm, Multicenter Study to Evaluate the Efficacy and Safety of Pemigatinib in Participants With Previously Treated Locally Advanced/Metastatic or Surgically Unresectable Solid Tumor Malignancies Harboring Activating FGFR Mutations or Translocations

14059. **STAR** -Phase 1/2, trial of Ibrutinib plus Trastuzumab in HER2-amplified Metastatic Breast Cancer (*Lang*)

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations *(Waterhouse)*  19054. **STAR** - Randomized, double-blind, phase 3 study of tucatinib or placebo in combination with ado-trastuzumab emtansine (T-DM1) for subjects with unresectable locally-advanced or metastatic HER2+ breast cancer (HER2CLIMB-02)

20286. Screening protocol to detect HER2 alterations required for enrollment on clinical research protocols of tucatinib (*Johns*)

### COLORECTAL

19082. **No Slots Currently Available** - A Phase 1/1b, Multicenter study to evaluate the humanized anti-CD73 antibody, CPI-006, as a single agent or in combination with Ciforadenant, with Pembrolizumab and with Ciforadenant plus Pembrolizumab in adult subjects with advanced cancers (*Waterhouse*)

19079. **STAR** - A Phase 2, Open-Label, Single-Arm, Multicenter Study to Evaluate the Efficacy and Safety of Pemigatinib in Participants With Previously Treated Locally Advanced/Metastatic or Surgically Unresectable Solid Tumor Malignancies Harboring Activating FGFR Mutations or Translocations.

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations (*Waterhouse*)

20216. **STAR** - MOUNTAINEER: A Phase 2, Open Label Study of Tucatinib Combined with Trastuzumab in Patients with HER2+ Metastatic Colorectal Cancer

### **ESOPHAGEAL**

20171. **STAR** - A Multicenter, Double-Blind, Randomized Phase III Clinical Trial Evaluating the Efficacy and Safety of Sintilimab vs. Placebo, in Combination with Chemotherapy, for First-Line Treatment of Unresectable, Locally Advanced, Recurrent or Metastatic Esophageal Squamous Cell Carcinoma (ORIENT-15)

### **GRAFT VERSUS HOST**

18130. A Phase 3, Study of Itacitinib or Placebo in Combination With Corticosteroids as Initial Treatment for Chronic Graft-Versus-Host Disease (GRAVITAS-309). *(Essell)* 

### **GYNECOLOGIC**

19160. A Randomized Phase 3, Double-Blind Study of Chemotherapy With or Without Pembrolizumab Followed by Maintenance With Olaparib or Placebo for the First-Line Treatment of BRCA non-mutated Advanced Epithelial Ovarian Cancer (*Chua*) 19200. Phase 3, Study of Mirvetuximab Soravtansine vs Investigators' Choice of Chemotherapy in Platinum-Resistant, Advanced High-grade Epithelial Ovarian, Primary Peritoneal or Fallopian Tube Cancers with High Folate Receptor-Alpha Expression (*Chua*)

19082. **No Slots Currently Available** - A Phase 1/1b, Multicenter study to evaluate the humanized anti-CD73 antibody, CPI-006, as a single agent or in combination with Ciforadenant, with Pembrolizumab and with Ciforadenant plus Pembrolizumab in adult subjects with advanced cancers (*Waterhouse*)

19079. **STAR** - A Phase 2, Open-Label, Single-Arm, Multicenter Study to Evaluate the Efficacy and Safety of Pemigatinib in Participants With Previously Treated Locally Advanced/Metastatic or Surgically Unresectable Solid Tumor Malignancies Harboring Activating FGFR Mutations or Translocations (FIGHT-207)

18214. A Phase 1/2, study of Galinpepimut-S in combination with Pembrolizumab (MK-3475) in patients with selected advanced cancers (*Ward*)

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations (*Waterhouse*)

20225. A Phase 2, multicenter, single-arm, open-label study to evaluate the efficacy and safety of AK104 in subjects with recurrent or metastatic cervical cancer (*Chua*)

20298. **STAR** - A Phase 2 Study of VS-6766 (Dual RAF/MEK Inhibitor) Alone and In Combination with Defactinib (FAK Inhibitor) in Recurrent Low-Grade Serous Ovarian Cancer (LGSOC)

### **HEAD AND NECK**

19082. **No Slots Currently Available** - A Phase 1/1b, Multicenter study to evaluate the humanized anti-CD73 antibody, CPI-006, as a single agent or in combination with Ciforadenant, with Pembrolizumab and with Ciforadenant plus Pembrolizumab in adult subjects with advanced cancers (*Waterhouse*)

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations (*Waterhouse*)

### HEMATOPOIETIC STEM CELL TRANSPLANT

19247. A Randomized Study of Daratumumab Plus Lenalidomide Alone as a Maintenance Treatment in Patients with Newly Diagnosed Multiple Myeloma Who are Minimal Residual Disease Positive After Frontline Autologous Stem Cell Transplant (*Faber*)

#### **HODGKIN'S LYMPHOMA**

11282. **STAR** - A Phase 2, Open-Label Study of Brentuximab Vedotin in Front-Line Therapy of Hodgkin Lymphoma (HL) in Adults age 60 and Above (*Essell*)

18013. A Phase 2, Multi-Part Clinical Trial of Brentuximab Vedotin in Classical Hodgkin Lymphoma subjects *(Islas-Ohlmayer)* 

#### **LEUKEMIA**

18168. A Phase 3b, Single-Arm, Multicenter Open-Label Study of sponsor provided Venetoclax in Combination with Azacitidine (SOC) or Decitabine (SOC) in an Outpatient Setting in AML Patients Ineligible for Intensive Chemotherapy (*Broun*)

19082. **No Slots Currently Available** - A Phase 1/1b, Multicenter study to evaluate the humanized anti-CD73 antibody, CPI-006, as a single agent or in combination with Ciforadenant, with Pembrolizumab and with Ciforadenant plus Pembrolizumab in adult subjects with advanced cancers (Waterhouse)

18161. Limited Slots - A Phase 1b, Study of PTC299 in Relapsed/Refractory Acute Leukemias (*Broun*)

### **MULTIPLE MYELOMA**

19247. A Randomized Study of Daratumumab Plus Lenalidomide Alone as a Maintenance Treatment in Patients with Newly Diagnosed Multiple Myeloma Who are Minimal Residual Disease Positive After Frontline Autologous Stem Cell Transplant (Faber)

19174. An Open-label, Phase 2 Study Treating Subjects With First or Second Relapse of Multiple Myeloma with Carfilzomib, Pomalidomide and Dexamethasone (KPd) *(Faber)* 

18230. DREAMM 7: A Multicenter, Open-Label, Randomized Phase III Study to Evaluate the Efficacy and Safety of the Combination of Belantamab Mafodotin, Bortezomib and Dexamethasone (B-Vd) Compared with the Combination of Daratumumab, Bortezomib and Dexamethasone (D-Vd) in Participants with Relapsed/Refractory Multiple Myeloma (Faber)

19036. A Phase 3, Randomized, Open-Label, Study comparing once-weekly vs Twice-weekly Carfilzomib in combination with Lenalidomide and Dexamethasone in subjects with relapsed or refractory Multiple Myeloma (*Faber*)

18229. A Phase 3, Open-Label, Randomized Study to Evaluate the Efficacy and Safety of Single Agent Belantamab Mafodotin Compared to Pomalidomide plus Low-dose Dexamethasone in Participants with Relapsed/Refractory Multiple Myeloma (*Faber*)

19064. **Limited Slots** - A Phase 1a/1b, Open-label, multicenter study evaluating the safety of Tiragolumab as a single agent and in combination with Daratumumab in patients with relapsed or refractory Multiple Myeloma and as a single agent and in combination with Rituximab in patients with relapsed or refractory B-cell Non-Hodgkin's Lymphoma (*Faber*)

#### MYELODYSPLASTIC SYNDROME

20178. A Randomized, Double-Blind, Phase 3 Study Evaluating the Safety and Efficacy of Venetoclax in Combination with Azacitidine in Patients Newly Diagnosed with Higher-Risk Myelodysplastic Syndrome (Higher-Risk MDS) (VERONA) (*Broun*)

### **MYELOFIBROSIS**

19171. **STAR** - A Randomized, Controlled Phase 3 Study of Pacritinib Versus Physician's Choice in Patients with Primary Myelofibrosis, Post Polycythemia Vera Myelofibrosis or Post-Essential Thrombocythemia Myelofibrosis with Severe Thrombocytopenia (Platelets Counts <50,000/uL)

20177. **STAR** - A Randomized, Double-Blind, Placebo-Controlled Phase 3 Study of Navitoclax in Combination with Ruxolitinib versus Ruxolitinib in Subjects with Myelofibrosis (TRANSFORM-1) *(Islas-Ohlmayer)* 

### NON HODGKIN'S LYMPHOMA

16176. A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-controlled Study of the Bruton's Tyrosine Kinase (BTK) Inhibitor, Ibrutinib, in Combination with Rituximab versus Placebo in Combination with Rituximab in Treatment Naïve Subjects with Follicular Lymphoma (*Islas-Ohlmayer*)

20219. A dual-cohort, open-label, phase 2 study of brentuximab vedotin and CHP (A+CHP) in the frontline treatment of subjects with peripheral T-cell lymphoma (PTCL) with less than 10% CD30 expression (*Islas-Ohlmayer*)

19082. **No Slots Currently Available** - A Phase 1/1b, Multicenter study to evaluate the humanized anti-CD73 antibody, CPI-006, as a single agent or in combination with Ciforadenant, with Pembrolizumab and with Ciforadenant plus Pembrolizumab in adult subjects with advanced cancers (*Waterhouse*)

19062. A Phase 1b/3 double-blind, randomized, active-controlled 3-stage, biomarker, adaptive study of Tazemetostat or placebo in combination with Lenalidomide plus Rituximab in subjects with relapsed/refractory Follicular Lymphoma (*Islas-Ohlmayer*)

18104. **CAR-T** . A Safety Trial of Lisocabtagene Maraleucel (JCAR017) for Relapsed and Refractory B-cell Non-Hodgkin Lymphoma in the Outpatient Setting *(Essell)* 

19064. **Limited Slots** - A Phase 1a/1b, open-label, multicenter study evaluating the safety of Tiragolumab as a single agent and in combination with Daratumumab in patients with relapsed or refractory Multiple Myeloma and as a single agent and in combination with Rituximab in patients with relapsed or refractory B-cell Non-Hodgkin's Lymphoma (*Faber*)

20144. A randomized, double-blind, placebo-controlled, active-comparator, multicenter, phase 3 study of brentuximab vedotin or placebo in combination with lenalidomide and rituximab in subjects with relapsed or refractory diffuse large B-cell lymphoma *(Islas-Ohlmayer)* 

19070. **STAR** - GC-LTFU-001: Long-term follow-up protocol for subjects treated with gene-modified T-cells (*Essell*)

#### NON SMALL CELL LUNG

19209. **Observational,** A Non-interventional Biomarker Study on the Molecular Evaluation of Archival Tumor Tissue in Subjects with Non-Small Cell Lung Cancer (*Waterhouse*)

19088. A Phase 3, Randomized, Open Label Study to Compare Nivolumab plus Concurrent Chemoradiotherapy (CCRT) followed by Nivolumab plus Ipilimumab or Nivolumab plus CCRT Followed by Nivolumab vs CCRT followed by Durvalumab in Previously Untreated, Locally Advanced Non-small Cell Lung Cancer (*Waterhouse*)

19044. Requires MM approval prior to consent - A Phase 3,

Randomized, placebo-controlled, double-blind, multi-center, study of Durvalumab following SBRT for the treatment of patients with unresected Stage I/II, lymph-node negative NSCLC (Shaughnessy)

20224. Screening Protocol to Detect Mutation of KEAP1 or NRF2/NFE2L2 Genes in Patients with Non-Small Cell Lung Cancer Not Previously Treated for Metastatic Disease to Determine Eligibility for a Biomarker Selected Clinical Trial **(KEAPSAKE Trial)** 

19239. **STAR** - A Phase 2, Randomized, Multicenter, Doubleblind, Study of the Glutaminase Inhibitor Telaglenastat with Pembrolizumab and Chemotherapy versus Placebo with Pembrolizumab and Chemotherapy in First-line Metastatic **KEAP1/NRF2-mutated** Nonsquamous, Non-Small Cell Lung Cancer (KEAPSAKE)

19208. **STAR** - A Randomized, Open-Label, Phase 3 Study of Pralsetinib versus Standard of Care for First Line Treatment of RET fusion-positive, Metastatic Non-Small Cell Lung Cancer

20381. Molecularly Informed Lung Cancer Treatment in a Community Cancer Network: A Pragmatic Prospective RWE Study (MYLUNG Consortium: Part 2) (*Waterhouse*)

20250. **STAR** - A Phase 3, Randomized Study of Amivantamab and Lazertinib Combination Therapy Versus Osimertinib Versus Lazertinib as First-Line Treatment in Patients with EGFR-Mutated Locally Advanced or Metastatic Non-Small Cell Lung Cancer (73841937NSC3003)MARIPOSA

20249. **STAR** - A Randomized, Open-label Phase 3 Study of Combination Amivantamab and Carboplatin-Pemetrexed Therapy, Compared with Carboplatin-Pemetrexed, in Patients with **EGFR Exon 20ins** Mutated Locally Advanced or Metastatic Non-Small Cell Lung Cancer

19192. A Phase 3. Double-Blinded, Placebo-controlled study of Tiragolumab, an anti-TIGIT antibody, in combination with Atezolizumab compared with Placebo in combination with Atezolizumab in patients with previously untreated locally advanced unresectable or metastatic PD-L1 selected nonsmall cell lung cancer (*Waterhouse*)

19018. A Phase 3, Randomized Study of Sitravatinib in Combination with Nivolumab Versus Docetaxel in Patients with Advanced Non-Squamous Non-Small Cell Lung Cancer with Disease Progression On or After Platinum-Based Chemotherapy in Combination with Checkpoint Inhibitor Therapy (*Waterhouse*)

19143. A Phase 3 Multicenter, Randomized , Open Label, Active-controlled, Study of AMG 510 versus Docetaxel for the Treatment of Previously Treated Locally Advanced and Unresectable or Metastatic NSCLC Subjects with **Mutated KRAS p.g12C** (*Waterhouse*)

19082. **No Slots Currently Available** - A Phase 1/1b, Multicenter study to evaluate the humanized anti-CD73 antibody, CPI-006, as a single agent or in combination with Ciforadenant, with Pembrolizumab and with Ciforadenant plus Pembrolizumab in adult subjects with advanced cancers (*Waterhouse*)

18129. **STAR** - A Phase 3 Randomized Open-label Study of Brigatinib (ALUNBRIG<sup>™</sup>) Versus Alectinib (ALECENSA\*) in **Advanced Anaplastic Lymphoma Kinase-Positive** Non-Small-Cell Lung Cancer Patients Who Have Progressed on Cristine 18164. **STAR** - A Phase 1, Study of the Highly-selective RET Inhibitor, BLU-667, in Patients with Thyroid Cancer, Non-Small Cell Lung Cancer (NSCLC) and Other Advanced Solid Tumors (BLU-667-1101) **RET Mutation or Rearrangement** 

19079. **STAR** - A Phase 2, Open-Label, Single-Arm, Multicenter Study to Evaluate the Efficacy and Safety of Pemigatinib in Participants With Previously Treated Locally Advanced/ Metastatic or Surgically Unresectable Solid Tumor Malignancies Harboring Activating **FGFR** Mutations or Translocations

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations *(Waterhouse)* 

20283. A phase 2 study of brentuximab vedotin in combination with pembrolizumab in subjects with metastatic solid tumors after progression on prior PD-1 inhibitor treatment (*Waterhouse*)

### PROSTATE

18103. **STAR** - A Phase 3 Randomized, Placebo-controlled, Double-blind Study of Niraparib in Combination with Abiraterone Acetate and Prednisone Versus Abiraterone Acetate and Prednisone for Treatment of Subjects with Metastatic Prostate Cancer

19082. **No Slots Currently Available** - A Phase 1/1b, Multicenter study to evaluate the humanized anti-CD73 antibody, CPI-006, as a single agent or in combination with Ciforadenant, with Pembrolizumab and with Ciforadenant plus Pembrolizumab in adult subjects with advanced cancers (*Waterhouse*)

16238. **STAR** - Phase 3, 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)

19079. **STAR** - A Phase 2, Open-Label, Single-Arm, Multicenter Study to Evaluate the Efficacy and Safety of Pemigatinib in Participants With Previously Treated Locally Advanced/ Metastatic or Surgically Unresectable Solid Tumor Malignancies Harboring Activating FGFR Mutations or Translocations (FIGHT-207)

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations (*Waterhouse*)

20248. **STAR** - A Phase 3 Randomized, Placebo-controlled, Double-blind Study of Niraparib in Combination with Abiraterone Acetate and Prednisone Versus Abiraterone Acetate and Prednisone for the Treatment of Participants with **Deleterious Germline or Somatic Homologous Recombination Repair (HRR) Gene-Mutated** Metastatic Castration-Sensitive Prostate Cancer (mCSPC)

### **RENAL CELL**

19082. **No Slots Currently Available** - A Phase 1/1b, Multicenter study to evaluate the humanized anti-CD73 antibody, CPI-006, as a single agent or in combination with Ciforadenant, with Pembrolizumab and with Ciforadenant plus Pembrolizumab in adult subjects with advanced cancers (*Waterhouse*) GU-005. A Phase 3, Open-label, Randomized Study of MK-6482 Versus Everolimus in Participants with Advanced Renal Cell Carcinoma That has Progressed After Prior PD-1/L1 and VEGF-Targeted Therapies

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations (*Waterhouse*)

### SKIN

20283. A phase 2 study of brentuximab vedotin in combination with pembrolizumab in subjects with metastatic solid tumors after progression on prior PD-1 inhibitor treatment (Waterhouse)

18014. **STAR** - A Phase I, Multi-Center, Open-Label, Treatment Duration Increment, Expansion, Safety and Pharmacodynamic Study of CX-4945 Administered Orally Twice Daily to Patients with Advanced Basal Cell Carcinoma

### UROTHELIAL

19032. Observational, Biomarker Study to Identify Subjects with Advanced Urothelial Cancer and Fibroblast Growth Factor Receptor Gene Aberrations (*Waterhouse*)

20172. **STAR** - A study of enfortumab vedotin (ASG-22CE) as monotherapy or in combination with other anticancer therapies for the treatment of urothelial cancer

19094. **STAR** - A Phase 3, Multicenter, Double-Blind, Randomized, Placebo-Controlled Trial of Infigratinib for the Adjuvant Treatment of Subjects with Invasive Urothelial Carcinoma with Susceptible FGFR3 Genetic Alterations

17133. **STAR** - A Phase 3, Study of Erdafitinib compared with Docetaxel or Pembrolizumab in subjects with advanced urothelial cancer and selected FGFR gene aberrations

19092. **STAR** - A Phase 2 Study of Erdafitinib in Subjects With Advanced Solid Tumors and FGFR Gene Alterations (*Waterhouse*)

18033. **STAR** - A Phase 2 Study of Sitravatinib in Combination with PD-L (1) Checkpoint Inhibitor Regimens in Patients With Advanced or Metastatic Urothelial Carcinoma

### **SOLID TUMOR - MUTATIONAL**

19151. **STAR** - A Phase 1/2 Multiple Expansion Cohort Trial of MRTX849 in Patients with Advanced Solid Tumors with KRAS G12C Mutation

20186. Tumor-agnostic precision immuno-oncology and somatic targeting rational for you (TAPISTRY) phase II platform trial (*Ward*)

20344. **STAR** - A Phase 2 Basket Study of Tucatinib in Combination with Trastuzumab in Subjects with Previously Treated, Locally-Advanced Unresectable or Metastatic Solid Tumors Driven by HER2 Alterations At Mercy Health — Cincinnati we extend the compassionate ministry of Jesus by improving the health and well-being of our communities and bring good help to those in need, especially people who are poor, dying and under served.

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.



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