



**Mary Lanning**  
HEALTHCARE  
Morrison Cancer Center

M. Sitki Copur, MD FACP,  
Medical Director

*A quarterly newsletter from Mary Lanning Healthcare's  
Morrison Cancer Center  
Local and national cancer authority  
The definition of excellence in a comprehensive, academic,  
community cancer program*

## Lung Cancer Screening program goes live

The Mary Lanning Healthcare/Morrison Cancer Center's Lung Cancer Screening program is now available to patients after the initial phases of development were completed.

The first phase, which began in January, included training and implementation of "Follow-up Manager," which tracks incidental lung nodules through Artificial Intelligence (AI) technology. The software program, "Power Scribe," picks up on words that identify incidental lung nodules.

Once scan results become available, they are placed on a tracking board, which is monitored by nurse navigators. From the tracking board, additional follow-up scans are scheduled, monitored and tracked efficiently. This process



**Meese**

helps avoid missing abnormal findings that might require follow-up.

The second phase, during which the program became fully functional on February 24, was training for the low-dose CT imaging studies. This process works similar to "Follow-Up Manager" but includes only low-dose CT scans on the tracking board. This helps in tracking annual CT screenings, as well as any follow-up diagnostic testing.



**Muske**



**Jones**

Pulmonology, Medical Oncology, Radiation Oncology and a team of primary providers.

MCC Director Dave Jones, Nurse Navigator Chandra Muske, RN OCN, and Clinical Trials Coordinator Joan Meese, RN, work together on monitoring tracking boards and communicating with patients and providers.

Implementation of the program featured exemplary teamwork by several departments including Information Technology, Diagnostic Imaging,

### Also in this issue

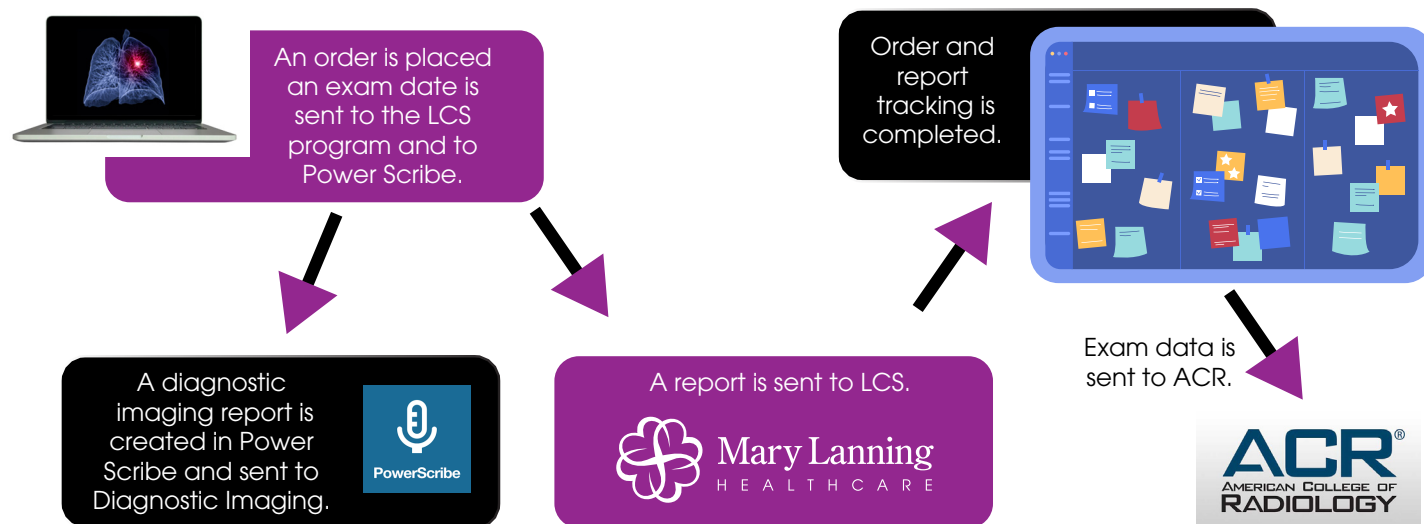
- LCS program
- LCS data flow
- MCC clinical trials
- FPBCC Advisory Board
- MCC and NC2

- Radiation therapy in GI
- Radiation therapy student
- New employees
- ACS-CAN
- Legislative efforts

- ASCO submission
- Staff highlight
- Drug approvals
- Cancer Committee
- theMedNet

- NMA Advocate article
- Textbook contribution
- Publications
- Practice changing data
- Drug approvals

## MLH/MCC Lung Cancer Screening (LCS) data flow



## MCC Clinical Trials program in final stages

The Morrison Cancer Center continues to work closely with the University of Nebraska Medical Center and the Fred and Pamela Buffett Cancer Center (FPBCC) to finalize the MCC Clinical Trials program.

MCC has completed training in UNMC's Integrated Cancer Repository for Cancer Research (iCaRe2) program and is one of two sites for the iCaRe2 registry.

MCC has started enrolling patients in the Breast Cancer Collaborative Registry (BCCR), Pancreatic Cancer Collaborative (PCCR) and Leukemia and Myeloid Neoplasm Registry (LeMN).

In February, the crucial step was executed by establishing an Institutional Review Board (IRB) of record. After much research and interviews with potential candidates, MCC chose the Western Copernicus Group (WCG) IRB, formerly known as Western Institutional Review Board (WIRB) in New Jersey.

MCC Clinical Trials Coordinator Joan Meese and MCC Director David Jones have attended several virtual meetings



**"Anytime a patient enrolls in a clinical trial, it is a sign that God has not given up on the possibility of human beings curing cancer one day."**

**— Dr. M. Sitki Copur**

with WCG for training and completing pivotal steps toward program setup.

With this essential piece of the puzzle complete, MCC is now ready to commit to opening and enrolling patients into the National Clinical Trials Network (NCTN) cooperative group clinical trials, as well as industry-sponsored trials.

The FPBCC Community Advisory Board

in February recommended MCC work with the UNMC colleagues to create the MCC clinical trials portfolio most suitable for our central Nebraska patient population.

Currently, MCC has a large portfolio of clinical trials including UNMC, FPBCC and NCTN cooperative group trials, as well as studies sponsored by industry partners.



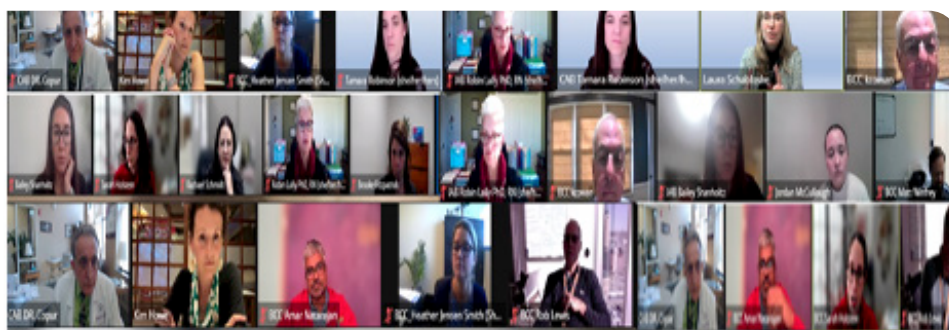
## FPBCC community advisory board meeting

The Morrison Cancer Center in February presented three key projects to the combined meeting of the Fred and Pamela Buffett Cancer Center (FPBCC) Community Advisory Board, Internal Advisory Board and Cancer Center Researchers.

Fifty-seven people attended the online meeting .

The MCC three projects are focused on reducing cancer care disparities in rural central Nebraska:

- Establishing a comprehensive MLH/MCC Lung Cancer Screening Program
- Establishing a successful clinical trials infrastructure
- Actively taking part in oncology-related legislative activities in collaboration with the American Society of



Morrison Cancer Center, Mary Lanning Healthcare			
<b>Project 1</b>	<b>Project 2</b>	<b>Project 3</b>	<b>Project 4</b>
...	...	...	...

Our Shared Goals	
Domain	Priorities
Prevention	HPV vaccination, obesity, smoking
Early detection	Cancer screening, cancer risk assessment
Treatment	Cancer navigation, cancer treatment guidelines
Clinical Trials	Clinical trial participation barriers, awareness of clinical trials
Policies	Policy collaborations, data-driven approach

Clinical Oncology Action Network (ASCO-ACT), American Medical Association (AMA), Nebraska Medical Association (NMA), American Cancer Society Cancer Action Network (ACS-

CAN) and Nebraska Cancer Coalition (NC2).

## MCC organization member of NC2

The Morrison Cancer Center was invited to be an organizational member of the Nebraska Cancer Coalition (NC2).

NC2 connects people and resources to strengthen cancer prevention and

detection, and the quality of life in Nebraska. Through its membership, MCC will be an integral part of the network of organizations and individuals dedicated to conquering cancer in Nebraska.

MCC is ready to participate in more collaborative, statewide efforts of the organization.



## MCC in Hastings & Grand Island



Home of Dr. M. Sitki Copur and his cancer team

## Radiation therapy update from GI campus

April marks the six-month anniversary of radiation therapy services at the Morrison Cancer Center in Grand Island. (The first treatment was given on November 9, 2022.)

For the past six months, the MCC team has fulfilled an unmet need for high-quality radiation oncology services to Grand Island and the surrounding communities.

"Our team is honored and proud to be able to provide this crucial component of multidisciplinary cancer care service," said Dr. Randy Duckert. "We are charged with the duty of delivering state-of-the-art treatment in the same manner we'd expect for ourselves and our family. This requires skill and, importantly, demands honesty and the ability to listen, educate and encourage people with a diagnosis of cancer. At MCC, this is delivered with the heart. The region is most fortunate to have this service available in central Nebraska. We are humbled and encouraged by the appreciation of our beloved patients, as well as our distinguished referring providers."

To refer a patient to the radiation therapy program at MCC in Grand Island, please call 308-384-2446. For our Hastings location, please call 402-460-5899.



## UNMC radiation oncology student visits MCC

The Morrison Cancer Center radiation oncology team recently provided clinical rotations for a University of Nebraska Medical Center (UNMC) Radiation Therapy student. The recent rotations are part of a continuous affiliation between UNMC and MCC.

Brittany Roberts has been working at MCC since December 2022. She will complete her clinical rotation in August 2023.

The didactic component of the program is composed of 40 semester hours, complying with the American Society of Radiologic Technology curriculum. Required courses, totaling 40 semester hours, are completed as part of a 12-month curriculum. Radiation therapy students gain clinical experience by rotating through affiliated cancer centers. MCC is the only affiliate in central Nebraska.



Brittany has worked as an X-ray and CT tech during the past few years. She decided to go back to school for radiation therapy experience through UNMC.

"Being a distance learner through the UNMC Radiation Therapy program in

Omaha, I feel privileged to have the opportunity to obtain my clinical experiences in the smaller cities of Hastings and Grand Island," Brittany said. "Not only do I have the opportunity to learn alongside wonderful physicians and therapists, but also I have the opportunity to build relationships with our patients. I don't know if that would always be an option in larger facilities."

Brittany's passion for oncology in general grew when she was in middle school after hearing about the relationships her cousin made with her cancer care team.

"It was inspiring how much of an impact they made on her wellbeing. From then on, I knew that someday that is what I wanted to do. Working with cancer patients and being there for them during likely the most difficult time in their lives is extremely rewarding."



## New employees join the MCC team

Two registered nurses joined the Morrison Cancer Center staff in January.

Sandy Burns works at MCC's Hastings campus. She graduated from Creighton University School of Nursing — Mary Lanning campus in 1999 with a BSN. She worked on the Medical-Surgical Unit, the Family Care Center and at a local family practice clinic before joining MCC.

She and her husband live in Hastings with their son and daughter.

"I care deeply about people and have always strived to give them the best care I can," Burns said. "I see this

from the other team members at the cancer center, as well, and am honored to work alongside this wonderful group of professionals. It takes a team working together to provide quality patient care and MCC has that team. I'm happy to say I'm now part of that team."

Lindsey Hessel works at MCC's Grand Island campus. She graduated from Creighton University's Accelerated Nursing program at Mary Lanning in 2014 with her BSN. After nursing school, she worked in the Emergency Room for



**Burns**



**Hessel**

nine years.

She is a Grand Island native, who still lives in GI with her two children.

"I was ready for a change of pace and looking for a career

where I could get to know my patients and be part of their journey while working with a great team. Never have I felt so welcomed and honored to be part of an outstanding team of nurses and providers. I am excited for the new challenges and learning everything about oncology nursing."

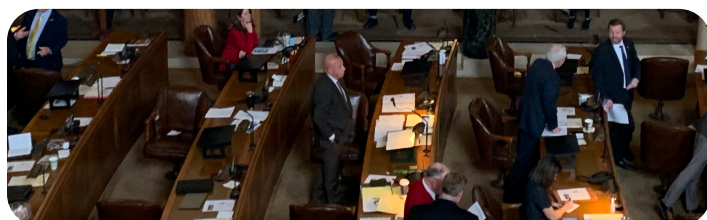
## ACS-CAN Nebraska Cancer Action Day

Dr. M. Sitki Copur represented the Morrison Cancer Center at the annual American Cancer Society Cancer Action Network (ACS-CAN) Day on March 2 in Lincoln.

Dr. Copur joined advocates from across Nebraska, starting the day at the Scottish Rite Ballroom at Centennial Mall South. After preparing for the senators' meeting, the group walked to the Nebraska State Capitol building. The ACS-CAN agenda included support for three legislative bills: LB-345 for Palliative Care; LB-539 for use of Juul settlement money toward the Tobacco Free Nebraska program; and LB-802/657 for pediatric cancer research and funding for the NC2 for Cancer Prevention and Support group.

This annual event brings together cancer survivors, caregivers and advocates from across Nebraska who want to make the fight against cancer a priority in the Nebraska Legislature.

Dr. Copur met with MCC service area district senators Loren Lippincott (top right) and Steve Halloran and Matt Prokop, ACS-CAN Senior Grass Roots Manager, (bottom right).



## MCC continues legislative efforts

The Morrison Cancer Center continues to advocate for our patients not only through scientific, medical and care fronts, but also at the legislative level.

In this journey, MCC works with the American Society of Clinical Oncology Action Network (ASCO-ACT), American Medical Association (AMA), the Nebraska Medical Association (NMA), the American Cancer Society Cancer Action Network (ACS-CAN) and Nebraska Cancer Coalition (NC2).

One of the high-priority legislative bills is proposed reform of prior authorization in Medicare Advantage and Medicare prescription drug benefit plans. MCC is supporting a letter sent by physician organizations to the Centers for Medicare & Medicaid Services (CMS) Administrator Chiquita Brooks-LaSure. The letter urges the agency to finalize proposed reforms that target the inappropriate

use of prior authorization requirements by Medicare Advantage organizations. These requirements cause the delay, denial and disruption of medically necessary care to patients, placing excessive and unnecessary administrative obstacles between patients and evidence-based treatments.

MCC supports the following items (which also are supported by the AMA):

- Only use prior authorization to confirm diagnoses or other medical criteria, and ensure the medical necessity of services. That is, prior authorization is not a tool to be used to delay or discourage care.
- Give their beneficiaries access to the same items and services as they would under traditional Medicare. When no applicable coverage rule exists under traditional Medicare, plans must use current evidence from widely used treatment



guidelines or clinical literature for internal clinical coverage criteria, which must then be made publicly available.

- Not be allowed to deny care ordered by a contracted physician based on a particular provider type or setting unless medical necessity criteria is not met.

MCC is also supporting the following along with the NMA:

- LB210 - Prior Authorization Reform; introduced by Sen. Eliot Bostar; committees: Banking, Commerce and Insurance; status: Hearing was March 13.

LB210 would require health carriers, including commercial payers and the Medicaid managed-care organizations, to adopt a program offering providers at least one alternative to prior authorization, including an exemption from prior authorization requirements if the provider has a 90% or higher approval rating of prior authorization requests over the previous six months.

The ACS-CAN Cancer Action Day meeting with district senators at the Nebraska State Capitol was a good opportunity to present and share these items and ask for support for these legislative bills.

## Abstract submitted for ASCO 2023

As in the past, the Morrison Cancer Center has submitted an abstract for the American Society for Clinical Oncology (ASCO) annual meeting. The largest oncology convention in the world, ASCO takes place in June in Chicago.

**2023 ASCO**  
ANNUAL MEETING

**June 2–6, 2023**

McCormick Place | Chicago, IL & Online  
[am.asco.org](https://am.asco.org)

**#ASCO23**

MCC data on NextGen sequencing, comparing PDL1 scores to Tumor Mutational Burden was submitted under the

title, "Programmed Cell Death Ligand 1 (PD-L1) Expression Landscape and Its Relationship With Tumor Mutational Burden (TMB) in a Community-Based

Cancer Center Patient Population in Rural Central Nebraska."



## Staff highlight: Clinical Trials Coordinator

Joan Meese, RN, has taken on the challenging role of clinical trials coordinator at the Morrison Cancer Center.

Thanks to her relentless work since March, policies are in place for staff and trial sponsors to reference as needed. She has established relationships with the University of Nebraska Medical Center (UNMC) and the Fred and Pamela Buffett Cancer Center (FPBCC), as well as with pharmaceutical industry professionals. She continues to work on more connections as needed.

In September 2022, Joan, along with MCC Director Dave Jones and Drs.

M. Sitki Copur, Soe Min Tun and Randy Duckert, visited UNMC and FPBCC in Omaha. The group met with Dr. Apar Kishor Ganti, head of the UNMC Clinical Trials Program, and Associated Director of Clinical Research at the FPBCC.

Joan has been instrumental in setting up and expanding the relationships involved with clinical trials. She was a part of setting up MCC's Institutional Review Board (IRB) of record, and has attended several virtual meetings



**Meese**

for training.

"I'm honored to be part of this amazing team," Joan said. "The staff are all wonderful and really care about each other and the patients."

For Joan, the best part of the position is providing access to new medications and treatments for central Nebraska patients in a local setting. Patients will not miss out on such opportunities or have to travel great distances.

Prior to joining MCC, Joan worked as a case manager for a home health agency in Lincoln. When not at work, Joan spends time with family and

## FDA hematology/oncology drug approvals since last issue

The FDA approved **abemaciclib** (Verzenio, Eli Lilly and Company) with endocrine therapy (tamoxifen or an aromatase inhibitor) for the adjuvant treatment of adult patients with hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative, node-positive, early breast cancer at high risk of recurrence. **March 3, 2023.**

The FDA (FDA) approved **dostarlimab-gxly** (Jemperli, GlaxoSmithKline LLC) for adult patients with mismatch repair deficient (dMMR) recurrent or advanced endometrial cancer, as determined by an FDA-approved test, that has progressed on or following a prior platinum-containing regimen in any setting and are not candidates for curative surgery or radiation. **February 9, 2023.**

The FDA approved **sacituzumab govitecan-hziy** (Trodelvy, Gilead Sciences, Inc.) for unresectable locally advanced or metastatic hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative (IHC 0, IHC 1+ or IHC 2+/ISH-) breast cancer who have

received endocrine-based therapy and at least two additional systemic therapies in the metastatic setting. **February 3, 2023.**

The FDA approved **elacestrant** (Orserdu, Stemline Therapeutics, Inc.) for postmenopausal women or adult men with ER-positive, HER2-negative, ESR1-mutated advanced or metastatic breast cancer with disease progression following at least one line of endocrine therapy. **January 27, 2023.**

The FDA granted accelerated approval to **pirtobrutinib** (Jaypirca, Eli Lilly and Company) for relapsed or refractory mantle cell lymphoma (MCL) after at least two lines of systemic therapy, including a BTK inhibitor. **January 27, 2023.**

The FDA approved **pembrolizumab** (Keytruda, Merck) for adjuvant treatment following resection and platinum-based chemotherapy for stage IB (T2a ≥4 cm), II, or IIIA non-small cell lung cancer (NSCLC). **January 26, 2023.**

The FDA approved **zanubrutinib**

(Brukinsa, BeiGene USA, Inc.) for chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL). **January 19, 2023.**

The FDA granted accelerated approval to **tucatinib** (Tukysa, Seagen Inc.) in combination with trastuzumab for RAS wild-type HER2-positive unresectable or metastatic colorectal cancer that has progressed following fluoropyrimidine-, oxaliplatin-, and irinotecan-based chemotherapy. **January 19, 2023.**

The FDA granted accelerated approval to **mosunetuzumab-axgb** (Lunsumio, Genentech, Inc.), a bispecific CD20-directed CD3 T-cell engager for adult patients with relapsed or refractory follicular lymphoma (FL) after two or more lines of systemic therapy. **December 22, 2022.**

The FDA approved **nadofaragene firadenovec-vncg** (Adstiladrin, Ferring Pharmaceuticals) for adult patients with high-risk Bacillus Calmette-Guérin (BCG) unresponsive non-muscle invasive bladder cancer (NMIBC) with carcinoma in situ (CIS) with or without papillary tumors. **December 16, 2022.**

## Cancer Committee

The Morrison Cancer Center/Mary Lanning Healthcare Cancer Committee reviewed annual reports at its quarterly meeting on February 9.

Genetics, palliative care, rehabilitation services, nutrition services, survivorship and social work were areas that submitted reports.

Subcommittees are developing plans for quality improvement projects and cancer screening/prevention events for 2023.

A new MCC initiative will work on the Commission on Cancer (CoC) standard 8.1: *Addressing Barriers to Care*.

A 2021 study through Nebraska Cancer Coalition (NC2) indicated that our patients could benefit from self-empowerment and shared decision-making with their care. A new MCC initiative, facilitated by tumor registrars Shari Fiala and Stacy Parr, and nurse navigator Chandra Muske, will implement one of the Cancer Committee meeting agenda



items regarding Commission on Cancer (CoC) standard 8.1: *Addressing Barriers to Care*. With this new initiative, MCC patients will be given the opportunity to put questions into words at a time when they may not know what to expect or even ask. Our team will use a form from National Coalition for Cancer Survivorship - "take charge of your cancer care, know yourself" - for this purpose.

### Mehmet Sitki Copur, MD

Medical Director/ Professor  
Mary Lanning Healthcare Morrison Cancer Center/University of Nebraska Medical Center Adjunct Faculty

#### Summary

Answers Viewed: 58  
Total Views: 21897  
People Reached: 3651  
Institutions Reached: 2431



## theMednet

The Morrison Cancer Center contributions in theMednet has reached a total of 21,897 views. MCC has answered more than 58 questions.

theMednet is a physician-only online community where expert answers are offered to real-world oncology questions when there are no clear guidelines or published research on the topic.

More than 1,000 academic physicians are recruited based on their research, publications, case volumes, clinical trials and peer recommendations from every cancer center in the United States. The physicians are posed with answering challenging questions from other practicing oncology physicians. The answers are peer-reviewed and indexed, making them accessible through a quick search.

## MCC writes article for NMA Advocate

The Morrison Cancer Center recently contributed to the Nebraska Medical Association (NMA) Advocacy magazine.

Dr. M. Sitki Copur submitted the article, "*Achieving Health Equity in Cancer Through Clinical Trial Infrastructure in the Community Oncology Setting: Reflections of a Community Oncologist.*"

The article, which is scheduled to publish in April, tells a triumphant story of clinical trial performance in a community oncology setting and references the work of the MCC team.



### Achieving Health Equity in Cancer through Clinical Trial Infrastructure in the Community Oncology Setting: Reflections of a Community Oncologist



By Mehmet Copur, MD, FACP

#### Scope of the Problem

Cancer is the significant challenge for society and healthcare systems. Globally, it is the second leading cause of death, with close to 10 million deaths per year; only second to cardiovascular disease-related deaths. Cancer health disparities refer to

organizations such as the American Cancer Society (ACS), the Commission on Cancer (CoC), the American Society of Clinical Oncology (ASCO) and the National Comprehensive Cancer Network (NCCN) have long required and/or endorsed clinical trial participation as a high-quality indicator for cancer care. However, only 3 to 5 percent of eligible cancer patients are enrolled in clinical trials.<sup>1</sup> Participants are more frequently young, male, Caucasian, and living in the big cities, while a large



# MCC contributes to popular text

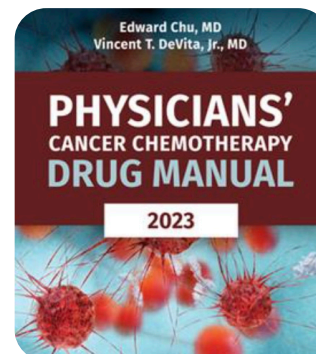
The Morrison Cancer Center is listed as a contributing institution in the *2023 Physicians' Cancer Chemotherapy Drug Manual*.

The manual is an up-to-date guide on the latest information in standard therapy and recent advances in the field.

Written by world-class experts in clinical

cancer therapeutics, this essential reference provides a complete, easy-to-use catalog of more than 100 drugs and commonly used drug regimens — both on- and off-label — for the treatment of major cancers.

Dr. M. Sitki Copur has been a contributing editor since the book was first published in 2000.



## MCC offering two new, free classes

The Morrison Cancer Center is now providing complimentary classes for its patients — one on nutrition, the other on rehabilitation.

Mikaela Perry, Occupational Therapist and Certified Lymphedema Therapist, (right) instructs patients in Hastings on various rehabilitation topics once a month. Education includes energy conservation techniques, activity modifications and upper- and lower-body strengthening exercises.

The goal is to help patients regain strength and confidence to return to daily activities and hobbies that they have missed due to the side effects of cancer treatment. If a patient is at high risk of falls or would benefit from one-on-one therapy, he or she can be referred for physical or occupational therapy. Janell Consbruck, Occupational Therapist and Certified Lymphedema Therapist, will be offering similar classes at the Grand Island location.

Hastings classes are 10:15 a.m. on the second Wednesday of the month. Grand Island classes are offered at 12:30 p.m. on the last Thursday of odd-numbered months.

Max Licktieg, RD LMNT, (right) provides nutrition classes aimed at teaching patients about foods that may reduce cancer recurrence and aid in recovery. In addition, common concerns are addressed about soy, super foods, supplements, red meat, sugar and more.

The purpose of the classes is to empower patients and help them feel confident in making dietary choices, reaching health goals and finding a good life balance.

The class currently is only available in Hastings at 9 a.m. on the first Wednesday of each month and at 2 p.m. on the third Wednesday of each month.



**Registration for both classes is encouraged by stopping by the front desk or calling MCC in Hastings at 402-460-5899 or in GI at 308-384-2446.**

# Publications since our last issue

- **Copur M.S., Peterson, T., Doornbos, K., Tun S.M., Springer, C.R., Robbins L., Arbogast, J., Muske, C., Buescher, L., Sukup J., Horn A., Wedel W., Lintel N., Brunt K., Duckert R., Lavudi, S.;** Programmed cell death ligand 1 (PD-L1) expression landscape and its relationship with tumor mutational burden (TMB) in a community-based cancer center patient population in rural central Nebraska. *J Clin Oncol* 2023 **(Submitted for publication)**
- **Copur, M.S., Tun ,S.M., Duckert, R.** Breast-Conserving Surgery with or without Irradiation - When less is more? *N Engl J Med* 2023 **(Submitted for publication)**
- **Copur, M.S.,** Achieving Health Equity in Cancer Through Clinical Trial Infrastructure in the Community Oncology Setting; Reflections of a Community Oncologist" *NMA Advocate* 2023;23: 10-15. **(In press)**
- Clark, A.S., Hong, F., Finn, R.S., DeMichele, A.M., Mitchell, E.P., Zwiebel, J., Arnaldez, F.I., Gray, J. Wang, V., McShane, L.M., Rubinstein, L.V., Patton, D., **Copur, M.S.,** et al. Phase II Study of Palbociclib (PD-0332991) in CCND 1, 2 or 3 Amplification: Results from the NCI-MATCH ECOG-ACRIN Trial (EAY131) sub-protocol Z1B. *Clin Can Res* 2022. **(Published)**
- Chu, E., Harrold, L.J., **Copur, M.S.,** Chemotherapeutic and Biologic Drugs. *Physicians' Cancer Chemotherapy Drug Manual Chu De Vita*, 2023. **(Published)**
- **Copur, M.S.,** Harrold, L.J., Chu, E. Guide- lines for Chemotherapy and Dosing Modifications. *Physicians' Cancer Chemotherapy Drug Manual Chu De Vita*, 2023. **(Published)**
- Kuang, C., **Copur, M.S.,** Harrold, L.J., Chu, E. Common Chemotherapy Regimens in Clinical Practice. *Physicians' Cancer Chemotherapy Drug Manual Chu De Vita*, 2023. **(Published)**
- **Copur, M.S.,** Harrold, L.J., Chu, E. Anti-emetic Agents for the Treatment of Chemotherapy-Induced Nausea and Vomiting. *Physicians' Cancer Chemotherapy Drug Manual Chu De Vita*, 2023. **(Published)**



## Neoadjuvant-adjuvant or adjuvant-only Pembrolizumab in advanced melanoma

Whether pembrolizumab given both before surgery (neoadjuvant therapy) and after surgery (adjuvant therapy), as compared with pembrolizumab given as adjuvant therapy alone, would increase event-free survival among patients with resectable stage III or IV melanoma is unknown.

In a phase 2 trial, authors randomly assigned patients with clinically detectable, measurable stage IIIB to IVC melanoma that was amenable to surgical resection to three doses of neoadjuvant pembrolizumab, surgery, and 15 doses of adjuvant pembrolizumab (neoadjuvant-adjuvant group) or to surgery followed by pembrolizumab (200 mg intravenously every three weeks for a total of 18 doses) for approximately one year or until disease recurred or unacceptable toxic effects

developed (adjuvant-only group).

The primary end point was event-free survival in the intention-to-treat population. Events were defined as disease progression or toxic effects that precluded surgery; the inability to resect all gross disease; disease progression, surgical complications, or toxic effects of treatment that precluded the initiation of adjuvant therapy within 84 days after surgery; recurrence of melanoma after surgery; or death from any cause. Safety was also evaluated.

At a median follow-up of 14.7 months, the neoadjuvant-adjuvant group (154 patients) had significantly longer event-free survival than the adjuvant-only group (159 patients) ( $P = 0.004$  by the log-rank test). In a landmark analysis, event-free survival at two years was

72% (95% confidence interval [CI], 64 to 80) in the neoadjuvant-adjuvant group and 49% (95% CI, 41 to 59) in the adjuvant-only group.

The percentage of patients with treatment-related adverse events of grades 3 or higher during therapy was 12% in the neoadjuvant-adjuvant group and 14% in the adjuvant-only group. Authors concluded that among patients with resectable stage III or IV melanoma, event-free survival was significantly longer among those who received pembrolizumab both before and after surgery than among those who received adjuvant pembrolizumab alone. No new toxic effects were identified.

Ref: Patel SP et al. *N Engl J Med* 2023;388:813-823.





## Pemetrexed, Bevacizumab or the combination as maintenance therapy for advanced nonsquamous non-small-cell lung cancer: ECOG-ACRIN 5508

Pemetrexed or bevacizumab is used for maintenance therapy of advanced non-squamous non-small cell lung cancer (NSCLC). The combination of bevacizumab and pemetrexed has also demonstrated efficacy.

Authors conducted a randomized study to determine the optimal maintenance therapy. Patients with advanced non-squamous NSCLC and no prior systemic therapy received carboplatin paclitaxel and bevacizumab for up to four cycles.

Patients without progression after four cycles were randomly assigned to maintenance therapy with bevacizumab pemetrexed or a combination of

the two agents.

The primary endpoint was overall survival, with bevacizumab serving as the control group. Of the 1,516 patients enrolled, 874 (57%) were randomly assigned after induction therapy to one of the three maintenance therapy groups.

With a median follow-up of 50.6 months, median survival with pemetrexed was 15.9 months, compared with 14.4 months with bevacizumab (hazard ratio (HR), 0.86;  $P = .12$ ); median survival with pemetrexed and bevacizumab was 16.4 months (HR, 0.9;  $P = .28$ ); median progression-free survival was 4.2, 5.1 (HR, 0.85;  $P = .06$ ),

and 7.5 months (HR, 0.67;  $P = .001$ ) for the three groups, respectively. Incidence of worst grade 3 to 4 toxicity was 29%, 37%, and 51%, respectively, for bevacizumab, pemetrexed, and the combination regimen.

Authors concluded that single-agent bevacizumab or pemetrexed is efficacious as maintenance therapy for advanced non-squamous NSCLC. Because of a lack of survival benefit and higher toxicity, the combination of bevacizumab and pemetrexed cannot be recommended.

*Ref: Ramalingam S: J Clin Oncol 37:2360-2367.*



## Breast-Conserving Surgery with or without Irradiation in early breast cancer

Limited level 1 evidence is available on the omission of radiotherapy after breast-conserving surgery in older women with hormone receptor-positive early breast cancer receiving adjuvant endocrine therapy.

Authors performed a phase 3 randomized trial of the omission of irradiation; the trial population included women 65 years of age or older who had hormone receptor-positive, node-negative, T1 or T2 primary breast cancer (with tumors  $\leq 3$  cm in the largest dimension) treated with breast-conserving surgery with clear excision margins and adjuvant endocrine therapy. Patients were randomly assigned to receive whole-breast irradiation (40 to 50 Gy) or no irradiation. The primary end point was local breast cancer recurrence.

Regional recurrence, breast cancer-specific survival, distant recurrence as the first event, and overall survival were also assessed. A total of 1,326 women were enrolled; 658 were randomly assigned to receive whole-breast irradiation and 668 to receive no irradiation.

The median follow-up was 9.1 years. The cumulative incidence of local breast cancer recurrence within 10 years was 9.5% (95% confidence interval (CI), 6.8 to 12.3) in the no-radiotherapy group and 0.9% (95% CI, 0.1 to 1.7) in the radiotherapy group (hazard ratio, 10.4; 95% CI, 4.1 to 26.1;  $P < 0.001$ ). Although local recurrence was more common in the group that did not receive radiotherapy, the 10-year incidence of distant recurrence as the first event was not higher in the no-radiotherapy group than in the

radiotherapy group, at 1.6% (95% CI, 0.4 to 2.8) and 3.0% (95% CI, 1.4 to 4.5), respectively. Overall survival at 10 years was almost identical in the two groups, at 80.8% (95% CI, 77.2 to 84.3) with no radiotherapy and 80.7% (95% CI, 76.9 to 84.3) with radiotherapy.

The incidence of regional recurrence and breast cancer-specific survival also did not differ substantially between the two groups. Omission of radiotherapy was associated with an increased incidence of local recurrence but had no detrimental effect on distant recurrence as the first event or overall survival among women 65 years of age or older with low-risk, hormone receptor-positive early breast cancer.

*Ref: Kunkler IH et al. N Engl J Med 2023;388:585-594.*



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Suite 100  
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**Five Pillars of the  
Morrison Cancer Center**

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**Mary Lanning**  
HEALTHCARE  
Morrison Cancer Center



**The Morrison Cancer Center team of oncology nurses ("Shark Nurses Team") poses for a picture together during Nurses Week in May 2022.**