#### SUMMER 2022

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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

## **Grand Island program growing**



M. Sitki Copur, MD FACP, Medical Director

The number of patients being seen at the Morrison Cancer Center in Grand Island continues to grow. In addition, more services are being provided.

Dr. M. Sitki Copur said outpatient hematology/oncology is being provided five days a week. Services include new patient consultation, follow-ups, chemotherapy, biologic therapy, immunotherapy, infusions and laboratory services, along with a 24/7, seamless continuum of care with after-hours coverage.

Radiation oncology provides outpatient/inpatient new patient consultation and follow-up. Starting in September, radiation treatment will be available in Grand Island, as it is in Hastings.



Dr. Copur said the cancer team is "delighted and humbled by the sincere and generous welcome, and appreciation of our services in Grand Island and the surrounding communities."

"Our unique, academic, community-based approach, coupled with the 24/7, seamless continuum of high-level, comprehensive, passionate cancer care delivery,

distinguishes our team. Academic affiliation and collaborative work with the University of Nebraska Medical Center and National Cancer Institute-designated Fred and Pamela Buffett Cancer Center enables us to bring a long unmet need — academic, community-centered cancer care — to the central Nebraska population, where it is most needed."

#### **Lung Cancer Screening program moving forward**

Mary Lanning Healthcare and the Morrison Cancer Center are teaming up to provide more patients with the potential to detect lung cancer at an early stage.

The new lung cancer screening program will begin serving patients sometime this fall. A kickoff meeting for the team took place recently.

David Jones, MCC Director, said patients can be recommended to the program by their primary care providers or specialists. If they meet the American Lung Association criteria for being at high risk for lung cancer, they can become part of the program.

The first step is scheduling a low-dose CT

screening through the MLH Diagnostic Imaging Department. Depending on the results, the lung cancer screening team will recommend next steps, which may include follow-up with a pulmonologist, MCC or MCC's smoking cessation program.

Jones said a big part of organizing the program included work by the MLH Information Technology Department to implement a new software system for tracking patients in the program. The team working on the program includes executive sponsors David Jones and Tami Lipker; physician champion, Daniel Herold, MD; functional administrator Shannon Plummer; technical administrators Jason Piersee, Steph Brubaker and Dave Kempf; interface administra-

tor Michelle Musgrave and super users and in-house trainers Chandra Muske, OCN RN, nurse navigator; and Joane Meese.

In conjunction with the Power-Scribe software informational technology, software, implementation will enable quick-and-easy access it information on lung nodule screening exams.

"Many different departments of the hospital have worked on getting this program up and running," Jones said. "We hope that we can help more people get a handle on their lung cancer risk at an earlier stage."

#### MLH first in state to use the Monarch™ platform

There's a new robot in town.

Auris Health's Monarch<sup>TM</sup> Platform made its debut in the Mary Lanning Health-care Surgical Services Department last week. And the new technology — the first MonarchTM to be used in Nebraska — is a game changer for those facing a lung cancer diagnosis.

Dr. Matthew Stritt, a pulmonologist with Hastings Pulmonary & Sleep Clinic, teamed up with the MLH Respiratory Therapy team to offer bronchoscopy treatment using the robot. Used to view the inside of the lungs and obtain tissue samples for biopsy, the robot enables the pulmonologist to obtain an earlier, more accurate diagnosis of small, hard-to-reach lung nodules.

Dr. Stritt said the new equipment will primarily be used for lung cancer diagnosis but also for obtaining samples of, and diagnosing, inflammatory lung disease.

"The robot allows for advanced maneuverability and can reach areas of

the lung that were previously unattainable." Dr. Stritt said.

The technology integrates the latest advancements in robotics, software, data science and endoscopy (the use of small cameras and tools to enter the body through its natural openings). Mary Lanning Healthcare is among the first hospitals in the United States to utilize the platform, which was recently cleared by the U.S. Food and Drug Administration.

"Lung cancer is the leading cause of cancer deaths worldwide, in part because it has no symptoms in its early stages. Because the Monarch™ vision and control for bronchoscopic procedures, it holds potential to help us to make a diagnosis earlier," said Sheri Trindle, MLH Director of Cardiopulmonary Services. "We are excited about the promise of this technology to offer a more hopeful future for our patients with lung cancer."

#### **Thoracic Oncology Board**

MCC has the advantage of having a highly qualified, multidisciplinary



Thoracic Oncology Tumor Board, which includes thoracic oncology surgeon Dr. Rudy Lackner and his team from the University of Nebraska Medical Center; pulmonologists Dr. Kalpesh Ganatra and Stritt; and the medical and radiation oncology teams of MCC.

"All of our thoracic oncology cases are discussed in regularly held multi-disciplinary thoracic oncology tumor conferences. The addition of this lung navigation technique will certainly elevate the oncology care for thoracic cancer cases." said Dr. M. Sitki Copur.

#### MCC implements smoking cessation strategy

The Morrison Cancer Center team recently implemented a new strategy for smoking cessation as part of a Commission on Cancer (CoC) project.

The "Just ASK Quality Improvement Project & Clinical Study" is an elective quality improvement study, focusing on strengthening evidence-based care across participating programs. The idea is to leverage existing resources in order to address ASKing all newly diagnosed cancer patients about their smoking habits.

The goal of the Plan-Do-Study-Act

(PDSA) model is to increase and improve the integration of smoking assessment as a standard of care.



Under the guidance **Chandra Muske** of Shari Fiala, MLT (ASCP) CTR, and Stacy Parr CMA (AAMA), tumor registrars; and Chandra Muske, RN OCN, nurse navigator; the MCC team is geared up to accomplish this goal.

Participation will require completion of three questionnaires to track prog-







ress during the project. As a long-time CoC-accredited cancer program, MCC is proud to take on this timely initiative, which aligns with the lung cancer screening program and the new lung cancer navigation equipment.



## New imaging options enhance MCC care

Two important additions made recently to Diagnostic Imaging at Mary Lanning Healthcare are benefiting patients, including those at the Morrison Cancer Center.

On April 26, the MLH Nuclear Medicine team held an open house highlighting the installation of a new SPECT/CT machine. The equipment is the only of its kind in the area and is an improvement over the previous SPECT camera. The SPECT/CT will be used in many areas, including oncology.

On June 9, MLH installed the new, state-of-the-art Positron Emission Tomography (PET) scanner. The new equipment allows for PET/CT scans five days a week to patients in the region. Previously, PET/CT imaging took place in a mobile unit and was only available on certain days of the week.

The new equipment offers advanced applications for oncology, cardiology and neurology. It improves the patient experience through increased scan speeds in a comfortable environment, plus it offers increased image quality.

# Dr. Soe Min Tun receives PhD

Dr. Soe Min Tun, Morrison Cancer Center hematologist/medical oncologist, recently completed his Doctor of Philosophy in Surgery.

He received this advanced degree from the University of Auckland in New Zealand. He studied the role of mesenteric lymph during critical illness. His research will help identify therapeutic and diagnostic strategies to prevent lung injury in critically ill patients.

Dr. Tun received his Medical Degree from the University of Medicine II Yangon in Myanmar. He completed an Internal Medicine residency in Woodhull Medical

and Mental Health Center in Brooklyn, New York, and a Hematology/Medical Oncology fellowship at the University of Massachusetts Medical School — Baystate program in Springfield, Massachusetts. He is board certified in Internal Medicine, Hematology and Medical Oncology.

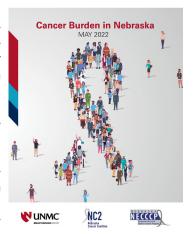
In addition to his medical training, Dr. Tun has a Master of Business Administration Degree from the S.P. Jain School of Global Management in Singapore and a Master of Science Degree in Biomedical Engineering from Nanyang Technological University in Singapore.



Priority-setting activity results, specific aims and accomplishments were discussed during the Fred and Pamela Buffett Cancer Center Community Outreach Engagement meeting on April 12.

The revised specific aims were proposed including:

 Improving the understanding of the cancer burden and needs of Nebraskans, especially in under-represented populations.



- Engaging with community, healthcare and public health partners to promote evidence-based interventions, policies in cancer prevention and control.
- Promoting cancer clinical trials and community-engaged research addressing cancer issues affecting Nebraskans.

Dr. M. Sitki Copur suggested adding policy/advocacy to the agenda for the September meeting in Omaha. Copur will also be sharing his ASCO Action Network Legislative meeting report.

In May, the board, in collaboration with the Nebraska Comprehensive Cancer Control Program and State Cancer Coalition, published the Nebraska Statewide Cancer Needs Assessment. The document summarizes the findings from the secondary analysis of existing data, such as the cancer registry and Behavioral Risk Factor Surveillance System data. The document can be found at www.unmc.edu/cancercenter/cancerburdenfinal.pdf.

#### Mehmet Sitki Copur, MD

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

#### Summary

Answers Viewed: 19 Total Views: 5578 People Reached: 1528 Institutions Reached: 1148



# MCC continues with the Mednet

The Morrison Cancer Center continues to be actively involved in the Mednet, providing feedback to the oncology community.

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 physicans 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.







#### **ASCO Advocacy Summit takes place in April**

Oncology providers from across the United States met with members of Congress and their staff from April 4-8.

The meetings were part of the American Society of Clinical Oncology (ASCO) annual Advocacy Summit Week of Action. Providers were advocating for policies to improve access to high-quality, equitable care for cancer patients and ensure robust funding for cancer research.

The Morrison Cancer Center team participated online in this year's summit and contacted Nebraska lawmakers, urging them to take action on four main issues:

• Improving Seniors' Timely Access to Care Act (H.R. 3173/S. 3018): Protects patients from care delays due to prior au-

thorization and step therapy. The legislation seeks to streamline prior authorization and step therapy protocols.

- **Telehealth Modernization Act** (H.R.1332/S. 368): Improves telehealth availability to allow for greater access to high-quality cancer care.
- Connect for Health Act (H.R. 2903/S. 1512): Lifts some of the current restrictions on telehealth services under the Medicare program, including who can provide telehealth and where the services take place.
- Diverse Trials Act (H.R. 5030/S. 2706): With this bill, Congress would ensure that all Americans have access to clinical trials by allowing trial sponsors to cover ancillary costs, such as travel, lodging and child care. It would also allow pa-

tients to participate in trials remotely as appropriate.

 Research funding for the National Institutes of Health (NIH) and National Cancer Institute (NCI) for fiscal year 2023

The MCC team has asked to see an upward trend in funding to continue in Fiscal Year 2023, with a robust increase for the NNIH and \$7.76 billion for NCI.

Based on the post-meeting feedback, the meetings with Congress had a big impact. Since the Advocacy Summit, legislative asks have gained new co-sponsors. It is expected that more will be added in coming weeks.

The 2023 ASCO Advocacy Summit is May 1-2 in Washington, D.C.



The office team from the Morrison Cancer Center in Grand Island enjoys a gift of roses for Administrative Assistants Week in April.

#### New employee at MCC

Daniel Bailey, PharmD, joined the Morrison Cancer Center team in March.

Originally from Oregon, Daniel received his Bachelor's Degree in Molecular, Cellular and Developmental Biology from the University of Colorado and his PharmD from the University of Nebraska College of Pharmacy.

After graduation, he worked with underserved populations in south Omaha at One World until moving to Grand Island.

"I became fascinated by the genetic

and molecular complexities and abnormalities that underlie cancer during my first cancer biology class...

and chose to be an oncology pharmacist. In my off time, I love snowboarding during the winter, and enjoy building engines and racing during the warmer months.



**Daniel Bailey** 

I am excited to be part of the Mary Lanning Team and continue to learn and grow at MCC."

# MCC at ASCO 2022 in Chicago



After two years of meeting online due to COVID-19, the biggest cancer convention in the world was able to meet in person once again. The American Society of Clinical Oncology (ASCO) held its annual meeting in Chicago from June 3-7.

Dr. M. Sitki Copur was among the 30,000 registrants, 80 percent of whom attended in person.

MCC presented the abstract "The relationship of oncotype Dx Recurrence Score with Ki 67 in early stage breast cancer patients in a community-based cancer center in rural central Nebraska."

Dr. Copur serves as an Ambassador for ASCO. ASCO recognizes members at

different levels for their service, engagement, dedication and commitment to efforts that benefit ASCO, the specialty of oncology and the patients whom they serve.

Speaking about the event, Copur said: "As expected, it was a very productive meeting with a lot of networking opportunities, including a Patient-Centered Outcomes Research Inititiative (PCORI) project for our lung cancer screening program; in person meetings with Sarah Cannon colleagues; Journal of Oncology practice editor; ASCO Political Action Network representative group; and ASCO President's Reception, including meeting with Dr. Apar Ganti, Associated Director of Clinical Research at UNMC."



Dr. M. Sitki Copur is pictured with Dr. Apar Ganti at the ASCO President's Reception.

## New 'Ask the Expert' topics posted

The KHAS radio "Ask the Expert" segments for April, May and June can be found on the Mary Lanning website.

Topics for this quarter included radiosurgery for April by Dr. Duckert, non-melanoma skin cancer by Dr. Kelly and acute myeloid leukemia in June by Dr. Copur. The interviews are broadcast on the first Wednesday and last Friday of each month on KHAS radio (1230 AM).

www.marylanning.org/our-services/cancer-care/in-the-news/

#### MCC participates in two regional fundraisers

#### Race for Grace

After a two-year hiatus due to COVID-19, the Race for GRACE was able to take place in Grand Island again this spring.

The Grand Island Area Cancer Endowment (GRACE), a non-profit organization established in 2008, sponsors the event each year. The Morrison Cancer Center participated in the event, the funding from which supports the unmet needs of cancer patients.

"Now with our full-capacity cancer center in Grand Island, the Morrison Cancer Center-GRACE collaboration has become event more essential in providing much-needed support services to our patients," said Dr. M. Sitki Copur.





## **HH Cancer Walk**

New this year to the annual Half Hastings event was the Making Strides for Cancer Walk for patients, their families and their caregivers.

The event, at the Hastings College Osborne Family Sports Complex, was organized by Half Hastings, the Mary Lanning Healthcare Foundation and Scott Bokelman.

Bokelman, a cancer survivor who recently moved to Hastings from Wyoming, had organized a similar event in his home state.

Hastings Ford, Bokelman's employer, was the title sponsor for the one-mile event.

Money raised will be used to buy equipment at the Morrison Cancer Center. This year's focus is a vein visualizer for both the Hastings and Grand Island offices.



The Morrison Cancer Center team at the Making Strides for Cancer Walk.



# Neoadjuvant Nivolumab plus chemotherapy in resectable lung cancer

Neoadjuvant or adjuvant chemotherapy confers a modest benefit over surgery alone for resectable non-small-cell lung cancer (NSCLC). In early-phase trials, nivolumab-based neoadjuvant regimens have shown promising clinical activity; however, data from phase 3 trials are needed to confirm these findings.

In this open-label, phase 3 trial, patients with stage IB to IIIA resectable NSCLC were randomized to receive nivolumab plus platinum-based chemotherapy or platinum-based chemotherapy alone, followed by resection.

The primary end points were event-free survival and pathological complete response (0% viable tumor in resected lung and lymph nodes), both evaluated by blinded independent review.

Overall survival was a key secondary end point. Safety was assessed in all treated patients. The median event-free survival was 31.6 months (95% CI 30.2 to not reached) with nivolumab plus chemotherapy and 20.8 months (95% CI 14.0 to 26.7) with chemotherapy alone (hazard ratio for disease progression, disease recurrence, or death, 0.63; 97.38% CI, 0.43 to 0.91; P = 0.005). The percentage of patients with a pathological complete response was 24.0% (95% CI, 18.0 to 31.0) and 2.2% (95% CI, 0.6 to 5.6), respectively (odds ratio, 13.94; 99% CI, 3.49 to 55.75; P<0.001).

Results for event-free survival and pathological complete response across most subgroups favored nivolumab plus chemotherapy over chemotherapy alone.

At the first prespecified interim analysis, the hazard ratio for death was 0.57 (99.67% CI, 0.30 to 1.07) and did not meet the criterion for significance. Of the patients who underwent randomization, 83.2% of those in the nivolumab plus chemotherapy group and 75.4% of those in

the chemotherapy alone group underwent surgery. Grade 3 or 4 treatment-related adverse events occurred in 33.5% of the patients in the nivolumab-plus-chemotherapy group and in 36.9% of those in the chemotherapy-alone group.

The authors concluded that in patients with resectable NSCLC, neoadjuvant nivolumab plus chemotherapy resulted in significantly longer event-free survival and a higher percentage of patients with a pathological complete response than chemotherapy alone. The addition of nivolumab to neoadjuvant chemotherapy did not increase the incidence of adverse events or impede the feasibility of surgery.

Reference: Forde PM, Spicer J, Lu S, et al. April 11,2022, NEJM.org.DOI: 10.1056/ NEJMoa2202170.

#### FDA hematology/oncology drug approvals since last issue

- The FDA granted accelerated approval to tisagenlecleucel (Kymriah, Novartis Pharmaceuticals Corporation) for adult patients with relapsed or refractory follicular lymphoma (FL) after two or more lines of systemic therapy. May 27, 2022.
- The FDA approved nivolumab (Opdivo, Bristol-Myers Squibb Company) in combination with fluoropyrimidine- and platinum-based chemotherapy and nivolumab in combination with ipilimumab (Yervoy, Bristol-Myers Squibb Company) for the first-line treatment of patients with advanced or metastatic esophageal squamous cell carcinoma (ESCC).
   May 27, 2022.
- The FDA approved ivosidenib (Tibsovo, Servier Pharmaceuticals LLC) in combination with azacitidine for newly diagnosed acute myeloid leukemia (AML) with a susceptible IDH1 mutation, as detected by an FDA-approved test in adults 75 years or older, or who have comorbidities that

- preclude use of intensive induction chemotherapy. **May 25, 2022.**
- The FDA approved azacitidine (Vidaza, Celgene Corp.) for pediatric patients with newly diagnosed juvenile myelomonocytic leukemia (JMML).May 20, 2022.
- The FDA approved fam-trastuzumab deruxtecan-nxki (Enhertu, Daiichi Sankyo, Inc.) for adult patients with unresectable or metastatic HER2-positive breast cancer who have received a prior anti-HER2-based regimen either in the metastatic setting, or in the neoadjuvant or adjuvant setting and have developed disease recurrence during or within 6 months of completing therapy. May 4, 2022.
- The FDA granted accelerated approval to alpelisib (Vijoice, Novartis Pharmaceuticals) for adult and pediatric patients two years of age and older with severe manifestations of PIK3CA-related

- overgrowth spectrum (PROS) who require systemic therapy. **April 5, 2022.**
- The FDA approved axicabtagene ciloleucel (Yescarta, Kite Pharma, Inc.) for adult patients with large B-cell lymphoma (LBCL) that is refractory to first-line chemoimmunotherapy or relapses within 12 months of first-line chemoimmunotherapy. It is not indicated for the treatment of patients with primary central nervous system lymphoma. April 1, 2022.
- The FDA approved Pluvicto (lutetium Lu 177 vipivotide tetraxetan, Advanced Accelerator Applications USA, Inc., a Novartis company) for the treatment of adult patients with prostate-specific membrane antigen (PSMA)-positive metastatic castration-resistant prostate cancer (mCRPC) who have been treated with androgen receptor (AR) pathway inhibition and taxane-based chemotherapy. March 23, 2022.

#### Staff highlight: Mikaela Perry, occupational therapist

Patients at the Morrison Cancer Center have access to top-notch lymphedema therapy thanks to Mikaela Perry, MOT, OTR/L CTL.

Mikaela is an occupational therapist and certified lymphedema therapist. She treats patients who have an abnormal accumulation of fluid due to cancer therapy, related surgery, removal of lymph nodes or radiation treatment.

Patients who have difficulty with range of motion of arms or neck, and those who need work to improve upper body strength, are among those Mikaela has helped. She also meets with newly diagnosed breast cancer patients for baseline evaluation and risk-reduction strategies, as well as education on early detection of swelling.

"My goal is to help patients at the Morrison Cancer Center with reduced discomfort and swelling, as well as helping them return to their desired activities and have an improved quality of life," Mikaela said. "It is such an honor and thrill to be able to make small/big differences in our patients' lives every day."

Mikaela graduated with her Master's Degree in Occupational Therapy from College of St. Mary in 2013. She became a Certified Lymphedema Therapist through the Academy of Lymphatic Studies in fall 2013.

"Her extraordinary talent, dedication and effective work in making our patients return to their normal has earned her the nickname, Magic Mikaela," said Dr. M. Sitki Copur.



Occupational therapist Mikaela Perry works with a patient recently at the Morrison Cancer Center.

## Publications since our last issue

- Copur, M.S., Peterson, T., et al. The relationship of oncotype Dx Recurrence Score
  (RS) with Ki 67 in early stage breast cancer patients in a community based cancer center in rural central Nebraska. J Clin Oncol 2022. (Published)
- Copur, M.S., Rupe, A., Kelly, J. Miscellaneous Chemotherapeutic Agents. DeVita PPO 12th edition 2022. (In press)
- Copur, M.S., Tun, S.M., Wedel, W., Vargas, L., Shaheed, M., Horn, A., Lintel, N., Bronson, R., Kelly, J. Unusual dMMR Phenotype Pancreatic Ductal Adenocarcinoma with Germline, and Somatic BRCA2 Mutations in a Jehovah Witness Patient. Oncology 2022. (Submitted for publication)
- Copur, M., Vargas, L., Drincic, A. Neuroendocrine Cancer Associated Hypercalcemia with Prolonged Survival. N Engl J Med 2022. (Submitted for publication)
- Copur, M., Tun, S., Duckert, R. Neoadjuvant Nivolumab plus Chemotherapy in Resectable Lung Cancer. N Engl J Med 2022. (Submitted for publication)



#### PD-1 Blockade in mismatch repairdeficient, locally advanced rectal cancer

Neoadjuvant chemotherapy and radiation followed by surgical resection of the rectum is a standard treatment for locally advanced rectal cancer.

A subset of rectal cancer is caused by a deficiency in mismatch repair. Because mismatch repair-deficient colorectal cancer is responsive to programmed death 1 (PD-1) blockade in the context of metastatic disease, it was hypothesized that checkpoint blockade could be effective in patients with mismatch repair-deficient, locally advanced rectal cancer.

Authors initiated a prospective phase 2 study in which single-agent dostarlimab, an anti-PD-1 monoclonal antibody, was administered every 3 weeks for 6 months in patients with mismatch repair-deficient stage II or III rectal adenocarcinoma.

This treatment was to be followed by standard chemoradiotherapy and surgery. Patients who had a clinically complete response after completion of dostarlimab therapy would proceed without chemoradiotherapy and surgery.

The primary end points were sustained clinical complete response 12 months after completion of dostarlimab therapy or pathological complete response after completion of dostarlimab therapy with or without chemoradiotherapy and overall response to neoadjuvant dostarlimab therapy with or without chemoradiotherapy.

A total of 12 patients have completed treatment with dostarlimab and have undergone at least 6 months of follow-up. All 12 patients (100%; 95% confidence interval, 74 to 100) had a clinical complete response, with no evidence of tumor on

magnetic resonance imaging, 18F-fluoro-deoxyglucose-positron-emission tomography, endoscopic evaluation, digital rectal examination, or biopsy.

At the time of this report, no patients had received chemoradiotherapy or undergone surgery, and no cases of progression or recurrence had been reported during follow-up (range,6 to 25 months). No adverse events of grade 3 or higher have been reported.

Mismatch repair-deficient, locally advanced rectal cancer was highly sensitive to single-agent PD-1 blockade. Longer follow-up is needed to assess the duration of responses.

Reference: Cercek A, Lurnish J, Sinopoli J et al. June 5, 2022, at NEJM.org. DOI: 10.1056/ NEJMoa2201445



# Trastuzumab Deruxtecan in previously treated HER2-low advanced breast cancer

Among breast cancers without human epidermal growth factor receptor 2 (HER2) amplification, overexpression, or both, a large proportion express low levels of HER2 that may be targetable. Currently available HER2-directed therapies have been ineffective in patients with these "HER2-low" cancers.

Authors conducted a phase 3 trial involving patients with HER2-low metastatic breast cancer who had received one or two previous lines of chemotherapy. (Low expression of HER2 was defined as a score of 1+ on immunohistochemical (IHC) analysis or as an IHC score of 2+ and negative results on in situ hybridization.)

Patients were randomly assigned in a 2:1 ratio to receive trastuzumab deruxtecan or the physician's choice of chemotherapy. The primary end point was progression-free survival in the hormone receptor-positive cohort. The key secondary end points were progression-free survival among all patients and overall survival in the hormone receptor-positive cohort and among all patients. Of 557 patients who underwent randomization, 494 (88.7%) had hormone receptor-positive disease and 63 (11.3%) had hormone receptor-negative disease.

In the hormone receptor–positive cohort, the median progression-free survival was 10.1months in the trastuzumab deruxtecan group and 5.4 months in the physician's choice group (hazard ratio for disease progression or death, 0.51; P<0.001), and overall survival was 23.9 months and 17.5 months, respectively (hazard ratio for death, 0.64; P = 0.003).

Among all patients, the median progression-free survival was 9.9 months in the trastuzumab deruxtecan group and 5.1 months in the physician's choice group (hazard ratio for disease progression or

death, 0.50; P<0.001), and overall survival was 23.4 months and 16.8 months, respectively (hazard ratio for death, 0.64; P=0.001). Adverse events of grade 3 or higher occurred in 52.6% of the patients who received trastuzumab deruxtecan and 67.4% of those who received the physician's choice of chemotherapy.

Adjudicated, drug-related interstitial lung disease or pneumonitis occurred in 12.1% of the patients who received trastuzumab deruxtecan; 0.8% had grade 5 events. In this trial involving patients with HER2-low metastatic breast cancer, trastuzumab deruxtecan resulted in significantly longer progression-free and overall survival than the physician's choice of chemotherapy.

Reference: Modi S, Jacot T, Yamashita J et al. June 5,2022, at NEJM.org. DOI: 10.1056/ NEJMoa2203690

# New employees at MCC

Two new employees, Pamela Moritz and Joan Meese, RN, recently joined the staff at MCC.

Pamela Moritz is a scheduler working at the MCC Grand Island location. She worked as a medical records analyst for 13 years before joining MCC. She owns a photo booth rental business, Capture It!, as well.

Pamela grew up on a central Nebraska farm and has lived in Grand Island for 35 years. She enjoys collecting antiques, upcycling unwanted treasures, crafting and photography.

"I am excited to join the Mary Lanning Healthcare team as a scheduler," Moritz said. "I look forward to making a difference in cancer patients' lives as part of this legendary team," Pamela said.

Joan joined the team in March as the clinical trials coordinator.



**Pamela Moritz** 

She has been a nurse since 2008 with experience in long-term care and in-home health. Most recently, she was a case manager for a home health agency in Lincoln for seven years.

She and her husband moved back to the Clay Center area when her husband retired earlier this year.

"I am new to oncology, and love it already," Joan said. "Our patients are



**Joan Meese** 

all such amazing people, and the team here at Morrison is top-notch. It is extremely exciting to start and grow our clinical trials program. My favorite part of this position is the possi-

bility of bringing new treatments and medications to our patients and our community."

Meese has one son and two stepchildren. She and her husband enjoy spending free time together in the quiet of a small town, and tending to their home, yard and garden.



# LUMINA: A prospective trial omitting radiotherapy following breast conserving surgery in T<sub>1</sub>N<sub>0</sub> luminal A breast cancer

Adjuvant breast radiation therapy is usually prescribed following breast conserving surgery to reduce the risk of local recurrence. However, this treatment is inconvenient, costly, and associated with acute and late toxicity.

Traditional clinical pathological factors alone are limited in their ability to identify women with a low enough risk of local recurrence to omit radiation therapy. Molecularly defined intrinsic subtypes of breast cancer provide additional prognostic information, with luminal A having the lowest risk of recurrence.

A retrospective analysis of a previous trial suggested that women older than 60 years with luminal A grade 1-2 T1N0 breast cancer treated by breast conserving surgery and endocrine therapy alone had a low rate of local recurrence.

The utility of identifying luminal A subtype combined with clinical pathological factors has not been prospectively evaluated for its ability to guide radition therapy decision making.

Authors of the study performed a prospective multicenter cohort study with the eligibility criteria: women age 55 or older; having undergone breast conserv-

ing surgery for grade 1-2 T1N0 BC; greater than 1mm margins of excision; luminal A subtype (defined as: ER  $\geq$  1%, PR>20%, HER2 negative and Ki67  $\leq$  13.25%); and treated with adjuvant endocrine therapy. ER, PR and HER2 were performed locally as per ASCO guidelines.

Patients meeting clinical eligibility with ER  $\geq$  1%, PR>20%, HER2 negative breast cancer were registered and had Ki 67 immunohistochemistry performed centrally in one of three Canadian laboratories using International Ki67 Working Group methods. Proficiency testing between laboratories was performed yearly.

Patients with Ki67  $\leq$  13.25% were enrolled in the trial and were assigned to not receive radiation therapy. The primary outcome was local recurrence defined as time from enrollment to any invasive or non-invasive cancer in the ipsilateral breast.

Assuming a 5-year local recurrence rate of 3.5%, 500 patients were required to show that the upper bound of a two sided 90% (one-sided 95%) confidence interval (CI) was <5%. Patients were followed every six months for the first two

years and then yearly.

The probability of local recurrence was estimated using the cumulative incidence function with death as a competing risk. Secondary outcomes were contralateral breast cancer; relapse free survival based on any recurrence; disease free survival based on any recurrence, second cancer or death; and overall survival.

From August 2013 to July 2017, 501 of 727 registered patients from 26 centers had a Ki67  $\leq$  13.25% and were enrolled. Median follow-up was 5 years. Median age was 67 and 442 (88%) patients were younger than 75 years age. Median tumor size was 1.1 cm. The 5-year rate of local recurrence satisfied pre-specified boundary. Authors concluded that women older than 55 years with grade 1-2 T1N0 luminal A breast cancer following breast conserving surgery treated with endocrine therapy alone had very low rates of at 5 years and are candidates for omission of RT.

Reference: Whelan TJ, Smith S, Nielsen TO et al. J Clin Oncol 40, 2022 (suppl 17; abstr LBA501)



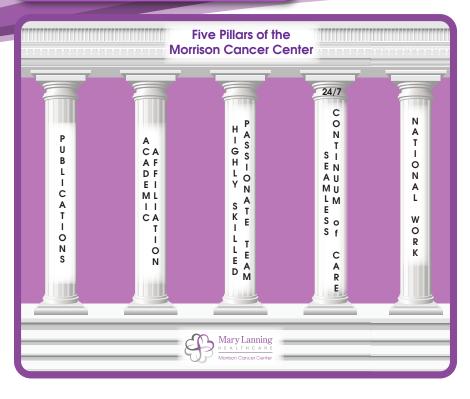


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#### **Hastings location:**

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Grand Island location: 3563 Prairieview Street, Suite 100 308-384-2446





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