Oncology Update

Winter 2019

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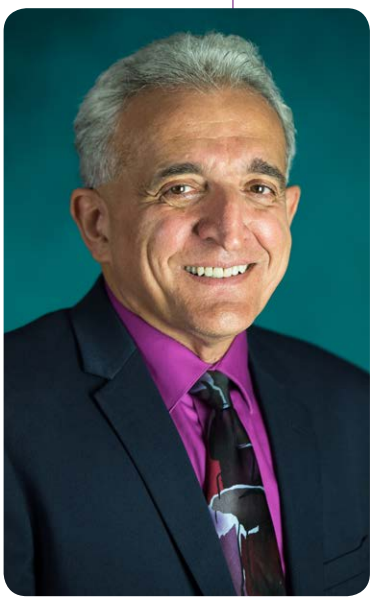
Mary Lanning HEALTHCARE
Morrison Cancer Center

A quarterly newsletter from Mary Lanning Healthcare's Morrison Cancer Center
The future of cancer care in central Nebraska
The definition of excellence in comprehensive community oncology

Happy New Year and seventh year of the Oncology Update



Dear colleagues,
January 2019 marks the seven-year anniversary of the launch of our Oncology Update newsletter! I would like to start our celebration by thanking to you, our loyal readers and referring healthcare professionals. Your support and precious feedback have kept this newsletter going. Cancer care continuum is a team effort. Our team starts with you, our distinguished referring healthcare providers, and extends to all disciplines with which we work.

At our seventh anniversary, the goal of this newsletter remains the same: to stay in touch and communicate with you on a quarterly basis regarding what is happening in the hematology/oncology world, highlight new advances in our specialty, share accomplishments at the Morrison Cancer Center, as well as highlight accomplishments and advances in your practices that you might want to publicize. We welcome any subject or area of interest that you would like to see covered. Please contact me at mehmet.copur@marylanning.org. We would love to hear from you.

Cheers to a healthy, happy, prosperous new year full of meaningful, successful endeavors!

Cordially,

Mehmet Sitki Copur, MD FACP
Morrison Cancer Center
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Professor, University of Nebraska Medical Center, Adjunct Faculty
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This issue

MCC's Dr. Copur featured in two international/national publications

Two highly respected international/national publications featured the work of M. Sitki Copur, MD FACP, of the Morrison Cancer Center in Hastings, Nebraska. The two publications are the result of Dr. Copur's 23-year work in the clinical trials arena.

The first publication was in the December 25, 2018 issue of the ASCO Post. Published by the American Society of Clinical Oncology (ASCO), the ASCO Post is circulated to about 27,000 oncologists and other cancer specialists in the United States and around the world. Each issue of the ASCO Post features highly validated coverage of clinical cancer research, policy news, patient care, clinical practice issues, and thoughtful commentaries by leaders in the field. As a national leader in community oncology clinical cancer research, Dr. Copur's first page Op-Ed article was titled "How to Build A Clinical Trial Infrastructure in the Community Oncology Setting."

The second publication was in the January 2019 issue of Scientific American. Founded in 1845 Scientific American is the longest published scientific magazine to date providing expert insights on advances in science and technology. It has featured the works of more than 150 Nobel Prize winners. Translated into 14 languages in international editions around the globe, it has 3.5 million plus readers in print worldwide and exceeds 7.24 million unique visitors a month online (40% outside the U.S.).

It also has a social media reach exceeding 4 million. The Scientific American article featuring Dr. Copur is about his story of success with clinical trials in the rural community oncology setting in Nebraska.

UN Liver and Pancreas Clinic joins MLH, MCC

The University of Nebraska Liver and Pancreas Disease Clinic now provides Hepatic Pancreatic Biliary specialty surgery services in the Hastings area.

Located in the MLH Medical Services Building, this expansion of Nebraska Medicine's Pancreas Disease program specializes in the surgical management of benign and malignant liver, pancreas and complex hepatobiliary diseases.

As the only program in the state recognized by and designated as a National Pancreas Foundation Center, this clinic provides evaluation and follow-up treatments for the Morrison Cancer Center and area patients closer to home.

Patients with liver tumors, metastatic colon cancer to the liver, cancer of bile duct and pancreatic tumors have access to multidisciplinary evaluation by a team of Nebraska Medicine specialty surgeons including Dr. Luciano Vargas and Dr. Shaheed Merani; Mary Lanning Healthcare general surgeons Dr. Caleb Schroeder, Dr. Shellie Faris and Dr. Mina Todorov; and the Morrison Cancer Center team of Dr. Pornchai Jonglertham, Dr. M. Sitki Copur and Dr. Thomas Zusag.

With both healthcare systems now sharing the EPIC electronic medical record system and a soon-to-be-activated clinical trial system in collaboration with the University of Nebraska, seamless care is provided to all patients. Patients of the Liver and Pancreas Disease Clinic at Hastings obtain roughly 80 percent of services related to their surgery at Mary Lanning, making this relationship a win-win for both the healthcare providers and patients. For more information on how to refer your patients to one of these clinics, please call 402-460-5899.

Pictured in the top photo are Dr. Luciano Vargas (left), Stacie Williams, RN BSN and Dr. Shaheed Merani. Pictured above are Drs. Mina Todorov (left), Caleb Schroeder and Shellie Faris, who work as a team at Central Nebraska General Surgery at Mary Lanning Healthcare.

MCC seeing patients in Grand Island

In response to growing demand, the Morrison Cancer Center team now brings its unmatched, high-quality hematology/oncology services to Grand Island at the Central Nebraska Specialty Clinic at 425 Diers Ave., Suite 1.

The Morrison Cancer Center team is now providing hematology/oncology services to Grand Island area residents, as well as those in Hastings. For appointments, please call **402-460-5899**.

Palliative care services being integrated into MCC oncology care

In general, palliative care provides symptom management, advanced care planning and education for chronic diseases. However, palliative care for the cancer patient is a relatively new concept.

It focuses on relief of suffering and improvement in quality of life by addressing physical, intellectual, emotional, social and spiritual needs of cancer patients and their caregivers. Palliative care is often provided in conjunction with active cancer treatment but can extend beyond active treatment. There is increasing recognition that palliative care plays a vital role much earlier in the cancer illness than originally conceived. Palliative care can be delivered simultaneously with antineoplastic treatment whenever the aim of that therapy is not explicitly curative.

Members of the Palliative Care team include staff from Home Health, Hospice, the Morrison Cancer Center, ICU/PCU, Social Services and Pharmacy.

Morrison Cancer Center and Mary Lanning Healthcare patients now have access to a dedicated palliative care committee led by Carrie Edwards, RN BSN MHA LSSGB. This committee has been working for three years to develop a formal palliative care program. One of the Palliative Care team members, Cynthia Kathman, APRN, who has been with the Mary Lanning Healthcare Palliative Care team since 2002, recently became certified in palliative care through the Hospice and the Palliative Nurses Association. Cindy, along with the Palliative Care team consisting of nurses, a chaplain and medical social workers, visit patients in the hospital, nursing home, cancer center, assisted living facilities and patients' homes. Advanced cancer patients at the Morrison Cancer Center are now seen by our certified interdisciplinary Palliative Care team early in the course of their cancer treatment.

Essential components of these services include: rapport and relationship-building with patients and caregivers; symptom, distress and functional status management (e.g., pain, dyspnea, fatigue, sleep disturbance, mood, nausea or constipation); exploration of understanding and education about cancer and prognosis; clarification of treatment goals; assessment and support of coping needs (e.g., provision of dignity therapy); assistance with medical decision-making; coordination with other care providers; and provision of referrals to other care providers as indicated. In addition, Palliative Care team members initiate caregiver-tailored palliative care support, which includes telephone coaching, education, referrals and face-to-face meetings for the family caregivers.

MCC partners with community for women's health event

The Morrison Cancer Center and some community partners played host to an educational event for Hispanic women in the Hastings community.

The event, which promoted mammography and healthy lifestyles, involved South Heartland District Health Department, the Community Health Center, Hastings Family YMCA, YWCA Adams County and community volunteers. The message was geared toward Hispanic women age 40 and above.

Educational presentations and materials on the importance of breast cancer screening, exercise and a healthy diet to prevent breast cancer were featured. Bilingual volunteers helped throughout the event.

Sally Molnar, Morrison Cancer Center Director, gave a presentation on breast health, mammography and screening recommendations in cancer.

Forty-five women attended the event. Of those, 93 percent were Hispanic.

Only 44 percent of women ages 40-75 reported having a mammogram in the past two years.

The two most reported take-a-ways by the participants were breast cancer detection strategies and the importance of mammography screening. The largest barrier to not receiving care was lack of insurance coverage.

MCC appearing on 'Ask the Expert'

Starting in October 2018, the Morrison Cancer Center team has been participating in the "Ask the Expert" radio talk program.

Produced by Platte River Radio and aired on KHAS-AM 1230, these educational programs are intended to bring awareness to the important healthcare topics in cancer. Dr. M. Sitki Copur of the Morrison Cancer Center has shared recent information on breast, lung and colorectal cancer screening recommendations. Upcoming topics include obesity and cancer, HPV and cancer and prostate cancer.

A link to each of these educational interviews can be accessed through the Morrison Cancer Center web page "In the News."

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

Tumor Registrars meet for workshop

Each fall, Tumor Registrar's Association of Nebraska (TRAN) meets for its annual workshop.

The workshop provides useful information to cancer registrars across the state. It offers continuing education units for maintaining certifications as well as sharing best practices in cancer registry.

This year's meeting was held at Nebraska Methodist College in Omaha. During the two-day workshop, registrars throughout Nebraska assembled to attend presentations on various topics including American Joint Commission on Cancer (AJCC) staging, radiation oncology, genomics and palliative care. Shari Fiala, certified tumor registrar at the Morrison Cancer Center, (pictured at right, third from left) attended.

Certifications and re-certifications at MCC

Cindy Kathman

Leslie Robbins

Jessica Arbogast

Tonya Peterson

The Morrison Cancer Center had a flurry of certification and re-certifications this quarter.

First, Cindy Kathman, APRN, received her Palliative Care certification through the Hospice and Palliative Nurses Association (HPNA) in October 2018.

This was followed by three Oncology Nursing Certifications in October, November and December. Leslie Robbins, RN BSN; Jessica Arbogast, RN BSN; and Tonya Peterson, RN BSN all passed their OCN exams and joined an army of OCN certified nurses at the Morrison Cancer Center. Now, 70 percent of MCC nurses have their RN BSN OCN.

Finally, to keep up with amazing accomplishments by the MCC nurses, Dr. Pornchai Jongleretham re-certified with his Internal Medicine Board and Dr. M. Sitki Copur re-certified with his Medical Oncology Board.

MCC boasts a high percentage of nurses with BSN degrees and Oncology Nursing Certifications (OCN).

Publications since our last issue

• Copur MS. Adjuvant FOLFOX Improved DFS in yp Stage III Rectal Cancer. Commentary. Oncology CancerNetwork, June 6, 2018. (Published)

• Copur MS. Second-Line Irinotecan/Cetuximab/Ramucirumab Combo Ups PFS in Advanced CRC. Commentary. Oncology Cancer Network, June 6, 2018. (Published)

• Copur MS, et al. Miscellaneous Chemotherapeutic Agents. In: Cancer Principles & Practice of Oncology De Vita VT, Hellman S, Rosenberg SA 11th edition: November 2018. (Published)

• Copur MS. How to Build A Clinical Trial Infrastructure in the Community Oncology Practice Setting. The ASCO Post, December 2018. (Published)

• Freedman DH. Clinical Trials in the Rural Community Oncology Setting. Scientific American, January 2019. (Published)

• Leon-Ferre RA, Le-Rademecher J, Terstriept S, Glaser R, Novotni P, Guliano A, Copur MS, et al. A Randomized Double-Blind Placebo Controlled Trial of Testosterone (T) for Aromatase Inhibitor-Induced Arthralgias (AIA) in Postmenopausal Women: AllianceA221102 San Antonio Breast Cancer Symposium (SABCS). (Published)

• Chu E, Harrold LJ, Copur MS. Chemotherapeutic and Biologic Drugs. In: Physicians Cancer Chemotherapy Drug Manual. Chu E, De Vita VT ed. 5-447:2019. (Published)

• Copur MS, Tiedemann D, Harrold LJ, Chu Guidelines for Chemotherapy and Dosing Modifications. In: Physicians Cancer Chemotherapy Drug Manual. Chu E, De Vita ed.449-472:2019. (Published)

• Copur MS, Harrold LJ, Chu E. Common Chemotherapy Regimens in Clinical Practice.473-622:2019. (Published)

• Copur MS, Harrold LJ, Chu E. Antiemetic Agents for the Treatment of Chemotherapy-Induced Nausea and Vomiting. 623-632:2019. (Published)

• Copur MS, et al. 49-year-old man with pathologic hip fracture and widespread metastatic lytic lesion in his bone. Case Quandaries. Oncology CancerNetwork, January 2019. (Accepted for publication)

• Copur MS, et al. Molecular Analysis for Therapy Choice (MATCH) - Phase 2 Study of Palbociclib in Patients with Tumors with CCND1, 2, 3 Amplification. MATCH sub-protocol EAY131-Z1B – Clin Can Res 2019. (Submitted for AACR). Abstract

• Copur MS. Lack of awareness lack of clinical trials in the community where most needed. Oncology CancerNetwork, 2019. (Submitted for publication)

• Copur MS, Horn A. 51-year-old man with abdominal distension pain. Image IQ. Oncology, CancerNetwork, November 2018. (Submitted for publication)

• Copur MS. Strategies for the Optimal Management of Dyspnea in Cancer Patients with Advanced Illness. Comorbidity Consult Perspective. Oncology Cancer Network, December 2018. (Submitted for publication)

• Copur MS, Turcotte K, Fu K, Jonglertham P. 70-year-old woman with progressive red to violaceous papules and plaques on her neck and abdominal skin. Oncology CancerNetwork, 2019. (Submitted for publication)

Rituximab plus Lenalidomide in Advanced Untreated Follicular Lymphoma

Rituximab plus chemotherapy has been shown to be effective in patients with advanced-stage, previously untreated follicular lymphoma. Combination immunotherapy with lenalidomide and rituximab is an immunomodulatory regimen that has shown promising activity in patients with indolent B-cell non-Hodgkin's lymphoma.

Authors conducted a multicenter, international, phase 3 superiority trial to evaluate rituximab plus lenalidomide, as compared with rituximab plus chemotherapy, in patients with previously untreated follicular lymphoma. Patients were randomly assigned to receive either treatment with rituximab plus lenalidomide consisting of 18 cycles of the two drugs, followed by rituximab maintenance therapy every 8 weeks for 12 cycles or treatment with rituximab plus chemotherapy consisting of the investigator's choice of one of three rituximab-based regimens, followed by maintenance monotherapy with rituximab every 8 weeks for 12 cycles.

The primary end points were complete response (confirmed or unconfirmed) at 120 weeks and progression-free survival. A total of 1030 patients were randomly assigned to receive rituximab plus lenalidomide (513 patients) or rituximab plus chemotherapy (517 patients).

The rate of confirmed or unconfirmed complete response at 120 weeks was similar in the two groups: 48% (95% confidence interval [CI], 44 to 53) in the rituximab–lenalidomide group and 53% (95% CI, 49 to 57) in the rituximab–chemotherapy group (P=0.13). The interim 3-year rate of progression-free survival was 77% (95% CI, 72 to 80) and 78% (95% CI, 74 to 82), respectively.

A higher percentage of patients in the rituximab–chemotherapy group had grade 3 or 4 neutropenia (32% vs. 50%) and febrile neutropenia of any grade (2% vs. 7%), and a higher percentage of patients in the rituximab–lenalidomide group had grade 3 or 4 cutaneous reactions (7% vs. 1%).

Among patients with previously untreated follicular lymphoma, efficacy results were similar with rituximab plus lenalidomide and rituximab plus chemotherapy (with both regimens followed by rituximab maintenance therapy). The safety profile differed in the two groups.

Reference: Morschhauser F, Fowler NH, Feugier O et al. Rituximab plus Lenalidomide in Advanced Untreated Follicular Lymphoma. N Engl J Med 2018; 379:934-947.

Overall survival with Palbociclib and Fulvestrant in advanced breast cancer

The cyclin-dependent kinase 4 and 6 (CDK4/6) inhibitor palbociclib, in combination with fulvestrant therapy, prolongs progression-free survival among patients with hormone-receptor–positive, human epidermal growth factor receptor 2 (HER2)–negative advanced breast cancer. Authors report the results of a prespecified analysis of overall survival.

Patients with hormone-receptor–positive, HER2-negative advanced breast cancer who had progression or relapse during previous endocrine therapy were randomly assigned to receive palbociclib plus fulvestrant or placebo plus fulvestrant.

Overall survival was analyzed based on the effect of palbociclib according to the prespecified stratification factors of presence or absence of sensitivity to endocrine therapy, presence or absence of visceral metastatic disease, and menopausal status; the efficacy of subsequent therapies after disease progression; and safety.

Among 521 patients who underwent randomization, the median overall survival was 34.9 months (95% confidence interval [CI], 28.8 to 40.0) in the palbociclib–fulvestrant group and 28.0 months (95% CI, 23.6 to 34.6) in the placebo–fulvestrant group (hazard ratio for death, 0.81; 95% CI, 0.64 to 1.03; P=0.09; absolute difference, 6.9 months). CDK4/6 inhibitor treatment after the completion of the trial regimen occurred in 16% of the patients in the placebo–fulvestrant group.

Among 410 patients with sensitivity to previous endocrine therapy, the median overall survival was 39.7 months (95% CI, 34.8 to 45.7) in the palbociclib–fulvestrant group and 29.7 months (95% CI, 23.8 to 37.9) in the placebo–fulvestrant group (hazard ratio, 0.72; 95% CI, 0.55 to 0.94; absolute difference, 10.0 months). The median duration of subsequent therapy was similar in the two groups, and the median time to the receipt of chemotherapy was 17.6 months in the palbociclib–fulvestrant group, as compared with 8.8 months in the placebo–fulvestrant group (hazard ratio, 0.58; 95% CI, 0.47 to 0.73; P<0.001).

No new safety signals were observed with 44.8 months of follow-up. Among patients with hormone-receptor–positive, HER2-negative advanced breast cancer who had sensitivity to previous endocrine therapy, treatment with palbociclib–fulvestrant resulted in longer overall survival than treatment with placebo–fulvestrant.

Reference: Nicholas C. Turner, M.D., Dennis J. Slamon, M.D. Jungsil Ro Overall Survival with Palbociclib and Fulvestrant in Advanced Breast Cancer N Engl J Med 2018; 379:1926-1936

Elotuzumab plus Pomalidomide and Dexamethasone for multiple myeloma

The immunostimulatory monoclonal antibody elotuzumab plus lenalidomide and dexamethasone has been shown to be effective in patients with relapsed or refractory multiple myeloma. The immunomodulatory agent pomalidomide plus dexamethasone has been shown to be effective in patients with multiple myeloma that is refractory to lenalidomide and a proteasome inhibitor.

Patients with multiple myeloma that was refractory or relapsed and refractory to lenalidomide and a proteasome inhibitor were randomly assigned to receive elotuzumab plus pomalidomide and dexamethasone (elotuzumab group) or pomalidomide and dexamethasone alone (control group). The primary end point was investigator-assessed progression-free survival. A total of 117 patients were randomly assigned to the elotuzumab group (60 patients) or the control group (57 patients).

After a minimum follow-up period of 9.1 months, the median progression-free survival was 10.3 months in the elotuzumab group and 4.7 months in the control group. The hazard ratio for disease progression or death in the elotuzumab group as compared with the control group was 0.54 (95% confidence interval [CI], 0.34 to 0.86; P=0.008). The overall response rate was 53% in the elotuzumab group as compared with 26% in the control group (odds ratio, 3.25; 95% CI, 1.49 to 7.11). The most common grade 3 or 4 adverse events were neutropenia (13% in the elotuzumab group vs. 27% in the control group), anemia (10% vs. 20%), and hyperglycemia (8% vs. 7%). A total of 65% of the patients in each group had infections. Infusion reactions occurred in 3 patients (5%) in the elotuzumab group. Among patients with multiple myeloma in whom treatment with lenalidomide and a proteasome inhibitor had failed, the risk of progression or death was significantly lower among those who received elotuzumab plus pomalidomide and dexamethasone than among those who received pomalidomide plus dexamethasone alone.

Reference: Dimopoulos MA, Dytfeld D, Grosicki S et al. Elotuzumab plus Pomalidomide and Dexamethasone for Multiple Myeloma. N Engl J Med 2018; 379:1811-1822.

Potentially Practice Changing DATA

Effects of surgery with salvage stereotactic radiosurgery versus surgery with whole-brain radiation therapy

in patients with one to four brain metastases (JCOG0504): A Phase III, Noninferiority, Randomized Controlled Trial

Whereas whole-brain radiotherapy (WBRT) has been the standard treatment of brain metastases (BMs), stereotactic radiosurgery (SRS) is increasingly preferred to avoid cognitive dysfunction; however, it has not been clearly determined whether treatment with SRS is as effective as that with WBRT or WBRT plus SRS.

Authors assessed the noninferiority of salvage SRS to WBRT in patients with BMs. Patients age 20 to 79 years old with performance status scores of 0 to 2—and 3 if caused only by neurologic deficits—and with four or fewer surgically resected BMs with only one lesion > 3 cm in diameter were eligible. Patients were randomly assigned to WBRT or salvage SRS arms within 21 days of surgery. The primary end point was overall survival.

Between January 2006 and May 2014, 137 and 134 patients were enrolled in the WBRT and salvage SRS arms, respectively. Median overall survival was 15.6 months in both arms (hazard ratio, 1.05; 90% CI, 0.83 to 1.33; one-sided P for noninferiority = .027). Median intracranial progression-free survival of patients in the WBRT arm (10.4 months) was longer than that of patients in the salvage SRS arm (4.0 months). The proportions of patients whose Mini-Mental Status Examination and performance status scores that did not worsen at 12 months were similar in both arms; however, 16.4% of patients in the WBRT arm experienced grade 2 to 4 cognitive dysfunction after 91 days post enrollment, whereas only 7.7% of those in the SRS arm did (P = .048). Salvage SRS is noninferior to WBRT and can be established as a standard therapy for patients with four or fewer BMs.

Reference: Kayama T, Sato S, Sakurada K et al. Effects of Surgery with Salvage Stereotactic Radiosurgery Versus Surgery with Whole-Brain Radiation Therapy in Patients with One to Four Brain Metastases (JCOG0504): A Phase III, Noninferiority, Randomized Controlled Trial. J Clin Oncol 2018. https://doi.org/10.1200/JCO.2018.78.6186

FDA hematology/oncology drug approvals since last issue

• **Calaspargase pegol-mknl** (ASPARLAS, Servier Pharmaceuticals LLC), an asparagine specific enzyme, as a component of a multiagent chemotherapeutic regimen for acute lymphoblastic leukemia (ALL) in pediatric and young adult patients age 1 month to 21 years. **December 20, 2018.**

• **Olaparib** (LYNPARZA, AstraZeneca Pharmaceuticals LP) for the maintenance treatment of adult patients with deleterious or suspected deleterious germline or somatic BRCA-mutated (gBRCAm or sBRCAm) advanced epithelial ovarian, fallopian tube or primary peritoneal cancer who are in complete or partial response to first-line platinum-based chemotherapy. **December 19, 2018.**

• **Pembrolizumab** (KEYTRUDA, Merck & Co. Inc.) for adult and pediatric patients with recurrent locally advanced or metastatic Merkel cell carcinoma (MCC). **December 19, 2018.**

• **Herzuma** (trastuzumab-pkrb, Celltrion Inc.) as a biosimilar to Herceptin (trastuzumab, Genentech Inc.) for patients with HER2-overexpressing breast cancer. **December 14, 2018.**

• **Romiplostim** (NPLATE, Amgen Inc.) for pediatric patients 1 year of age and older with immune thrombocytopenia (ITP) for at least 6 months who have had an insufficient response to corticosteroids, immunoglobulins, or splenectomy. **December 14, 2018.**

• **Atezolizumab** (TECENTRIQ, Genentech, Inc.), in combination with bevacizumab, paclitaxel, and carboplatin for the first-line treatment of patients with metastatic non-squamous, non-small cell lung cancer (NSq NSCLC) with no EGFR or ALK genomic tumor aberrations. **December 6, 2018.**

• **Gilteritinib** (XOSPATA, Astellas Pharma US Inc.) for treatment of adult patients who have relapsed or refractory acute myeloid leukemia (AML) with a FLT3 mutation as detected by an FDA-approved test, **November 28, 2018.**

• **Truxima** (rituximab-abbs, Celltrion Inc.) as the first biosimilar to Rituxan (rituximab, Genentech Inc.) for patients with CD20-positive, B-cell non-Hodgkin's lymphoma (NHL) to be used as a single agent or in combination with chemotherapy, **November 28, 2018.**

• **Larotrectinib** (VITRAKVI, Loxo Oncology Inc. and Bayer) for adult and pediatric patients with solid tumors that have a neurotrophic receptor tyrosine kinase (NTRK) gene fusion without a known acquired resistance mutation, that are either metastatic or where surgical resection is likely to result in severe morbidity, and who have no satisfactory alternative treatments or whose cancer has progressed following treatment, **November 26, 2018.**

• **Venetoclax** (VENCLEXTA, AbbVie Inc. and Genentech Inc.) in combination with azacitidine or decitabine or low-dose cytarabine for the treatment of newly-diagnosed acute myeloid leukemia (AML) in adults who are age 75 years or older, or who have comorbidities that preclude use of intensive induction chemotherapy, November 21, 2018.

• **Glasdegib** (DAURISMO, Pfizer Labs) in combination with low-dose cytarabine (LDAC), for newly-diagnosed acute myeloid leukemia (AML) in patients who are 75 years old or older or who have comorbidities that preclude intensive induction chemotherapy, **November 21, 2018.**

• **Emapalumab** (GAMIFANT, Novimmune SA), a monoclonal antibody that binds and neutralizes interferon gamma, for adult and pediatric (newborn and older) patients with primary hemophagocytic lymphohistiocytosis (HLH) with refractory, recurrent or progressive disease or intolerance with conventional HLH therapy, **November 20, 2018.**

Continued on page 10

FDA hematology/oncology drug approvals since last issue

Continued from page 9

• **Pembrolizumab** (KEYTRUDA, Merck & Co., Inc.) for patients with hepatocellular carcinoma (HCC) who have been previously treated with sorafenib, **November 9, 2018**.

• **Lorlatinib** (LORBRENA, Pfizer, Inc.) for patients with anaplastic lymphoma kinase (ALK)-positive metastatic non-small cell lung cancer (NSCLC) whose disease has progressed on crizotinib and at least one other ALK inhibitor for metastatic disease, or whose disease has progressed on alectinib or ceritinib as the first ALK inhibitor therapy for metastatic disease, **November 2, 2018.**

• **Pembrolizumab** (KEYTRUDA, Merck & Co., Inc.) in combination with carboplatin and either paclitaxel or nab-paclitaxel as first-line treatment of metastatic squamous non-small cell lung cancer (NSCLC), **October 30, 2018**.

• **Talazoparib** (TALZENNA, Pfizer, Inc.), a poly (ADP-ribose) polymerase (PARP) inhibitor for patients with deleterious or suspected deleterious germline BRCA-mutated (gBRCAm), HER2 negative locally advanced or metastatic breast cancer. Patients must be selected for therapy based on an FDA-approved companion diagnostic for talazoparib, **October 16, 2018**.

• **Emicizumab-kxwh injection** (HEMLIBRA, Genentech, Inc.) for prophylaxis to prevent or reduce the frequency of bleeding episodes in adult and pediatric patients (ages newborn and older) with hemophilia A (congenital factor VIII deficiency) with or without factor VIII (FVIII) inhibitors, **October 4, 2018.**

• **Cemiplimab-rwlc** (LIBTAYO, Regeneron Pharmaceuticals Inc.) for patients with metastatic cutaneous squamous cell carcinoma (CSCC) or locally advanced CSCC who are not candidates for curative surgery or curative radiation, **September 28, 2018**.

• **Dacomitinib tablets** (VIZIMPRO, Pfizer Pharmaceutical Company) for the first-line treatment of patients with metastatic non-small cell lung cancer (NSCLC) with epidermal growth factor receptor (EGFR) exon 19 deletion or exon 21 L858R substitution mutations as detected by an FDA-approved test, **September 27, 2018.**

• **Duvelisib** (COPIKTRA, Verastem, Inc.) for adult patients with relapsed or refractory chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL) after at least two prior therapies. In addition, duvelisib received accelerated approval for adult patients with relapsed or refractory follicular lymphoma (FL) after at least two prior systemic therapies, **September 24, 2018.**

The Morrison Cancer Center

The Morrison Cancer Center reflects a commitment to compassionate, evidence-based care for diagnosis, treatment and support services in one central location on the Mary Lanning Healthcare campus. The 19,000-square-foot building features two distinct treatment areas linked by a shared space for exam rooms and provider offices. This shared clinical space facilitates collaboration between Medical and Radiation Oncology.

In the Medical Oncology treatment area, there are 15 infusion chairs with seven private chemo suites. Infusion patients have access to a variety of amenities: virtual fish tank, TV, audio books, tablets, wireless internet, movies and relaxation videos, along with a library of educational resources. A beautiful Healing Garden is visible from the infusion area, offering all patients a peaceful and tranquil healing atmosphere while they receive their treatment. The Healing Garden has been funded through gracious donors who recognize the importance of nature in overall wellbeing and healing.

Within Radiation Oncology, state-of-the-art technologies are used for planning and delivery of comprehensive radiation treatment. A Varian True Beam Linear Accelerator enables the center to perform the latest treatment options, including stereotactic radio surgery. Radiation Oncologist, Dr. Thomas Zusag is an expert in performing breast and vaginal brachytherapy treatments.

At the Morrison Cancer Center, the compassionate and highly trained cancer center staff are able to provide quality cancer treatment in a healing environment, close to home.The team of providers consists of highly qualified medical and radiation oncologists, oncology nurses, a genetic counselor, registered dietitian, patient advocate, a certified lymphedema therapist and many more. They guide and support patients throughout treatment.

MCC physicians also see patients at four clinics: York, Superior, Grand Island and Henderson.

Seeing patients in Grand Island and Hastings

Dr. M. Sitki Copur, a nationally-known oncologist, is now part of the team at the Morrison Cancer Center in Hastings. He is seeing patients at **425 N. Diers Avenue, Suite 1** in Grand Island, as well as at the MCC in Hastings.

Your patients have a choice!

If they wish to see Dr. Copur, the MCC staff can assist with making appointments in **Grand Island** or **Hastings**. Please call the MCC at **402-460-5899.**

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The Morrison Cancer Center team