

# Gastrointestinal Cancer:

## 2022 ASCO Annual Meeting Highlights for the Advanced Practitioner



**Nina N. Grenon, DNP, AGCNP-BC, AOCN®**, of Dana-Farber Cancer Institute, evaluates data on *RAS* wild-type metastatic colorectal cancer, locally advanced mismatch repair-deficient rectal cancer, circulating tumor DNA tests, pancreatic neuroendocrine tumors, and nonresectable locally advanced pancreatic cancer. **Kristen O'Hagan, MSN, ANP-BC, AOCNP®**, of Memorial Sloan Kettering Cancer Center, reviews research on disparities in receiving guideline-concordant care among patients with colorectal cancer.

### Abstract LBA1

#### In Metastatic *RAS* Wild-Type Left-Sided Colorectal Cancer, Panitumumab Proves Superior to Bevacizumab

By Caroline Helwick

Visit [https://ascopubs.org/doi/10.1200/JCO.2022.40.17\\_suppl.LBA1](https://ascopubs.org/doi/10.1200/JCO.2022.40.17_suppl.LBA1) to read the full abstract and view author disclosures.

**T**he preferred targeted therapy for left-sided *RAS* wild-type metastatic colorectal cancer, in combination with standard chemotherapy, is panitumumab, not bevacizumab, based on a head-to-head comparison in the phase III PARADIGM trial. Panitumumab plus chemotherapy yielded the longest overall survival ever reported in a prospective phase III trial in first-line metastatic colorectal cancer. Takayuki Yoshino, MD, PhD, of the National Cancer Center Hospital East, Chiba, Japan, presented the data at the Plenary Session of the 2022 ASCO Annual Meeting.

The use of panitumumab, which is an inhibitor of EGFR, improved overall survival by 3.6 months as compared with the VEGF inhibitor bevacizumab. Median overall survival was 37.9 months vs 34.3 months, respectively.

“It has long been believed that the sequence of treatment in metastatic colorectal cancer does not matter as long as patients had access to the drugs at some point in their treatment,” Dr. Yoshino added. “This trial demonstrates that for *RAS* wild-type and left-sided metastatic colorectal cancer, the choice of the initial biologic with chemotherapy does matter and that initial treatment with panitumumab with FOLFOX [fluorouracil, leucovorin, oxaliplatin] chemotherapy is superior to initial treatment with bevacizumab plus FOLFOX chemotherapy.”

PARADIGM is the first prospective trial to test the superiority of panitumumab vs bevacizumab in combination with standard doublet first-line chemotherapy in patients with *RAS* wild-type metastatic colorectal cancer and left-sided primary tumors. In CALGB/SWOG 80405 and FIRE-3, the EGFR inhibitor cetuximab was compared with bevacizumab

PARADIGM is the first prospective trial to test the superiority of panitumumab vs bevacizumab in combination with standard doublet first-line chemotherapy in patients with *RAS* wild-type metastatic colorectal cancer and left-sided primary tumors. In CALGB/SWOG 80405 and FIRE-3, the EGFR inhibitor cetuximab was compared with bevacizumab

but lacked a prospective assessment according to tumor site. Retrospective analyses have suggested that EGFR inhibitors are superior to VEGF therapy in the first-line setting for left-sided wild-type *RAS* tumors, but in the absence of prospective data, bevacizumab continues to be widely used.

### Study Details

The open-label multicenter trial conducted in Japan randomly selected patients with chemotherapy-naïve *RAS* wild-type tumors to panitumumab plus modified (m)FOLFOX6 or bevacizumab plus mFOLFOX6. Overall survival as the primary endpoint was hierarchically tested in patients with left-sided tumors; this was followed by assessment in the overall population.

The population included 823 patients, 802 of whom ultimately received treatment and satisfied key eligibility criteria. The population with left-sided primary tumors included 312 patients receiving panitumumab and 292 receiving bevacizumab. Overall survival was analyzed after 448 events in the patients with left-sided disease, which occurred after a median follow-up of 61 months.

### Relative Benefit in Overall Survival

“Panitumumab significantly improved overall survival vs bevacizumab in both populations,” Dr. Yoshino reported. In patients with left-sided tumors,

median overall survival was 37.9 months with panitumumab vs 34.3 months with bevacizumab. Median progression-free survival was similar, but response rate and R0 (curative-intent) resection rates were improved with panitumumab.

Within the whole study population of both left-sided and right-sided tumors, panitumumab also fared significantly better, with median overall survival of 36.2 months vs 31.3 months with bevacizumab. This difference, however, appeared to be driven by the left-sided population, since in an exploratory analysis, panitumumab did not improve overall survival in patients with right-sided tumors. For them, median overall survival was 20.2 months with panitumumab and 23.2 months with bevacizumab.

Panitumumab was associated with more skin, nail, and mucosal toxicities—known to be associated with EGFR inhibitors—than bevacizumab.

Although PARADIGM was conducted in Japan, there is no reason to believe these results are not applicable to non-Asian patient populations, Dr. Yoshino emphasized. Large-scale biomarker analysis is currently underway using plasma and tumor tissue samples collected before and after treatment.

“The results from PARADIGM highlight the importance of *RAS* testing at initial diagnosis of metastatic disease in left-sided colorectal cancer and tailoring initial therapy based on the results,” Dr. Yoshino commented.

### The Advanced Practitioner Perspective

Nina N. Grenon, DNP, AGCNP-BC, AOCN®  
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The results of the PARADIGM study provide answers to a number of questions regarding the treatment of patients with metastatic colorectal cancer (mCRC). The study prospectively confirms superiority in terms of overall survival and objective response and also translating into a higher rate of secondary (curative intent) resections with FOLFOX plus panitumumab (Vectibix) in patients with left-sided *RAS* wild-type tumors.

Previously, only scant data were available to differentiate within the biologics in terms of tumor sidedness, which we know can influence the response to treatment based on clinicopathologic features of the tumor. Prevalence

of genomic and phenotypic features of right-sided tumors are associated with intrinsic resistance to anti-EGFR agents.

The sequence of treatment in mCRC until now did not matter, as long as patients had access to all the agents over the trajectory of the treatment. The results from this study show that for *RAS* wild-type and left-sided mCRC, the choice of initial biologic does matter and that the initial treatment with FOLFOX and panitumumab is superior to initial treatment with FOLFOX and bevacizumab (Avastin). The study also highlights the importance of *RAS* testing at initial diagnosis of mCRC, particularly in left-sided tumors. The results from this study are certainly practice changing.

**Disclosure:** Dr. Grenon has no conflicts of interest to disclose.

**Abstract LBA5****100% Complete Response Rate in 14 Patients With Rectal Cancer Treated With Neoadjuvant Dostarlimab-gxly**

By Caroline Helwick

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**I**n a study of 18 patients with locally advanced mismatch repair-deficient (dMMR) rectal cancer, 6 months of neoadjuvant treatment with the anti-PD-1 agent dostarlimab-gxly alone led to clinical complete responses in 100% of the study's first 14 patients. These results were presented at the 2022 ASCO Annual Meeting by Andrea Cercek, MD, of Memorial Sloan Kettering Cancer Center, New York.

"We were obviously beyond thrilled with the results," Dr. Cercek commented. "We've now treated a total of 14 patients, and all have had a clinical complete response to dostarlimab alone.... No patients have required chemotherapy, radiation therapy, or surgery. There were no grade 3 or 4 events. There have been no disease recurrences observed..., although longer follow-up is certainly required to establish the durability of this treatment."

Median follow-up is currently just 6.8 months. However, four patients have been followed for close to 2 years and four have received less than 6 months of the required treatment.

**About the Study**

The single-arm phase II study will ultimately enroll 30 patients with newly diagnosed clinical stage II and III dMMR rectal cancer. To date, all but 1 of 18 patients has had node-positive disease, and

about half have Lynch syndrome. Most (78%) have T3 or T4 rectal tumors. The median patient age is 54 (range, 26–78 years). All patients had dMMR rectal cancers and all had wild-type *BRAF* V600F; the mean tumor mutational burden was 67.

"I'd like to highlight that the majority of these patients had big bulky tumors, and 94% had node-positive disease," Dr. Cercek said.

Patients received dostarlimab at 500 mg intravenously every 3 weeks for 6 months and then underwent radiologic and endoscopic evaluations. The protocol called for patients with clinical complete responses to be followed nonoperatively every 4 months; those with residual disease would undergo chemoradiotherapy, after which clinical complete responders would be followed nonoperatively and those with persistent residual disease would undergo surgery.

The primary objectives were overall response rate to PD-1 blockade with or without chemoradiation and pathologic complete response or clinical complete response rate at 12 months after PD-1 blockade with or without chemoradiation. Only the first primary endpoint has been evaluated.

Overall response was determined by rectal MRI and endoscopic exam; patients were determined to have stable disease, partial response, near complete response, or complete response. Clinical complete response was indicated by an endoscopic visual exam showing disappearance of the primary along with a normal digital rectal exam; the formal criteria for rectal MRI response also had to be met.

"In dMMR rectal cancer, PD-1 blockade may be able to either replace chemotherapy; replace chemotherapy and radiation therapy; or replace chemotherapy, radiation therapy, and surgery," Dr. Cercek said. The early results of her study suggest the third possibility could become a reality.

**The Advanced Practitioner Perspective**

Nina N. Grenon, DNP, AGCNP-BC, AOCN®  
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In this small study, single-agent dostarlimab (Jemperli) led to complete response (100%) in patients with locally advanced mismatch repair-deficient (dMMR) rectal cancer, avoiding surgery, radiation, and chemotherapy. The follow-up period for this cohort of patients has

been 6 to 24 months. So far, all patients show preliminary evidence of a complete response.

The results of this study are beyond exciting and encouraging. The treatment for rectal cancer is associated with potential morbidity and life-impacting resection, including a permanent colostomy, problems related to fertility, and sexual and urinary dysfunction, all of which would be avoided in the setting of treat-

ment with dostarlimb. The avoidance of the possible late effects is particularly attractive to the increasingly younger patient population with rectal cancer.

The results of this study are clinically meaningful and scientifically possible; however, at this time, they cannot be considered practice changing. The sample size is relatively small, and the median follow-up is extremely short. We know from previous trials that tumor regrowth can occur up to 2 years after completing total neoadjuvant therapy. All patients

were treated at a single institution. Because the condition is rare (approximately 15% of colorectal cancers harbor dMMR), a randomized clinical trial would not be feasible.

In the absence of a randomized clinical trial, more data on disease-free survival, overall survival, and organ preservation are needed. In addition, the study needs to be conducted in multi-institutional settings in order for the results to be applied to all cancer care settings.

**Disclosure:** Dr. Grenon has no conflicts of interest to disclose.

## Abstract LBA100

### Circulating Tumor DNA-Guided Approach to Treating Stage II Colon Cancer

By Caroline Helwick

Visit [https://ascopubs.org/doi/abs/10.1200/JCO.2022.40.17\\_suppl.LBA100](https://ascopubs.org/doi/abs/10.1200/JCO.2022.40.17_suppl.LBA100) to read the full abstract and view author disclosures.

**T**he use of postoperative circulating tumor DNA (ctDNA) in stage II colon cancer spared many patients the need for adjuvant chemotherapy without compromising recurrence-free survival, according to the phase II DYNAMIC study.

“The strategy of using ctDNA results to inform treatment almost halved the number of patients who received chemotherapy after surgery, from 28% to 15%, and the chance of being alive and cancer-free at 3 years was comparable,” said Jeanne Tie, MD, FRACP, MBChB, Associate Professor at the Walter and Eliza Hall Institute of Medical Research and Peter MacCallum Cancer Centre, Victoria, Australia. Dr. Tie presented the findings at the 2022 ASCO Annual Meeting.

#### Study Rationale and Methodology

Surgery alone can cure more than 80% of cases of stage II colon cancer. However, the benefit of chemotherapy after surgery is unclear, though it is often recommended for patients with high-risk tumor features.

“More precise prediction of relapse risk may help limit treatment to very high-risk patients who

are most likely to benefit and avoid unnecessary treatment in low-risk patients who are not,” said Dr. Tie. “A ctDNA blood test can identify patients who have microscopic cancer remaining after surgery. These patients have a very high chance—more than 80%—of cancer relapse if left untreated.”

The phase II DYNAMIC trial was conducted in Australia between 2015 and 2019 using the Safe-SeqS tumor-informed personalized ctDNA assay. Patients were randomly assigned 2:1 to have their disease managed according to ctDNA results (ctDNA-guided management; n = 294) or by the treating clinician according to standard clinicopathologic criteria (standard management; n = 147).

In the ctDNA-guided arm, patients with a positive ctDNA result at either week 4 or 7 received adjuvant single-agent fluoropyrimidine or oxaliplatin-based chemotherapy. Patients with negative ctDNA results at both time points were not treated with adjuvant chemotherapy.

Characteristics were evenly matched across groups. Overall, the median patient age was 64 years; 46% of patients had left-sided tumors, and 54% had right-sided tumors; 85% had tumor stage T3 disease; and 40% were deemed to be at high risk at baseline.

The primary efficacy endpoint was recurrence-free survival at 2 years, calculated from the date of randomization. Median follow-up was 37 months.

#### Outcomes Data

In the ctDNA-guided treatment arm, the rate of recurrence-free survival was 92.5% among those who did not receive adjuvant therapy—the same as the rate of recurrence-free survival in the stan-

dard management arm. Also in the ctDNA-guided treatment arm, recurrent disease was observed at 3 years among 7% of ctDNA-negative patients who did not receive adjuvant chemotherapy, as compared with 14% of ctDNA-positive patients who were treated with chemotherapy.

“For patients with stage II colon cancer, a ctDNA-guided approach that treats only patients with detectable ctDNA after surgery substantially reduced the use of adjuvant chemotherapy and did not compromise recurrence-free survival. Additionally, the favorable 3-year recurrence-free survival seen in ctDNA-positive patients treated with adjuvant chemotherapy compared with previously reported low recurrence-free survival in untreated patients, suggesting a benefit may be gained from adjuvant chemotherapy in this well-defined, high-risk subgroup,” Dr. Tie said.

Chemotherapy was delivered to 15% of the ctDNA-guided arm vs 28% of the standard-management arm (relative risk = 1.82). For patients with high-risk clinicopathologic features, the likelihood of receiving adjuvant chemotherapy

was more than twice as high in the standard-management group as in the ctDNA-guided group. Among all patients who received adjuvant chemotherapy, an oxaliplatin-based doublet (vs single-agent fluoropyrimidine) was administered to a higher percentage of the ctDNA-guided group than of the standard-management group (62% vs 10%). Almost all (90%) of the chemotherapy administered under standard management was single-agent fluoropyrimidine.

The type of treatment seemed important, at least for ctDNA-positive patients. They had better recurrence-free survival at 3 years after receiving an oxaliplatin-based doublet (92.6%) than single-agent fluoropyrimidine (76.0%).

The percentages of patients surviving without disease recurrence at 2 years and at 3 years were similar in the ctDNA-guided group and the standard-management group: 2-year recurrence-free survival was 93.5% and 92.4%, respectively; 3-year recurrence-free survival was 91.7% and 92.4%, respectively. These data confirmed noninferiority of the ctDNA-guided approach, said Dr. Tie.

### The Advanced Practitioner Perspective

Nina N. Grenon, DNP, AGCNP-BC, AOCN®  
Dana-Farber Cancer Institute

The benefits of adjuvant chemotherapy in patients with stage III colorectal cancer (CRC) have been clearly demonstrated, with an approximately 30% relative reduction in the risk of disease recurrence. Adjuvant chemotherapy is standard of care in this group of patients. In contrast, the benefits of adjuvant therapy are less certain and the subject of ongoing debate in patients with stage II CRC (node negative).

The results of this study of circulating tumor DNA (ctDNA) in patients with stage II CRC and adjuvant chemotherapy help to bring clinicians one step closer to help in shared decision-making with patients about the role of adjuvant chemotherapy in stage II CRC. This study shows that patients with a positive ctDNA score after surgery have a very high recurrence risk; therefore, further treatment should be given.

Although it is not standard of care to obtain ctDNA analysis, in patients with stage II

CRC, especially in those patients with high-risk characteristics, such as poorly differentiated histology, high preoperative carcinoembryonic antigen (CEA), and intestinal perforation at presentation, this needs to be considered in order to guide care.

A word of caution when ordering a ctDNA test: It is important to make sure it is covered by the patient's medical insurance. If it is not covered, an appeal needs to be made by the clinician to the health plan; this study provides adequate evidence and rationale.

A randomized trial is currently being considered to assign patients with ctDNA-positive and ctDNA-negative CRC to a treatment or no treatment arm. But knowing what we already know from the conclusions of the DYNAMIC trial, a randomized trial may be difficult for patient accrual. Perhaps a larger trial and a longer follow-up phase II trial could shed more light on ordering standardized ctDNA testing in patients with stage II CRC for additional treatment decision-making.

**Disclosure:** Dr. Grenon has no conflicts of interest to disclose.



**Abstract 4004****Capecitabine Plus Temozolomide vs Temozolomide Alone in Advanced Pancreatic Neuroendocrine Tumors**

By Caroline Helwick

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**I**n the updated final analysis of the phase II ECOG-ACRIN E2211 trial, patients with advanced pancreatic neuroendocrine tumors experienced a significant improvement in progression-free survival with capecitabine plus temozolomide over temozolomide alone. Although the 5-month difference in overall survival was not statistically significant, it was “clinically meaningful,” according to Pamela L. Kunz, MD, Associate Professor of Medicine at Yale School of Medicine and Director of the Center for Gastrointestinal Cancers at Smilow Cancer Hospital and Yale Cancer Center.

“The combination of capecitabine and temozolomide should be included as a standard treatment option for patients with advanced pancreatic neuroendocrine tumors and is a reasonable comparator arm in future randomized studies,” Dr. Kunz said during her presentation of the data at the 2022 ASCO Annual Meeting.

The study also explored outcomes according to MGMT (O[6]-methylguanine-DNA methyltransferase) status. There is a biologic rationale for MGMT-deficient tumors to respond better to temozolomide, as they do in glioblastoma multiforme, she said.

**About ECOG-ACRIN E2211**

As Dr. Kunz noted, strong treatment response is uncommon in patients with advanced pancreatic neuroendocrine tumors. Retrospective studies and small, prospective studies have reported high response rates with capecitabine plus temozolomide, along with relatively long progression-free survival.

The randomized E2211 trial was conducted to establish a role for this combination. The trial evaluated capecitabine/temozolomide (capecitabine at 750 mg/m<sup>2</sup> twice daily on days 1–14, temozolo-

midate at 200 mg/m<sup>2</sup>/d on days 10–14) vs temozolomide (200 mg/m<sup>2</sup>/d on days 1–5) in 144 patients with metastatic or unresectable low- or intermediate-grade pancreatic neuroendocrine tumors. Eligible patients had to have experienced disease progression within the preceding 12 months and to have had no prior treatment with temozolomide, dacarbazine, capecitabine, or fluorouracil.

The primary endpoint was progression-free survival. Investigators also evaluated MGMT by immunohistochemistry (IHC) and by promoter methylation to look for associations with outcomes.

**Why Look at MGMT?**

E2211 is the largest prospective study to examine MGMT expression as related to the treatment of pancreatic neuroendocrine tumors. Of the 144 patients, 97 underwent MGMT testing. MGMT deficiency was indicated by low IHC or positive promoter methylation.

As Dr. Kunz explained, pancreatic neuroendocrine tumors are known to respond to temozolomide alone; it is believed that capecitabine may be synergistic with temozolomide, perhaps by downregulating MGMT. Temozolomide induces DNA methylation of the O(6) position of guanine, leading to DNA damage and cell death, which is usually repaired by MGMT. In glioblastoma multiforme, MGMT is silenced by promoter methylation, rendering cells more sensitive to alkylating agents. In neuroendocrine tumors, mechanisms other than methylation may be involved, since promoter methylation is less common, yet MGMT is still lost, according to Dr. Kunz.

“MGMT deficiency is predictive of response to temozolomide in glioblastoma but is a matter of debate for pancreatic neuroendocrine tumors,” she said. “This study was not designed to test MGMT as a predictive biomarker, as both arms contain temozolomide. However, we can examine the association of MGMT overall with response and survival by arm.”

**Combination Improves Outcomes**

This study met its primary endpoint, with capecitabine/temozolomide improving median progression-free survival by more than 8 months, from 14.4 months with temozolomide alone to 22.7 months. In the updated and final analysis, a trend

toward overall survival was observed, with a median of 58.7 months with the combination vs 53.8 months with temozolomide alone. "While this difference did not reach statistical significance, this is a 5-month clinically meaningful difference between the two arms," she maintained.

Objective response rates were high in both arms: 40% with the combination and 34% with temozolomide alone. The median duration of response was 16.6 months and 12.6 months, respectively, and disease control rates were 84% and 74%.

### **MGMT Deficiency Associated With Response**

Although the findings on MGMT deficiency and outcomes are only exploratory, the investigators reported MGMT deficiency was associated with greater odds of response.

"We also observed trends in MGMT deficiency associated with progression-free survival and overall survival," she added. Combination treatment led to a median progression-free survival of 27.3 months for MGMT-deficient patients and 16.6 months for patients not deemed MGMT-deficient. In MGMT-deficient patients treated with the combination, median overall survival was not reached but was 48.6 months with the single agent.

"Combined with a strong biologic rationale, these results are provocative and suggest that MGMT may, in fact, be predictive in pancreatic neuroendocrine tumors, as it is in glioblastoma. However, confirmatory testing is needed with studies that have non-temozolomide-containing arms," she said.

Capecitabine/temozolomide was associated with higher rates of grade 3/4 toxicities (44% vs 22%).

### **The Advanced Practitioner Perspective**

**Nina N. Grenon, DNP, AGCNP-BC, AOCN®**  
**Dana-Farber Cancer Institute**

Pancreatic neuroendocrine tumors (PNETs) are quite rare, with an incidence of 3 to 10 cases per million and accounting for < 5% of all pancreatic cancers. They are also known as islet cell tumors and include insulinoma, gastrinoma (Zollinger-Ellison syndrome), vasoactive intestinal peptide (VIPoma), glucagonoma, and somatostatinoma. They are often identified by a clinical syndrome associated with hormone secretion. Very few treatment options are available for these patients.

This randomized, phase II clinical trial compared the effects of temozolomide alone with temozolomide in combination with capecitabine. The trial, which included 144 patients, showed that the combination of capecitabine and temozolomide produced longer progression-free survival rates, higher response rates, and longer overall survival rates than temozolomide alone.

At the interim analysis, median progression-free survival was 14.4 months for temozolomide vs. 22.7 months for capecitabine and temozolomide. In the final analysis, median overall survival was 53.8 months for temozolomide and 58.7 months for the combination. The objective

response rate was 34% for temozolomide and 40% for capecitabine and temozolomide.

Treatment-related grade 3 or 4 adverse effects were twice as common with the combination therapy (44% vs. 22%). The most common adverse events were neutropenia (13% vs. 4%), nausea and vomiting (8% vs. 0%), diarrhea (8% vs. 0%), and fatigue (8% vs. 1%).

In addition, there appears to be a correlation between expression of methylguanine DNA methyltransferase (MGMT) and temozolomide responsiveness in advanced neuroendocrine tumors (NETs). MGMT is an enzyme that is responsible for DNA repair induced by alkylating agent chemotherapy. MGMT status, however, has not yet been prospectively validated as a predictor of response in NETs, and variability in the techniques and criteria used to assess MGMT status preclude its current use as a routine clinical test to select patients for temozolomide therapy.

This clinical trial is practice changing in patients who are highly symptomatic and have rapidly progressing disease. The combination of capecitabine and temozolomide should be included as standard of care in patients with PNETs.

**Disclosure:** Dr. Grenon has no conflicts of interest to disclose.

**Abstract 4008****CONKO-007: Initial Trial Results on Sequential Chemotherapy and Chemoradiotherapy in Nonresectable Pancreatic Cancer**

By JADPRO Staff

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**C**hemotherapy is the standard of care in nonresectable locally advanced pancreatic cancer. The CONKO-007 trial examined the role of sequential chemotherapy and chemoradiotherapy administered to patients with nonresectable locally advanced pancreatic cancer following standard-of-care chemotherapy.

**Study Details**

In this randomized multicenter phase III trial, resectability was judged by an independent surgical board. Patients received induction chemotherapy for 3 months (gemcitabine or FOLFIRINOX). After induction chemotherapy, patients without progression were randomized to either continuing chemotherapy for another 3 months or receiving chemoradiotherapy (cumulative dose of 50.4 Gy, single dose 1.8 Gy + gemcitabine 300 mg/m<sup>2</sup> weekly, followed by 1 cycle of gemcitabine 1,000 mg/m<sup>2</sup> at days 1, 8, and 15). The primary endpoint of the study was overall survival (OS) from the beginning of induction chemotherapy.

Between April 2013 and February 2021, a total of 525 patients were enrolled in 47 sites.

402 patients received induction chemotherapy with FOLFIRINOX and 93 patients with gemcitabine. After induction chemotherapy, 190 patients were excluded due to progression or toxicity and 335 were randomized. The median follow-up was 16 months.

**Study Results**

Hematologic toxicities were significantly increased in the chemoradiotherapy arm, while nonhematologic toxicities were comparable. R0 circumferential resection margin (CRM) negative resection rate and pathologic complete response (pCR) rate were significantly higher in the chemoradiotherapy arm. R1 resections occurred significantly more often in the chemotherapy arm. Median progression-free survival (PFS) and OS did not differ significantly in both arms, whereas the PFS rate tended to be higher in the chemoradiotherapy arm after 2 years. OS rates for CRM– R0 surgery ( $87.5 \pm 0.05\%$  [1 year] and  $67.2 \pm 0.05\%$  [2 years]) were significantly higher than rates for CRM+ R0 surgery ( $66.7 \pm 0.15\%$  [1 year] and  $41.2 \pm 0.1\%$  [2 years]), as well as for patients without or incomplete surgery ( $68.5 \pm 0.03\%$  [1 year] and  $26.4 \pm 0.03\%$  [2 years]).

**Conclusions**

The addition of radiotherapy after induction chemotherapy improves R0 CRM– resection and pCR rate without a significant change in R0 resection rate. Patients with R0 CRM– resections had a better prognosis compared with patients with R0 CRM+ or without or incomplete surgery. However, this effect on resectability did not translate into a statistically significant PFS or OS benefit in the whole cohort.

**The Advanced Practitioner Perspective**

Nina N. Grenon, DNP, AGCNP-BC, AOCN®  
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Concomitant chemoradiotherapy (CRT) or stereotactic body radiation therapy is not recommended as a standard approach for all patients with borderline resectable disease who have not developed metastatic disease after initial systemic chemotherapy and who are being considered for resection. As with locally advanced unresectable pancreatic cancer, no

randomized trials have demonstrated that patients who receive radiation therapy as a component of neoadjuvant therapy have better survival than those undergoing induction chemotherapy alone.

Standard of care for locally advanced pancreatic cancer is chemotherapy. The CONKO-007 trial investigated the role of CRT in patients with nonresectable locally advanced pancreatic cancer. The primary endpoint was R0 resection, with secondary end-



points of overall survival (OS), disease-free survival (DFS), rate of resection, and survival following resection.

The addition of radiation therapy after induction chemotherapy significantly improved RO resection rate in the surgery group but not in all patients with unresectable locally advanced pancreatic cancer. R1 resection was significantly reduced after CRT, and progression-free survival (PFS) and OS were similar

for patients following chemotherapy and CRT. The researchers concluded that induction chemotherapy followed by CRT and surgery in unresectable locally advanced pancreatic cancer is feasible in a select subgroup of patients. Although there was an effect on resectability, this did not translate into a statistically significant PFS or OS benefit in the entire cohort.

**Disclosure:** Dr. Grenon has no conflicts of interest to disclose.

## Abstract 6544

### Study Reveals Racial Disparities in Guideline-Concordant Care for Patients With Early-Onset Colorectal Cancer

By The ASCO Post Staff

Visit [https://ascopubs.org/doi/abs/10.1200/JCO.2022.40.16\\_suppl.6544](https://ascopubs.org/doi/abs/10.1200/JCO.2022.40.16_suppl.6544) to read the full abstract and view author disclosures.

**I**n a large national study, Black patients diagnosed with early-onset colorectal cancer received worse and less timely care than their White counterparts. Differences in health insurance coverage type accounted for the largest identified contributor to the racial disparities. The results were presented at the 2022 ASCO Annual Meeting.

In the study, led by Leticia Nogueira, PhD, MPH, of the American Cancer Society, more than 147,000 non-Hispanic Black and White individuals aged 20 to 49 years newly diagnosed with colorectal cancer during 2004 to 2019 were selected from the National Cancer Database. Patients who received all care recommended by the NCCN (staging, surgery, lymph node evaluation, chemotherapy, and radiotherapy) for which they were eligible, according to cancer subsite and clinical and pathologic TNM stage, were considered guideline-concordant.

Demographic characteristics (age and sex), comorbidities, and health insurance coverage type were added sequentially to a series of multivariable models to estimate the contribution to racial disparities in receipt of guideline-concordant care. Racial disparities in the time from diagnosis date (among patients with rectal cancer eligible for neoadjuvant chemotherapy) and surgery date (among patients with colon cancer eligible for adjuvant chemotherapy) to the date of chemotherapy initiation were evaluated using restricted mean time to treatment.

Of the 84,728 colon and 62,483 patients with rectal cancer included in the study, 20.8% and 14.5% were Black, respectively. Black patients were 18% and 36% less likely to receive guideline-concordant care than White patients diagnosed with colon and rectal cancer, respectively.

Demographic characteristics and comorbidities combined explained less than 5% of the disparity, while health insurance coverage type explained 28.6% and 19.4% of the disparity among patients with colon and rectal cancers, respectively. Restricted mean time to chemotherapy was statistically significantly longer among Black than White patients for colon (54.0 vs. 48.7 days) and rectal cancers (49.6 vs. 40.9 days).

The study authors stressed that improved access to care could help mitigate disparities in cancer outcomes.

### The Advanced Practitioner Perspective Kristen O'Hagan, MSN, ANP-BC, AOCNP® Memorial Sloan Kettering Cancer Center

Elements in colorectal cancer survival are multifactorial and thought to be intimately tied to social determinants of health, inequities in screening and early detection, and access

to care. There is much research being done to evaluate these disparities with the goal of eradicating them.

New research by Nogueira and colleagues focuses on differences in the receipt of guideline-concordant care between Black and White patient groups aged 20 to

49. They discovered that Black individuals are more likely to receive substandard, non-guideline-recommended care than White patients. Demographic characteristics (age and sex), comorbidities, and health insurance coverage type were evaluated as contributing factors. The receipt of non-guideline-concordant care was most strongly linked to differences in insurance coverage. Interestingly, demographic characteristics and comorbid illness combined explained less than 5% of the disparity.

Black patients experienced delays in care that were longer than White patients, particularly for those patients diagnosed with rectal

cancer. Rectal cancer treatment is complex and involves multimodality treatment, requiring multiple appointments and coordination, which could lead to possible delays or care not in alignment with guidelines.

Differences in insurance, a modifiable factor, was most associated with delayed and substandard care, and ultimately poorer survival. As advanced practitioners in oncology, it is our duty to work to ensure all patients are receiving guideline-concordant care, and to support initiatives aimed at increasing access to health insurance for all.

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