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CLINICAL Colorectal Cancer

and Other Gastrointestinal
Malignancies

Volume 18, Number 1 • March 2019

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One-year overall survival prediction nomogram included 6 easy-to-obtain pre Yttrium-90 radioembolization parameters and provided good prediction of overall survival post Yttrium-90 radioembolization. This can be useful for pretreatment patient stratification and counseling of heavily pretreated patients with colorectal cancer liver metastases. Baseline maximum standardized uptake value predicted liver progression-free survival.
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Cognitive dysfunction can occur after chemotherapy in cancer survivors but has not been widely investigated in colorectal cancer (CRC). Among patients with stage II or III CRC who had been prospectively assessed for neuropsychological function and had completed cognitive complaint questionnaires, those who had received fluoropyrimidine-based adjuvant chemotherapy presented with declines in executive function after 12 months compared with those patients who had not received chemotherapy.
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 The fluoropyrimidines, 5-fluorouracil and capecitabine can cause cardiotoxicity. In a review of 16 Eastern Cooperative Group Cancer Research Group–American College of Radiology Imaging Network fluoropyrimidine-based treatment studies, exclusion of premorbid cardiovascular disease was common. Less than half of the studies (43%) specifically evaluated cardiac ischemic events. Standardized collection of cardiovascular risk factor and outcome data in oncologic trials is needed.
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Sakti Chakrabarti, Jaskanwal Sara, Ronstan Lobo, Rachel Eiring, Heidi Finnes, Jessica Mitchell, Mindy Hartgers, Akiko Okano, Thorvardur Halfdanarson, Axel Grothey
 Coronary vasospasm with capecitabine or infusional 5-fluorouracil (5-FU) is a potentially serious complication. We performed a retrospective review to explore the safety of substituting FLOX (bolus 5-FU, oxaliplatin, leucovorin) for capecitabine or infusional 5-FU–based regimens in patients who had coronary vasospasm. FLOX is safe in patients who experienced coronary vasospasm with infusional 5-FU or capecitabine.
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Omar Abdel-Rahman
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Khurum Khan, Jayant K. Rane, David Cunningham, Sheela Rao, David Watkins, Naureen Starling, Eleftheria Kalaitzaki, Martin Forster, Chiara Braconi, Nicola Valeri, Marco Gerlinger, Ian Chau
 In this large cohort of gastrointestinal cancer patients with high cardiac risk factors or those with previous fluorouracil-based cardiac toxicities, we demonstrated the safety and efficacy of raltitrexed-based chemotherapy in patients. This study will offer reassurance to physicians who may encounter a clinically challenging situation.
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Grace G. Wong, Vincent Ha, Michael P. Chu, Deonne Dersch-Mills, Sunita Ghosh, Carole R. Chambers, Michael B. Sawyer
 Proton pump inhibitors (PPIs) have been implicated in the impaired absorption of various oral oncologic therapies. Significantly reduced 3-year recurrence-free survival rates were seen in our retrospective chart review of stage II-III colorectal cancer patients who received PPIs concurrently with CapeOx (capecitabine, intravenous oxaliplatin) compared to non-PPI recipients. No significant differences were seen among FOLFOX-treated patients (intravenous 5-fluorouracil, leucovorin, oxaliplatin).

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- e1 Association Between Primary Payer Status and Survival in Patients With Stage III Colon Cancer: An National Cancer Database Analysis**
Aabra Ahmed, Ahmed Tahseen, Elizabeth England, Katrine Wolfe, Michael Simhachalam, Travis Homan, Jenna Sitenga, Ryan W. Walters, Peter T. Silberstein
The goal of our study was to determine the between-insurance differences in survival in patients with pathologic stage III colon cancer using data from the National Cancer Database (NCDB). We identified 130,998 patients with pathologic stage III colon cancer in the NCDB diagnosed from 2004 to 2012. Patients with private insurance plans were 28%, 30%, and 16% less likely to die than were uninsured patients, Medicaid recipients, and Medicare beneficiaries, respectively.
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Adenosine has an immunosuppressive and angiogenic modulatory role in the tumor microenvironment. The present study revealed that *CD39 rs11188513*, a single nucleotide polymorphism in the adenosine pathway, affected the clinical outcomes of 451 patients with metastatic colorectal cancer from 2 phase III clinical trials treated with FOLFIRI (5-fluorouracil, leucovorin, oxaliplatin, irinotecan) plus bevacizumab.
- e20 Stromal PD-1/PD-L1 Expression Predicts Outcome in Colon Cancer Patients**
Jacqueline Wyss, Bastian Dislich, Viktor H. Koelzer, José A. Galván, Heather Dawson, Marion Hädrich, Daniel Inderbitzin, Alessandro Lugli, Inti Zlobec, Martin D. Berger
In a study that used a next-generation tissue microarray approach, stromal expression of programmed cell death 1 (PD-1)/programmed death ligand 1 (PD-L1) in patients with colon cancer correlated with less aggressive tumor features, resulting in improved outcome. Stromal PD-L1/PD-1 expression might serve as a prognostic biomarker in colon cancer patients.
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In a series of 53 patients with advanced anal squamous cell cancer, we demonstrate that a modified 5-fluorouracil and cisplatin schedule (FOLFICIS) with lower dose, more frequent administration of cisplatin is effective and well-tolerated. This regimen should be considered a standard treatment option. Human papillomavirus-negative anal squamous cell cancers were less sensitive to platinum-based therapy and exhibited a distinct molecular profile.
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Seán Fitzgerald, Julie-Ann O'Reilly, Erin Wilson, Ann Joyce, Richard Farrell, Dermot Kenny, Elaine Williamson Kay, Jenny Fitzgerald, Barry Byrne, Gregor Stefan Kijanka, Richard O'Kennedy
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Omar Abdel-Rahman
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Irina Druzhkova, Nadezhda Ignatova, Natalia Prodanets, Nikolay Kiselev, Iliya Zhukov, Marina Shirmanova, Vladimir Zagaynov, Elena Zagaynova
We analyzed colorectal cancer chemosensitivity according to expression of the main epithelial—mesenchymal transition (EMT) marker, E-cadherin. Human colon adenocarcinoma cell lines HT29 and HCT116 and 14 primary short-term cultures from patient tumors were used. Increased chemosensitivity of the cell line with EMT phenotype, HCT116, was demonstrated; this may serve as a predictive marker of chemotherapy efficacy.
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Pashtoon Murtaza Kasi, Faisal Shahjehan, Jordan J. Cochuyt, Zhuo Li, Dorin Toma Colibaseanu, Amit Merchea
We noticed an increased number of patients diagnosed with colorectal cancer (CRC) in their 20s, 30s, and 40s. We analyzed all CRC patients aged < 50 at our institutions from 1972 to 2017 and found increasing trends as well as a propensity for more distal location—findings that are hypothesis generating, given the embryologic origin of these tumors. This finding may have implications for screening guidelines.
- e96 Rising Incidence and Improved Survival of Anal Squamous Cell Carcinoma in Norway, 1987-2016**
Marianne Grønlie Guren, Bjarte Aagnes, Mari Nygård, Olav Dahl, Bjørn Møller
The purpose was to provide population-based data of incidence and survival of anal squamous cell carcinoma. All 1548 primary anal cancers in 1987 through 2016 were identified in the Cancer Registry of Norway. Incidence rates increased in men and women, and net survival improved, in the period. Five-year net survival was 76% after curative and 18% after palliative radiotherapy.
- e104 Prognostic Effect of Tumor Sidedness in Colorectal Cancer: A SEER-Based Analysis**
Yaqi Li, Yang Feng, Weixing Dai, Qingguo Li, Sanjun Cai, Junjie Peng
A retrospective population-based study was conducted based on the SEER database stratified by colorectal cancer (CRC) histologic subtype and differentiation. Unlike adenocarcinoma (AC), stage III right-sided poorly differentiated mucinous and signet-ring cell AC showed significantly better survival than left-sided disease. Combining histologic subtype and sidedness may help to more precisely predict prognosis and help guide personalized treatment for patients with CRC.
- e117 Third- or Later-line Therapy for Metastatic Colorectal Cancer: Reviewing Best Practice**
Tanios Bekaii-Saab, Richard Kim, Tae Won Kim, Juan Manuel O'Connor, John H. Strickler, David Malka, Andrea Sartore-Bianchi, Feng Bi, Kensei Yamaguchi, Takayuki Yoshino, Gerald W. Prager

- e130 Pathologic Staging Inconsistency Between ypT4N0 (stage II) and ypT1-2N1 (stage III) After Preoperative Chemoradiotherapy and Total Mesorectal Excision in Rectal Cancer: A Multi-Institutional Study**
Joo Hwan Lee, Mina Yu, Sung Hwan Kim, Jong Hoon Lee, Soo-Yoon Sung, Bae Kwon Jeong, Songmi Jeong, Taek Keun Nam, Jae Uk Jeong, Hong Seok Jang
Patients with rectal cancer patients with ypT4N0 (stage II) showed worse recurrence-free survival than those with ypT1-2N1 (stage III). Patients staging ypT4N0 (stage II) had significantly higher locoregional recurrence and distant metastasis rates than those staging ypT1-2N1 (stage III). ypT4N0 (stages II) should be classified to a higher stage in the rectal cancer staging system.
- e140 Outcomes of Older Patients (≥ 70 Years) Treated With Targeted Therapy in Metastatic Chemorefractory Colorectal Cancer: Retrospective Analysis of NCIC CTG CO.17 and CO.20**
J. Connor Wells, Dongsheng Tu, Lillian L. Siu, Jeremy D. Shapiro, Derek J. Jonker, Christos Karapetis, John Simes, Geoffrey Liu, Timothy J. Price, Niall C. Tebbutt, Chris J. O'Callaghan
Clinical trial data were used to evaluate cancer outcomes between older ($n = 251$) and younger ($n = 704$) patients with metastatic colorectal cancer who were treated with cetuximab. Overall survival trended toward favoring younger adults, but in general, outcomes, including quality-of-life benefit, were similar between age groups.
- e150 Patterns of Use, Safety, and Effectiveness of Targeted Therapies in First-Line Treatment of Metastatic Colorectal Cancer According to Age: The STROMBOLI Cohort Study**
Amandine Gouverneur, Juliette Coutureau, Jérémy Jové, Magali Rouyer, Angela Grelaud, Sophie Duc, Stéphane Gérard, Denis Smith, Alain Ravaud, Cécile Droz, Marie-Agnès Bernard, Régis Lassalle, Annie Forrier-Réglat, Pernelle Noize, on behalf the ETNA study group and the EREBUS study group
Elderly patients are excluded from clinical trials, yet they can be treated in clinical practice. This large cohort of metastatic colorectal cancer patients treated in first-line with targeted therapies reinforces their benefit in elderly patients. Safety and effectiveness of targeted therapies are similar between elderly and younger metastatic colorectal cancer patients.
- e163 ACTH-Secreting Neuroendocrine Carcinoma of the Cecum: Case Report and Review of the Literature**
Ahmed Mokhtar, Thomas Arnason, Daniel Gaston, Weei-Yuarn Huang, Heather MacKenzie, Rayan Al-Hazmi, Nadine Vaninetti, Barna Tugwell, Daniel Rayson
Adrenocorticotropic hormone-secreting neuroendocrine tumors of the colon are rare. We describe a case of *BRAF* V600E and *TP53* mutations detected with next-generation sequencing (NGS) and performed a comprehensive literature review. Eighteen cases were found with an unadjusted mortality rate of 77.7% and median survival from presentation of 63 days. NGS may be important to identify these rare tumors.