

Applying tumor genotyping and new clinical approaches to the management of colorectal cancer

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The last two decades have seen a dramatic improvement in outcomes for patients with metastatic colorectal cancer (mCRC) with median survival now more than 30 months. This improvement in outcomes has come from a multidisciplinary approach to the care of patients with mCRC that combines systemic chemotherapy with improved surgical techniques, sophisticated radiologic interventions, and local therapy, and from the use of targeted drugs that have ushered in an era of genomic analysis in the standard care of mCRC. Treatment of mCRC is now individualized both based on pattern and extent of metastatic disease and tumor genetics, particularly mutations in oncogenes, such as KRAS, NRAS, and BRAF, and inactivation of the mismatch repair enzymes. In this special issue of the *Journal of Gastrointestinal Oncology* (JGO), applying tumor genotyping and new clinical approaches to the management of colorectal cancer, experts in the field review key advances in the management of CRC patients.

The topics addressed in this issue encompass a variety of timely themes. Several articles address the use of genetic information in the management of CRC. Sylvester and Vakiani discuss genetic progression in mCRC and tumor heterogeneity between primary and metastatic CRC. Kawakami, Zaanani, and Sinicrope review implications of mismatch repair-deficient status on the management of early stage colorectal cancer. Clarke and Kopetz summarize the emerging understanding of BRAF mutant CRC as a distinct subset in CRC, and Corcoran discusses exciting early results in the targeting of these tumors. Finally, Lipsyc

and Yaeger discuss recent data that oncogene mutations may affect the pattern of metastases of CRC.

Several authors discuss advances in the treatment of patients with limited metastatic disease. McAuliffe, Qadan, and D'Angelica review advances in liver resection and hepatic arterial therapy for patients with colorectal cancer liver metastases. Ridge and Solomon review the use of radiofrequency ablation to treat colorectal lung metastases. Guend, Patel, and Nash discuss advances in the treatment of peritoneal-limited colorectal metastases and the use of intraperitoneal therapies.

We believe this special issue of the JGO addresses many of the challenges and new approaches in the management of CRC. We hope you find it informative and enjoyable.

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Footnote

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