Background

Therapeutic options for metastatic colorectal cancer (mCRC) have changed dramatically in recent years, greatly increasing the complexity of therapeutic decision making. Treatment guidelines may limit feasibility to individual patient cases. The aim of this analysis was to assess "real-world" global practice patterns for mCRC and then compare them with recommendations from US experts based on patient cases entered by healthcare providers (HCPs) into an online decision support tool designed to provide specific, patient-individuated expert recommendations.

Methods

• A panel of 5 experts provided treatment recommendations for unique case scenarios across first-, second-, and third-line settings for mCRC
• Expert recommendations were compiled in August 2017
• Individual tool scenarios were defined by key patient and disease characteristics including
  • RAS and BRAF V600E mutation status
  • Microsatellite instability (MSI)
  • Location of primary tumor (left, right/transverse)
  • Previous chemotherapy and biologic or targeted therapy exposures
  • To help clinicians entered their patient and disease factors and were surveyed about their intended treatment plan for that case. The expert treatment recommendations for that specific case were then provided to the clinician
• Tool online at clinicaloptions.com/CRCTool

Results

Impact of Decision Tool on Practice

• Optional survey on intended use and tool impact shown after experts’ recommendations answered for 253 of 870 cases (29%)

Impact of Tool for Cases With Planned Treatment Differing From Expert Consensus, All Cases (n = 253)

Impact of Tool for Cases With Planned Treatment Differing From Expert Consensus, MSI-H Cases Only (n = 65)

Conclusions

• Practice patterns were heterogeneous in several CRC subtypes and settings, including the impact of sidedness, BRAF V600E mutation, and MSI-H status
• Planned treatment of HCPs differed from the expert treatment consensus for several defined CRC subtypes*
  • VEGF inhibitor in the first line for right-sided RAS/BRAF WT mCRC (55% vs 100%)
  • EGFR inhibitor in left-sided RAS/BRAF WT mCRC in a patient who received VEGF in the first line (25% vs 100%)
  • VEGF inhibitor in the first line for patients with BRAF V600E–mutant mCRC (63% vs 100%)
  • Regorafenib or TAS-102 in the third-line setting for RAS-mutant MSI CRC previously treated with mitoxantrone, capecitabine, and a VEGF inhibitor (56% vs 100%)
• Immune-checkpoint inhibitors for MSI-H mCRC in second or third line of therapy
• The majority of HCPs using this tool indicated that the expert recommendations confirmed or changed their treatment choice in the absence of barriers
• In an even greater proportion of MSI-H cases, the expert recommendations in the tool changed treatment choice (55% vs 38%, respectively)