

GASTROENTEROLOGISTS SUMMIT

December 14-15, 2017 Dubai, UAE

7DUJHWHG FDQFHU JHQH VHTXHQFLQJ LGHQWL;HV SRWHQWL carcinogenesis

Colorectal cancer is the second cause of death in the world and genomic alteration plays an important role in its pathogenesis. Much of the underlying genetic cancer driver mutations in sporadic colorectal cancer (CRC) have not been characterized by race. Here, we report the identification of distinct novel variants from CRC patients in mismatch repair (MMR) genes *MHS3* and *MSH6* and *APC*. We developed a panel of 20 frequently altered colon cancer genes for targeted sequencing. We analyzed 138 colon tissues using next generation sequencing to examine 98.8% of the targeted exons and splice junctions. Through variant calling and alignment, we annotated the variants. A total of 11 variants were identified in *MHS3*, 12 in *MSH6*, and 3 in *APC*. These variants were not found in the 1000 Genomes Project and dbSNP. The variants were confirmed by Sanger sequencing. The variants were found in 11 (7.9%), 12 (8.7%), and 3 (2.2%) of the 138 colon tissues, respectively. The variants were found in 11 (7.9%), 12 (8.7%), and 3 (2.2%) of the 138 colon tissues, respectively. The variants were found in 11 (7.9%), 12 (8.7%), and 3 (2.2%) of the 138 colon tissues, respectively.

Notes: