



## Uncovering Mutations in Your DNA

& providing clinically actionable  
data for choice of the most optimal  
treatment

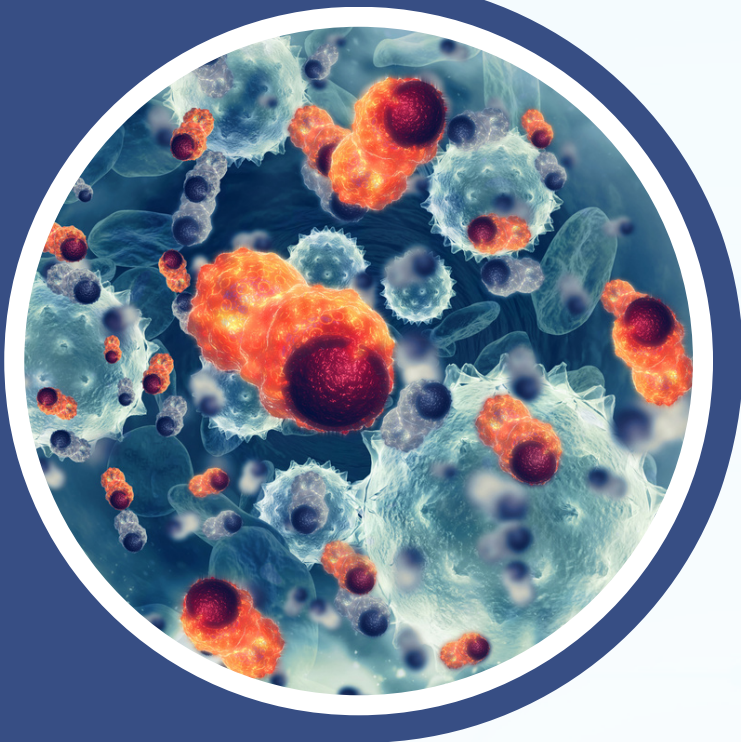
### COLORECTAL CANCER MULTIGENE PANEL (CRC CARE)

Colorectal cancer (CRC) is a formidable health problem worldwide and fourth most common cause of death due to cancer. In India, the annual incidence rates (AARs) for colon cancer and rectal cancer in men are 4.4 and 4.1 per 100000, respectively.

### GENES COVERED

APC BRAF CDKN2A ERBB2 KRAS MLH1 MSH2  
MSH6 NRAS PIK3CA PMS2 POLE PTEN SMAD4  
TP53 MUTYH STK11 EPCAM BMPR1A CHEK2  
POLD1





## CAUSES

An estimated 10% -15% of these cancers are likely attributable to hereditary (germline) causes. Several genes are associated with an increased risk of developing CRC, and those of key interest include those for Lynch syndrome, MLH1, MSH2, MSH6, PMS2, EPCAM; adenomatous polyposis conditions (APC), MUTYH, POLE, POLD1; hamartomatous polyposis syndromes PTEN, SMAD4, STK11, and other rare cancer predisposition states where colorectal cancer is part of the phenotype, CHEK2 and TP53.

Other environmental factors include: Age, gender (male), ulcerative colitis, alcohol, obesity etc.

## SAMPLE

- 3 ml BLOOD in EDTA/ lavender top tubes
- FFPE blocks

## WHY GENETIC TESTING?

- The latest NCCN guidelines recommend genetic evaluation if younger than age 50 regardless of other test results/ family history.
- The germline MGPT (multigene panel test) strategy is an alternative to tumor and family history-driven selection of patients with CRC for genetic testing because it is more sensitive for identifying individuals with LS and other cancer risk genes than a strategy of selecting for germline testing based on family history and tumor-based criteria.
- Pathogenic variants identified by MGPT are clinically actionable and inform screening and surveillance recommendations the treatment implications for patients with CRC and pathogenic mutations in the Lynch syndrome MMR genes are the best characterized and include response to immune checkpoint inhibitor therapy/programmed death-1 (PD-1) inhibitors. Keytruda (pembrolizumab) is approved for the treatment of any solid tumours that test MSI-H, have progressed after treatment and for which there are no other treatment options.



### BIOSERVE BIOTECHNOLOGIES (INDIA) PVT LTD

Pinnacle Towers, 1st Floor, Plot No.9/17/A&B  
Road No.6, IDA, Nacharam, Medchal-Malkagiri Dist.  
Hyderabad-500076, Telangana

+91-40 2955 8178/8176

+91 912 122 9283

bioserve.india@reprocell.com

salesindia@reprocell.com

www.bioserve.in



YOKOHAMA - JAPAN | GLASGOW - UK  
HYDERABAD - INDIA | BELTSVILLE - USA

