



Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



Colorectal NGS Fusion Panel

Alternative Name

Colorectal Fusion Panel

Methodology

Molecular

Test Description

The Colorectal NGS Fusion Panel is an RNA-based next-generation sequencing panel that detects translocations and fusions with known and novel fusion partners of these genes: AKAP9, ALK, BRAF, CCDC6, EML4, ERBB2, ETV6, FGFR2, FGFR3, FGFR4, GOPC, LMNA, MKRN1, NCOA4, NTRK1, NTRK2, NTRK3, RET, ROS1, SLC34A2, STRN, TPM3, and TRIM24.

Clinical Significance

The Colorectal NGS Fusion Panel is intended to detect gene fusions associated with colorectal cancer to aid in diagnosis, prognosis, and therapy selection.

In colorectal cancer (CRC), gene fusions could play both a prognostic role, conferring the aggressiveness of the disease, and a predictive one, identifying which patients more likely prone to refractoriness.

- NTRK gene fusions indicate dismal prognosis with median overall survival in metastatic setting. They likely account for primary resistance to EGFR targeted therapies. NTRK fusions are more common in patients with high microsatellite instability status and mismatch repair deficiency.
- ALK and ROS1 rearrangements are in the subgroup of poor prognosis metastatic CRC (mCRC). Crizotinib, lorlatinib, and entrectinib are approved drugs with known activity against recurrent mCRC gene fusions.
- RET arrangements, although rare for mCRC, seem to be associated with significantly shorter overall survival in older patients.
- FGFR fusions are rare, but patients who harbor these specific alterations can benefit from an already available targeted treatment, erdafitinib.

Specimen Requirements

- **FFPE tissue:** Paraffin block is preferred. Alternatively, send 1 H&E slide plus 5-10 unstained slides cut at 5 or more microns. Please use positively-charged slides and 10% NBF fixative. Do not use zinc fixatives.

Storage & Transportation

Use cold pack for transport, making sure cold pack is not in direct contact with specimen.

CPT Code(s)*

81449

Medicare MoIDX CPT Code(s)*

81449

New York Approved

Yes

Level of Service

Global

Turnaround Time

21 Days

References

1. Pagani F, Randon G, Guarini V, et al. The Landscape of Actionable Gene Fusions in Colorectal Cancer. *Int J Mol Sci*. 2019;20(21):5319. Published 2019 Oct 25. doi:10.3390/ijms20215319

*The CPT codes provided with our test descriptions are based on AMA guidelines and are for informational purposes only. Correct CPT coding is the sole responsibility of the billing party.

Please direct any questions regarding coding to the payor being billed.

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Rev. 112324