



Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



Breast NGS Fusion Panel

Alternative Name

Breast Fusion Panel

Methodology

Molecular

Test Description

The Breast 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: ACTL6A, AKT3, BRAF, CAPZA2, CCDC170, CCDC6, COA5, CTNNBL1, ESR1, ETV5, FGFR3, KIAA1549, MAST1, MAST2, MET, MYB, NCOA4, NFIB, NOTCH1, NOTCH2, NTRK1, NTRK2, NTRK3, PIK3CA, RAF1, RASGEF1A, RET, RPS6KC1, and TACC3.

Clinical Significance

The Breast NGS Fusion Panel identifies the recurrent, targetable gene fusions in breast cancer for the purposes of prognosis and treatment management.

Managing the aggressive forms of breast cancer remains a challenge despite many targeted therapy approaches. Studies have shown that gene fusions may have become a precision medicine approach for the disease. Oncogenic fusions in ER-positive breast cancer may function as predictive biomarkers of clinical resistance to endocrine therapy. Fusion genes may in themselves be a biomarker of advanced and aggressive disease and are associated with some potentially targetable protein kinases. NTRK fusions are rare, but testing is of high interest due to possible treatment with specific TRK inhibitors (entrectinib, larotrectinib).

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. Natrajan, R. et al. Driver Oncogenes but Not as We Know Them: Targetable Fusion Genes in Breast Cancer. *Cancer Discov*; 8(3); 272–5. ©2018 AACR.

*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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