





Pathology and Laboratory Medicine

Orderable - BRAF NCCO NGS

Turnaround Time: 15 days

Specimen:

FFPE

Collection Information:

Send blocks to pathology lab for cutting

Reference Ranges:

See report

Interpretive Comments:

In patients with advanced malignant melanoma BRAF V600 mutations have been shown to be associated with clinical response to therapies targeting BRAF, such as vemurafenib. (PMID: 2235632) While clinical guidelines for BRAF mutational analysis are evolving, current available guidelines recommend routine testing for BRAF V600 mutations in metastatic melanoma. (PMID:24129426

Comments:

Patient is outside CCO criteria for funded testing

Storage and Shipment:

Deliver to lab at room temperature.

Laboratory:

Molecular Diagnostics Lab

Requisition:

Refer to Pathology



Method of Analysis:

Mutation screening was performed by next generation sequencing (NGS) on the Ion Torrent technology using the Ion PGM™ System (ThermoFisher). Library preparation was performed as per manufacturers instructions using the Ion AmpliSeq[™] Cancer Hotspot Panel v2 (ThermoFisher), which screens approximately 2800 COSMIC mutations of 50 oncogenes and tumor suppressor genes, including COSMIC mutations in KRAS (63), NRAS (35) and BRAF (76) and EGFR (123). Only findings in the clinically indicated genes are reported; currently BRAF for melanoma, EGFR for lung cancer, and KRAS,



NRAS and BRAF for colon cancer. This assay has been internally validated to meet >99% sensitivity and specificity for mutations that are at 5% mutant allele frequency in the assessed DNA sample. Rarely, mutations are detected at <5% mutant allele frequency and these are confirmed using alternate methodology, including real-time quantitative PCR.



Test Schedule:

As required, Monday to Friday 0800-1600 hours





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