Test Information

Test Name: Chromosomal Microarray, Oncology

Performing Lab: Cytogenetics

Synonyms:
Array CGH
SNP array
Whole Genome Array
Hematologic Array
Loss of heterozygosity (LOH)

Turnaround Time: 7-14 days

Additional Information: Useful for the detection and characterization of a clonal copy number imbalance(s) and loss of heterozygosity associated with hematologic and/or solid tissue neoplasms. This array assists in the diagnosis and classification of certain neoplasms as well as the prognosis for patients with certain neoplasms. This information can also be helpful for determining therapy options.

This test does not detect balanced chromosome rearrangements, such as reciprocal translocations, inversions and/or balanced insertions. Low level abnormal clones may not be detected by this test. As a result of this latter limitation, the microarray test is not recommended for the assessment of minimal residual disease.

Methodology: DNA is extracted from the patient's peripheral blood, bone marrow or an FFPE section. After extraction, the DNA is digested, labeled and hybridized to the microarray chip. Following hybridization, the microarray chip is scanned and the intensity of signal is measured and compared to reference data values. Comparisons between these data sets are used to determine copy number changes. Chromosomal microarray data alone does not provide information about the specific chromosomal findings leading to an imbalance. Thus, some abnormal results may be further characterized by FISH or additional techniques.

CPT Code Information: 81406

Specimen & Collection:

Specimen name: Whole Blood
Container Type: Sodium Heparin Green top tube or EDTA (Lavender top)
Special Handling: Room temperature
Specimen Volume: Dark Green tube: 3 ml
Lavender tube: 3 ml

Specimen name: Bone Marrow
Container Type: Sodium Heparin Green top tube or heparinized syringe

Special Handling: Room temperature
Specimen Volume: 3 ml

Specimen name: FFPE section
Special Handling: Room temperature, not decalcified.
Specimen Volume: 10 slides cut at 10 microns. Requires an adjacent H & E slide with the area of interest marked by a pathologist.

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Specimen Transportation and Storage Information: Deliver to CSC 6th floor. VCUHS Courier Service will pick up from CSC (bloods and bone marrows) and/or Gateway building 6th floor (FFPE sections) and deliver to the cytogenetics laboratory (BioTech 8, 737 N. 5th Street, Suite 104).

Keep at room temperature. Do not spin.