NTRK Fusion Panel by Next Generation Sequencing

Patient: [redacted] DOB: [redacted] Age: 22 Sex: M **Patient Identifiers:** [redacted] **Visit Number (FIN):** [redacted]	Client: [redacted] Physician: [redacted]	ARUP Test Code: 3003684 Collection Date: 12/02/2022 Received in lab: 12/02/2022 Completion Date: 12/02/2022

Test Information

Test performed at NeoGenomics California, 31 Columbia, Aliso Viejo, CA 92656

Patient Report

Patient's report continues on following page(s).

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Chart continues on following page(s)

NEO GENOMICS

866.776.5907, option 3

Molecular Genetics
NTRK NGS Fusion Panel

Client [redacted]
ARUP Laboratories

500 Chipeta Way
Salt Lake City, UT 84108
Phone: (800) 242-2787
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FX 4

Patient Name: [redacted]
Patient DOB / Sex: [redacted] / M
Specimen Type: **Unknown**
Body Site: **Brain**
Specimen ID: **22336101979**
MRN: [redacted]
Other Patient ID / Acct #: [redacted]
Reason for Referral: **diagnosis**

Ordering Physician(s): [redacted]
Treating Physician(s): [redacted]
Accession / CaseNo: [redacted]
Collection Date: **12/02/2022 09:39:00 AM**
Received Date: **12/02/2022 02:17:14 PM EST**
Report Date: **12/02/2022 02:24:21 PM EST**

Results:

Fusion	Results	Fusion Partner
NTRK1	Detected	Detected
NTRK2	Detected	Detected
NTRK3	Detected	Detected

Clinical Significance:

Rearrangements of the genes tested and fusions with partner genes, leading to gene activation and overexpression, have been observed in a variety of cancers. Such fusions may be targetable with selective kinase inhibitors.

Methodology:

Total nucleic acid was extracted from formalin-fixed paraffin-embedded (FFPE) tissue. The NTRK NGS Fusion Panel uses hybridization capture-based targeted next-generation RNA sequencing for detection of fusions involving select exons of the following genes: NTRK1, NRTK2, and NTRK3. Sensitivity may be reduced for detection of fusions with a non-targeted translocation partner and detection of fusions with low expression. Certain isoforms of a given translocation may not be detected. Fusions involving regions with high homology to several regions, including DUX4L1, SUZ12P1 and SSX4 genes, may not be detected.

References:

1. Lange AM, Lo HW. Inhibiting TRK Proteins in Clinical Cancer Therapy. Cancers (Basel). 2018;10(4). pii: E105.
2. Cocco E, Scaltriti M, Drilon A. NTRK fusion-positive cancers and TRK inhibitor therapy. Nat Rev Clin Oncol. 2018;15(12):731-747. PMID: 30333516.

Test/Panel	MolDX CPT	AMA CPT
NTRK NGS Fusion Panel	81194	81194

Electronic Signature

[redacted]

The Accessioning Component, Technical Component Processing, Analysis and Professional Component of this test was completed at NeoGenomics HQ, 9490 NeoGenomics Way, Fort Myers, FL / 33912 / 866-776-5907 / CLIA #10D2235950 / Medical Director(s): Anahit Nowrouzi, MD.
The performance characteristics of this test have been determined by NeoGenomics Laboratories. This test has not been approved by the FDA. The FDA has determined such clearance or approval is not necessary. This laboratory is CLIA certified to perform high complexity clinical testing.
Images that may be included within this report are representative of the patient but not all testing in its entirety and should not be used to render a result.
The CPT codes provided with our test descriptions are based on MolDX and 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 payer being billed.