



# Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.



## NeoTYPE® Cholangiocarcinoma Profile

### Alternative Name

Cholangiocarcinoma Profile

### Methodology

FISH

Immunohistochemistry (IHC)

Molecular

### Test Description

The NeoTYPE Cholangiocarcinoma Profile analyzes 19 biomarkers through a combination of next-generation sequencing (NGS), FISH, and IHC as listed below. Test orders include summary interpretation of all results to help guide treatment decisions.

- NGS (15 genes + 2 biomarkers): APC, ARID1A, BAP1, BRAF, EGFR, ERBB2, HRAS, IDH1, IDH2, KRAS, MET (c-MET), NRAS, PBRM1, SMAD4, TP53, plus Microsatellite instability (MSI) and Tumor Mutation Burden (TMB).
- FISH (1 biomarker): FGFR2
- IHC (1 biomarker): PD-L1 22C3

### Clinical Significance

The NeoTYPE Cholangiocarcinoma Profile is intended to detect genetic aberrations reported in cholangiocarcinoma to aid in diagnosis and prognosis of the disease.

Cholangiocarcinoma (CCA) is an uncommon biliary tract cancer that typically presents at an advanced disease stage and is characterized by an aggressive disease course and poor clinical outcome. The most commonly mutated genes include KRAS, BRAF, BAP1, and SMAD4, associated with cell signaling pathways (MAPK signaling), cell cycle control and chromatin dynamics. Many potential therapies have been identified, including lapatinib (ERBB2), cetuximab and panitumumab (EGFR). Other potential targets include IDH1/2 and PD-L1.

### Specimen Requirements

- **FFPE tissue:** Paraffin block preferred. Please use 10% buffered formalin 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)\*

81445, 88360, 88374x1 or 88377x1

### New York Approved

No

## Level of Service

Global

## Turnaround Time

14 Days

## References

1. Jain, A. et al. Cholangiocarcinoma With FGFR Genetic Aberrations: A Unique Clinical Phenotype. *JCO Precision Oncology* 2018:2, 1-12.
2. Zhou, M., Zhu, Y., Hou, R., Mou, X., & Tan, J. (2019). Identification of candidate genes for the diagnosis and treatment of cholangiocarcinoma using a bioinformatics approach. *Oncology Letters*, 18, 5459-5467.  
<https://doi.org/10.3892/ol.2019.10904>
3. Labib, P.L., Goodchild, G. & Pereira, S.P. Molecular Pathogenesis of Cholangiocarcinoma. *BMC Cancer* 19, 185 (2019). <https://doi.org/10.1186/s12885-019-5391-0>

\*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.

NeoGenomics Laboratories is a specialized oncology reference laboratory providing the latest technologies, testing partnership opportunities, and interactive education to the oncology and pathology communities. We offer the complete spectrum of diagnostic services in molecular testing, FISH, cytogenetics, flow cytometry, and immunohistochemistry through our nation-wide network of CAP-accredited, CLIA-certified laboratories.

Committed to research as the means to improve patient care, we provide Pharma Services for pharmaceutical companies, in vitro diagnostic manufacturers, and academic scientist-clinicians. We promote joint publications with our client physicians. NeoGenomics welcomes your inquiries for collaborations. Please contact us for more information.

\*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.



12701 Commonwealth Dr., Suite 9  
Fort Myers, FL 33913  
Phone: 886.776.5907/ Fax: 239.768.0711  
neogenomics.com

© 2022 NeoGenomics Laboratories, Inc. All Rights Reserved.  
All other trademarks are the property of their respective owners  
Rev. 012722