

ThyroSure NGS Thyroid Molecular Panel

Yale Pathology Labs is pleased to offer a Next-Generation Sequencing (NGS) thyroid molecular panel, the **ThyroSure NGS Panel**, to analyze genetic alterations and mutations in thyroid tissue or cells. Approximately 20% of fine-needle aspiration (FNA) biopsies present with unresolved cytological findings and are classified as indeterminate, and approximately 30% of indeterminate nodules will undergo molecular testing. The ThyroSure NGS Panel allows for the simultaneous sequencing of multiple genes associated with thyroid cancer and thyroid disorders to further stratify the cancer risk of indeterminate FNA specimens.

This is possible because:

- ThyroSure NGS provides comprehensive next-generation sequencing analysis of 78 thyroid cancer genes to detect single nucleotide variations, gene fusions, and gene expression alterations.
- ThyroSure NGS helps to identify a wide range of genetic alterations that are highly relevant to the subclassification and risk assessment of thyroid nodules.
- ThyroSure NGS analysis of thyroid FNA with indeterminate cytology helps to further triage patients for subsequent surgical and medical management.

A recent Yale study comparing the use of ThyroSure, a modified thyroid genomic classifier (MTGC), to an established thyroid genomic classifier (ETGC) for thyroid FNA found that the MTGC had a higher specificity than ETGC, and equivalent and positive predictive values. The MTGC also has a high negative rate of testing (benign call rate), which may help avoid surgery in the majority of patients.

The study also determined that the MTGC maintains high negative predictive value and relatively high sensitivity while requiring less genetic input and potentially lower cost of testing. The MTGC also has high sensitivity in follicular lesion of uncertain significance (FLUS) and Follicular Neoplasm lesions in subgroup analysis.

Yale Pathology Labs has performed hundreds of ThyroSure cases, and our team of internationally recognized, fellowship-trained pathologists offers subspecialized expertise in molecular pathology, cytopathology, endocrine pathology, as well as several other disciplines.

At Yale Pathology Labs, we pride ourselves on our rapid evaluation capabilities and our broad experience. Our subspecialty pathologists are on call around the clock, ensuring that doctors working in oncology, surgery, and other clinical specialties always have access to our expertise.

A Legacy of Caring, a Passion for Excellence



Our Team

Adebowale Adeniran, MD

Professor of Pathology
Director, Cytopathology

Angelique W. Levi, MD

Vice Chair, Clinical Operations &
Reference Services

Kevin Schofield, BS, CT (ASCP)

Director, Clinical Operations &
Reference Services

Learn more

Stephanie Weirman

Director, Reference Services
Business Development

203-464-5518

yalepathologylabs@yale.edu

yalepathologylabs.org

@YalePathology

Insurance Information

CPT CODE 81455

(Genomic Sequencing Procedures)

- **Pre-authorization required by many carriers, dedicated staff to provide assistance with this process**
- **Test cost will depend upon the diagnosis and benefits available through patient insurance**
- **Self-Pay Rate available for those with no insurance benefit**
- **CMS covered based on diagnosis, ABN on file required**