

Thyroid Cancer Diagnostic Algorithmic Tests

- I. The use of a thyroid cancer diagnostic algorithmic test in fine needle aspirates of thyroid nodules is considered **medically necessary** when:
 - A. The fine needle aspirate showed [indeterminate cytologic findings](#) (i.e., Bethesda diagnostic category III or IV), **AND**
 - B. The result of the test would affect surgical decision making.
- II. The use of a thyroid cancer diagnostic algorithmic test in fine needle aspirates of thyroid nodules is considered **investigational** for all other indications.

RATIONALE AND REFERENCES

Thyroid Cancer Diagnostic Algorithmic Tests

American Thyroid Association (ATA)

The ATA developed evidence-based guidelines on the management of thyroid nodules and differentiated thyroid cancer in adults (2016). They state that molecular testing may be used to aid in risk stratification for nodules with AUS/FLUS [atypia of undetermined significance/follicular lesion of undetermined significance] in place of the more traditional strategy of surveillance or diagnostic surgery (p. 21).

Haugen BR, Alexander EK, Bible KC, et al. American Thyroid Association management guidelines for adult patients with thyroid nodules and differentiated thyroid cancer: The American Thyroid Association Guidelines Task Force on Thyroid Nodules and Differentiated Thyroid Cancer. *Thyroid*. 2016;26(1):1-133. doi:10.1089/thy.2015.0020

National Comprehensive Cancer Network (NCCN): Thyroid Carcinoma (1.2025)

This guideline recommends consideration of molecular diagnostics on fine needle aspirate (FNA) results of thyroid nodules which are classified as Bethesda III or Bethesda IV if there is not high clinical and/or radiographic suspicion of malignancy (p. THYR-1 and THYR-2).

National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Thyroid Carcinoma 1.2025 https://www.nccn.org/professionals/physician_gls/pdf/thyroid.pdf

DEFINITIONS

1. **ABCDE feature** is an acronym for examining patients with a lesion that is suspicious for melanoma: **a**symmetry, **b**order irregularity, **c**olor variegation, **d**iameter greater than 6 mm, and **e**volution.
2. **Adjuvant** therapy is a medication (such as chemotherapy or endocrine therapy) given after the surgical removal of a cancerous tumor.
3. **Ductal/NST** is a ductal breast cancer of no special type (NST), meaning the cancer cells have no features that classify them as a specific type of breast cancer when examined by microscope.
4. **Indeterminate cytologic findings** include Bethesda diagnostic category III (atypia/follicular lesion of undetermined significance) or Bethesda diagnostic category IV (follicular neoplasm/suspicion for a follicular neoplasm)