

WHAT'S NEW IN PATHOLOGY



Quantitative Image Analysis: Breast Prognostic Markers

Background



TOPA now utilizes FDA approved quantitative image analysis software to analyze all our breast prognostic and predictive immunohistochemical markers, including ER, PR, Her2/neu, Ki-67 and p53. This enables us to provide the most accurate, reproducible, and standardized results for our patients.

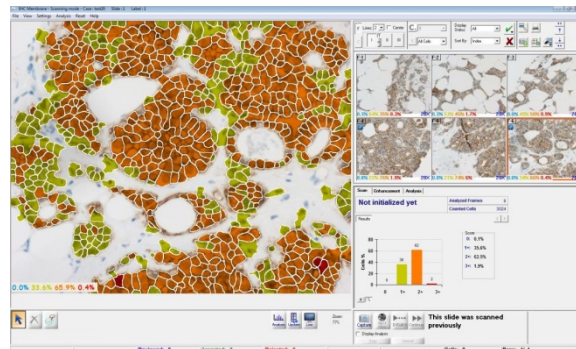
The Test

TOPA recently implemented GenASIS HiPath Capture and Analysis Software from Applied Spectral Imaging. Their software is FDA approved for the quantitative analysis of breast prognostic markers, ER, PR, Ki-67 and Her2/neu, by immunohistochemistry. These markers are reported using the most up to date, ASCO-CAP 2013 testing and reporting guidelines. These prognostic markers are automatically performed on all newly diagnosed malignant breast carcinomas.

Diagnostic Utility

Images are selected and captured by a pathologist. These images are then digitally analyzed and a computer software

algorithm classifies tumor cells as positive or negative for each immunohistochemical marker. The software also provides the percentage of tumor cells that are negative and positive at three different intensity levels (1+, 2+, 3+) to provide the most accurate and reproducible results. The software can count thousands of tumor cells. The pathologist maintains full control of the analysis, and must use his/her judgment to select appropriate areas of the tumor to analyze and ensure that the results correlate with the morphologic findings. The pathologist then reviews the software-generated results and reports them in an easy to read tabular format.



Her-2 IHC: Blue=0, Green =1+, Orange=2+, Red=3+

How to order the test

Prognostic markers are automatically performed on every newly diagnosed malignant breast biopsy case. The results are provided to you, usually within 24 hours of the diagnosis.

References

Quantitative image analysis of Ki-67 Immunohistochemistry Compared with Manual Pathologist Analysis in Breast Cancer. Author block: RL Lapham, KJ Kaplan, Gibbs Cancer Center, Spartanburg, SC. (poster)