

The CHTN has set a policy that all five adult divisions will provide the following biomarkers free of charge to investigators upon request if they are not already a part of the pathology report. These biomarker methods conform to CAP CLIA standards.

1. Breast – DCIS – ER IHC
2. Breast – Invasive ductal or lobular carcinoma – ER IHC
3. Breast – Invasive ductal or lobular carcinoma – PR IHC
4. Breast – Invasive ductal or lobular carcinoma – HER2 IHC
5. Breast – Invasive ductal or lobular carcinoma – HER2 FISH (if needed)
6. GI Tract NET – Ki-67
7. Colon/Rectum – Adenocarcinoma – MSI – IHC for MLH1, MSH2, MSH6 and PMS2
8. GIST – CD117 IHC or Molecular
9. Lung – Adenocarcinoma – PD-L1
10. Lung – Adenocarcinoma – ALK
11. Uterus/Endometrial – Other than Serous - MSI – IHC for MLH1, MSH2, MSH6 and PMS2
12. Head and Neck SCC – Oropharyngeal – p16

In addition, CHTN notes that, while not uniform across adult divisions, some divisions clinically perform even more biomarkers or molecular testing. This data, if available, could also be provided to investigators upon request. Examples include ThyroSeq molecular panel testing performed on thyroid tumors at Eastern and Southern Divisions, HER2 testing on esophageal tumors performed by Eastern, Western, and Mid-Atlantic Divisions, with additional PD-L1 and MSI-IHC testing performed on esophageal tumors by Mid-Atlantic Division, and HER2, EBV, and MSI testing performed on gastric tumors by Western, Southern, and Mid-Atlantic Divisions (EBV testing is also performed on these tumors by Midwestern Division), and BRAF testing performed on melanoma tumors by Southern, Midwestern, Mid-Atlantic, and Eastern Divisions.

The Pediatric Division performs molecular panel testing in hematologic malignancies, targeted microarray, DNA ploidy and N-MYC testing in neuroblastoma, targeted microarray testing in Wilm's tumor, N-MYC and C-MYC FISH testing in medulloblastoma, and specific gene fusion assays related to Ewing sarcoma, synovial sarcoma, desmoplastic small round cell tumor, and congenital fibrosarcoma/cellular mesoblastic nephroma.