Closing the Gap

OPTIMIZING BIOMARKER TESTING WORKFLOWS TO ADDRESS DISPARITIES IN EARLY BREAST CANCER CARE

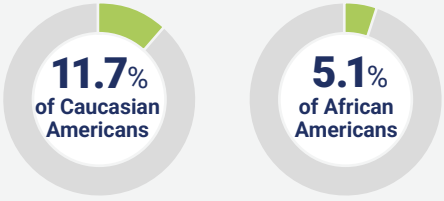
Disparities in Biomarker Testing for Early Breast Cancer

Disparities among populations have been observed in the ability to receive optimal biomarker testing for patients with breast cancer (BC).

- Despite advances in BC testing criteria and knowledge about detection strategies for mutation carriers, studies suggest that few women at high risk of hereditary BC are offered genetic testing[1]
  - Further disparities exist across race, with high-risk Black women less likely to be counseled or tested than high-risk White women[1]
- For patients with early breast cancer (eBC), gene expression profiles (GEPs) can be important predictive and prognostic assays to help guide the need for adjuvant therapy[2]
  - GEP testing uses genomic information from tumor samples, measuring the presence of key mutations to estimate the risk of BC recurrence and guide therapy[3]

Racial Disparities in BC Genomic Testing, United States[4]

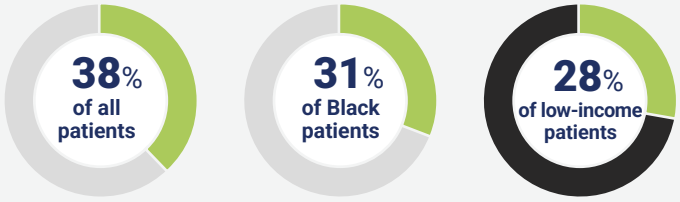
In a recent study of all patients with BC in Virginia…



…received **genomic testing** for BC.

Disparities in Genomic Expression Profile Testing, United States[2]

In a recent analysis of patients with eBC in the Carolina Breast Cancer Study…



…received **Oncotype DX® testing**.

- Despite its established clinical utility, GEP testing rates remain lower in certain patient populations, including: Black, Asian American, and Hispanic women, patients with lower socioeconomic status (SES), and patients in rural areas, which indicates some barriers to testing. Lower SES also was linked to negative outcome[2,5,6]

Barriers to GEP Testing

Resources for Providers[2]	Insurance Coverage[2,7]	Patient Preferences[8]	Patient Provider Communication[9]
Hospitals without multidisciplinary services (including multidisciplinary tumor boards) may be less likely to offer GEP testing	Out-of-pocket testing costs may be prohibitive for some patients Patients with Medicaid are less likely to receive testing	Patients may refuse testing, which may be related to concerns about chemotherapy	Providers may not have sufficient time to explain the importance of testing

PULSE CHECK

Has the patient been provided with biomarker (genomic and GEP) testing information and educational materials to support informed treatment decisions?

Precision Medicine

Optimize Your Workflows to Avoid Testing Disparities

Tips for Workflow Optimization:

Patient Identification and Risk Stratification	Provider-HCP Education, Shared Decision-Making, and Continued Patient Engagement	MDT Coordination	Streamline Test Ordering and Authorization	Data Tracking and Policy Alignment
Use standardized eligibility criteria for GEP testing in HR+/ HER2- eBC[10]	Understand disparities of care and GEP testing guidelines[10,11] Use decision support tools to guide appropriate test ordering[12] Engage patients continuously with culturally sensitive education and support to promote shared decision-making[2,8]	Discuss GEP testing in tumor boards or MDT meetings[11,12] Assign a nurse navigator to oversee biomarker testing workflows[9,13]	Establish automated workflow and reflex testing ordering within the EMR[9,12]	Monitor testing rates by race, insurance, and age Audit missed opportunities and reasons for not completing GEP testing[6] Track turnaround times and identify key bottlenecks[14]

The overall aim in addressing the disparities in BC care is to increase appropriate utilization of BC biomarker testing and improve overall patient outcomes.

Resources for Further Action

View these brochures for information on practical steps to ensure every patient receives the right testing at the right time:

- Addressing Disparities in Care Brochure
- Standardizing Biomarker Assessments 1-pager

EMR, electronic medical record; HCP, health care professional; HER2, human epidermal growth factor receptor 2; HR, hormone receptor; MDT, multidisciplinary team; OS, overall survival.

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