Quest Diagnostics offers several tests for detecting mutations associated with hereditary breast cancer. This Test Guide is intended to help the clinician select the most appropriate test for each patient. Additional assistance in test selection is available from our Genetic Counselors by calling 866-GENE-INFO (866-436-3463).

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<th>Test Code</th>
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<th>Clinical Application</th>
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| 91863     | BRCAvantage™, Comprehensive<sup>a</sup> | • Assess hereditary breast and/or ovarian cancer (HBOC) syndrome risk when there is no known familial mutation  
• Second-tier test to assess HBOC syndrome risk in Ashkenazi Jewish people who have a negative BRCAvantage™, Ashkenazi Jewish Screen |
| 91864     | BRCAvantage™, Ashkenazi Jewish Screen<sup>a</sup> | • First-tier test to assess HBOC syndrome risk in Ashkenazi Jewish people with or without a family history of an ethnicity-associated mutation |
| 92140     | BRCAvantage™, Ashkenazi Jewish Screen w/ Reflex BRCAvantage, Comprehensive<sup>a</sup> | • First- and second-tier tests combined to assess HBOC syndrome risk in Ashkenazi Jewish people with or without a family history of an ethnicity-associated mutation |
| 91865     | BRCAvantage™, Single Site<sup>a</sup> | • Assess HBOC syndrome risk in family members when there is a known familial BRCA1 or BRCA2 mutation |
| 91866     | BRCAvantage™, Rearrangements<sup>a</sup> | • Assess HBOC syndrome risk in people who have a negative BRCA1/BRCA2 sequencing test and no, or limited, deletion/duplication study |
| 92573     | BRCAvantage™ with Reflex to Breast Plus Panel<sup>a</sup> | • Assess hereditary breast cancer risk when there is no known familial mutation and the patient has a personal or family history consistent with more than 1 condition related to hereditary breast cancer  
• Two-step analysis begins with testing for mutations in BRCA1 and BRCA2, the most common causes of hereditary breast cancer; 5 additional genes analyzed if pathogenic or likely pathogenic mutations are not detected in the first step |

<sup>a</sup> Includes detection of point mutations, deletions, and duplications in the BRCA1 and BRCA2 genes.

<sup>b</sup> Includes detection of the 3 HBOC syndrome founder mutations (c.68_69delAG [185delAG, 187delAG], c.5266dupC [5382insC, 5385insC], and c.5946delT [6174delT]).
## Test Guide

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| 92587     | BRCAvantage™ Plus<sup>a</sup> | • Assess hereditary breast cancer risk when there is no known familial mutation and the patient has a personal or family history consistent with more than 1 condition related to hereditary breast cancer  
• Simultaneous analyses of relevant genes |
| 92586     | Breast Plus Panel w/o BRCA<sup>a</sup> | • Second-tier test to assess hereditary breast cancer risk in people who are negative for BRCA1 and BRCA2 point mutations, deletions, and duplications |
| 92560     | TPS3 Sequencing and Deletion/Duplication<sup>a</sup> | • Assess risk of hereditary breast cancer and other TPS3-associated cancers when there is a family history of Li-Fraumeni syndrome  
• Assist with diagnosis of Li-Fraumeni syndrome in a symptomatic individual |
| 92566     | PTEN Sequencing and Deletion/Duplication<sup>a</sup> | • Assess risk of hereditary breast cancer and other PTEN-associated tumors when there is a family history of Cowden syndrome  
• Assist with diagnosis of Cowden syndrome in a symptomatic individual |
| 92568     | CDH1 Sequencing and Deletion/Duplication<sup>a</sup> | • Assess risk of hereditary breast cancer and other CDH1-associated cancers when there is a family history of hereditary diffuse gastric cancer (HDGC)  
• Assist with diagnosis of HDGC in a symptomatic individual |
| 92565     | STK11 Sequencing and Deletion/Duplication<sup>a</sup> | • Assess risk of hereditary breast cancer and other STK11-associated cancers  
• Assist with diagnosis of Peutz-Jeghers syndrome in a symptomatic individual |
| 92571     | PALB2 Sequencing and Deletion/Duplication<sup>a</sup> | • Assess risk of hereditary breast cancer associated with monoallelic PALB2 mutations  
• Assist with diagnosis of Fanconi anemia in an individual suspected of having subtype FA-N, which is associated with biallelic PALB2 mutations |

<sup>a</sup> This test was developed and its performance characteristics have been determined by Quest Diagnostics Nichols Institute, San Juan Capistrano. Performance characteristics refer to the analytical performance of the test.

This Test Guide is provided for informational purposes only and is not intended as medical advice. A physician’s test selection decisions should be based on his/her education, clinical expertise, and assessment of the patient.