Targeted next generation sequencing and large rearrangement analysis of BRCA1 and BRCA2.

Most complete coverage
- Complete coding regions and splice sites of BRCA1 and BRCA2 genes are analyzed.
- Incidence of variants of uncertain significance (VUS) was only 2.3%.
- A separate multiplex PCR test is performed for detection of structural rearrangements in BRCA1 and BRCA2 (del/dup analysis).

Reporting
- Point mutations, small insertions/deletions, and large rearrangements are detected (>99.9% sensitivity and specificity).
- Likely pathogenic or pathogenic intronic variants up to 6 base pairs from the coding region are always reported.
- Variant classification based on ACMG Guidelines.

Highest accuracy
- Clinically validated based on CDC, CLIA, CAP, ACMG and CLSI guidelines.
- Analytical sensitivity and specificity over 99.9%.
- In validation studies, 100% reproducibility and repeatability across runs and operators with no false positives and negatives detected.
- Proprietary bioinformatics pipeline and variant assignment workbench used for data analysis.
- 27.7% of validation samples with known ethnicity were from non-white donors, including persons of Hispanic, African-American, East Asian, and Middle Eastern ancestry.

Most complete variant database
- More than 10,000 mutations representing over 500,000 patients, classified based on concordance among multiple clinical labs and curated and annotated by a physician.

Free the data
- Veritas strongly believes in data sharing to allow peer review and strengthen our collective knowledge about risk variants. Therefore, we have joined the Global Alliance for Genomics and Health (GA4GH) and FreeTheData movements and are contributing high quality, de-identified variant information to academic databases.

<table>
<thead>
<tr>
<th>Samples Accepted</th>
<th>Saliva, whole blood</th>
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</thead>
<tbody>
<tr>
<td>Amplicon Coverage</td>
<td>The assay offers full coverage of 16,426 base pairs of genomic sequence, including the complete coding regions and splice sites.</td>
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<tr>
<td>Validation</td>
<td>Validated based on 188 samples including 108 positive saliva and blood samples. Positive samples further confirmed by Sanger sequencing. There were no false negatives or positives.</td>
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</table>

About Veritas Genetics
Veritas Genetics aims to make high quality affordable genetic testing available to every patient who needs it. We believe that genetic knowledge can help improve patient care by providing recommendations that can lead to disease prevention and early detection. Veritas Genetics is founded and supported by clinicians and scientific leaders from the world’s top academic institutions including Harvard Medical School and MIT.