Introduction

Germline mutations in BRCA1 and BRCA2 genes have been associated with an increased risk of breast and ovarian cancer.\(^1\) Approximately 25% of hereditary breast cancer cases are caused by BRCA1 and BRCA2 mutations,\(^2\) and around 10% of all breast cancers.\(^3\) Mutations in BRCA1 and BRCA2 account for around 15% of ovarian cancers overall.\(^4\) With BGI’s CAP-certified Sentis BRCA test, you can be assured that no pathogenic variant will be missed. BGI provides targeted and affordable BRCA1 and BRCA2 testing, and also offers an extended 21-gene panel that analyzes other relevant genes for mutations that could also increase the risk of hereditary breast and ovarian cancer, as recommended by medical guidelines.\(^5\)

Knowledge of an increased genetic risk enables you to work with your patient to create a personalized plan designed to prevent or detect cancer at an earlier and more treatable stage.

\(^1\) Nature Genetics 15, 103 - 105 (1997)
\(^3\) Human Genetics 2008; 124(1):31–42.
\(^4\) Cancer 2005; 104(12):2807–16.
Advantages

Comprehensive  Whole exome plus flanking intronic regions covered for all genes tested; one single assay that detects point mutations, deletions, insertions, duplications, rearrangements*

Robust  Clinically important (pathogenic or likely pathogenic) variants are verified by Sanger Sequencing while large gene rearrangements are verified by qPCR.

Convenient  Test from peripheral blood or saliva.

Professional  State-of-the-art variant database ensures up-to-date analysis and interpretation. We also have a dedicated genetic counselling team offering professional genetic counselling services 24x7 through email.

*Alterations in methylation and complex genomic aberrations such as uniparental disomy, balanced translocation, inversions, ploidy changes, duplication and deletion of large DNA fragments and/or other rare alternations are not included. Also, there are some regions that cannot be fully covered, including exon15 of CHEK2 gene, and exon1 of STK11 gene.

Sample Requirements

5mL of peripheral blood or 2mL of saliva or ≥2µg good quality DNA

Turnaround time

20 working days (from sample arriving at BGI lab to report). Samples are sequenced at either our ISO15189 certified laboratory in Copenhagen or our CAP certified laboratory in Hong Kong.

Ordering Information

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CATALOG NO.</th>
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<tr>
<td>BGI SENTIS™ BRCA (2 genes) BRCA1, BRCA2</td>
<td>DX0648</td>
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<tr>
<td>BGI SENTIS™ Hereditary Breast and Ovarian (HBOC) (21 genes): BRCA1, BRCA2, CHEK2, PALB2, BRIPI, TP53, PTEN, STK11, CDH1, ATM, BARD1, MLH1, NBN, MRE11A, MSH2, MSH6, MUTYH, PMS1, PMS2, RAD50, RAD51C</td>
<td>DX0647</td>
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Workflow

1. Counselling and Consent
2. Sample Collection
3. DNA Extraction and QC
4. Targeted Capture and NGS
5. Data Analysis and Interpretation
6. Genetic Counselling
7. Report Ready

Contact your local BGI representative for more information or email info@bgi-international.com.

More information can also be found on our website.

www.bgi.com/global/

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Testing services not currently available in the United States of America. Please contact a representative for regional availability.