



**SCREEN NOW FOR A
HEALTHIER TOMORROW**



1 in 29

Indian women
develop
breast cancer



Breast cancer
accounts for

14%

of all cancers in
Indian women

Genetic Testing for Hereditary Breast & Ovarian Cancer Can Provide Useful Insights to the Clinicians

The American Society of Breast Surgeons recommends genetic testing to be made available to all breast cancer patients

BRCA1 & BRCA2 : What Genetic Testing Can Unravel

- Familial breast cancer comprises 20-30% of all breast cancers
- BRCA1 & BRCA2 are two major genes associated with hereditary breast & ovarian cancer syndrome
- 7 % of breast cancer & 15 % of ovarian cancer cases are caused by pathogenic mutations in the BRCA1 & BRCA2 genes

Introducing

BreastScreen Test



A comprehensively designed genetic screening panel

It tests for all relevant gene variants most commonly associated with hereditary breast-ovarian cancer (HBOC)

What Makes LifeCell's BreastScreen Panel the Right Choice?

- Analyses high & moderate risk genes associated with HBOC
- Improves the chances of preventing & promptly treating at-risk individuals
- Give your patients a sense of certainty & relief regarding future risk of cancer
- Helps make informed decisions & allow clinicians & patients to explore novel treatment options

What LifeCell has to offer for your patients

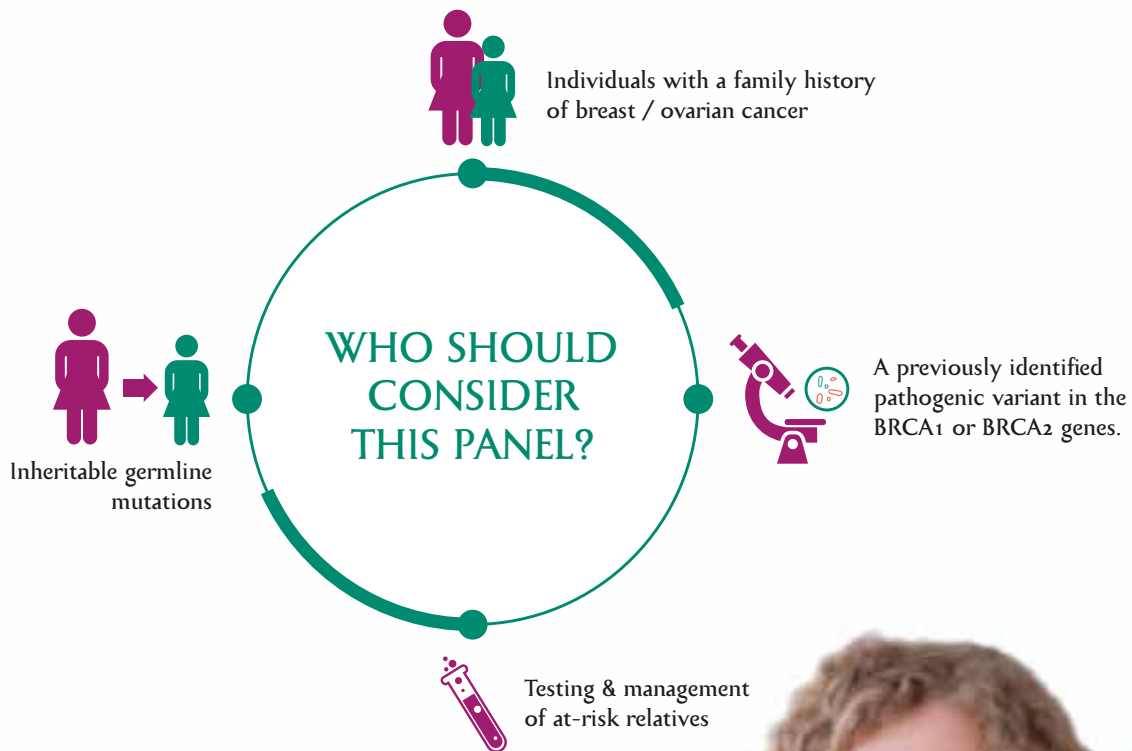
BRCA1 & BRCA2 Panel

What does this panel test?

The BRCA1 & BRCA2 Panel tests for pathogenic single nucleotide variants. It also includes MLPA (Multiplex Ligation-Dependent Probe Amplification) analysis for large deletion/duplications.

What does this panel cannot tell?

This panel is not appropriate for the detection of somatic mutations in tumour tissue.





BreastScreen Panel

BreastScreen Panel includes all genes associated with breast cancer & ovarian cancer based on the National Comprehensive Cancer Network® (NCCN) guidelines

- Highly penetrant genes: BRCA1, BRCA2, RAD51C, NBN, TP53, STK11, PTEN, NFI
- Moderately penetrant genes: CHEK2, PALB2, BRIP1, ATM, RAD50
- Low penetrant genes: FGFR2, CYP11A1, XRCC3, XRCC1, MAP3K1, TOX3, TGFB1, LSP1, BARD1

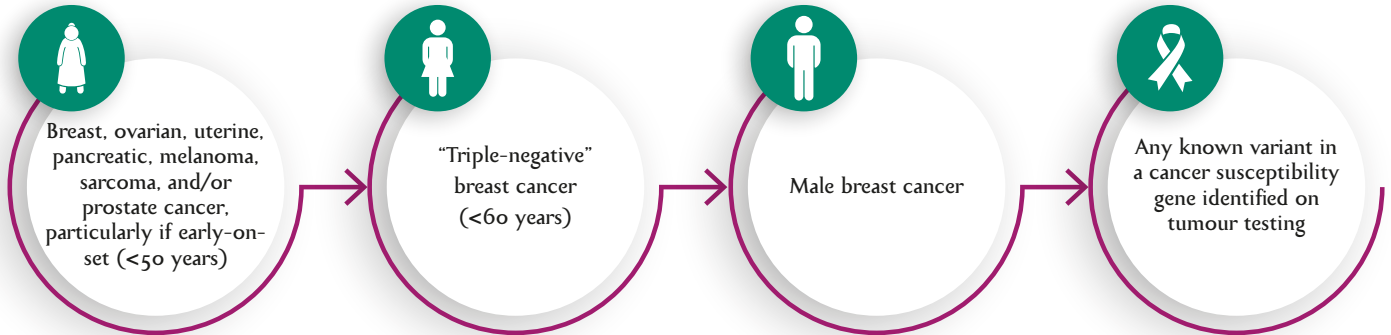
WHO SHOULD CONSIDER THIS PANEL?



Individuals with breast cancer



Those with clinical or family history of a hereditary cancer syndrome like:





What makes LifeCell a leader in Genetic Testing

- Next-generation sequencing (NGS) of all genes in the panel with extensive coverage: $\geq 99.5\%$ of target bases covered at $>20x$
- NGS-based CNV (copy number variant) analysis of all genes
- Quick turnaround time of 15 business days
- Requires only a few drops of blood ($\geq 1\text{ml}$ EDTA blood or 1 DBS card)
- Uses world's largest genome-wide database, Genomenon for reporting variants
- Interpretation of reports by clinical geneticists





Breast Cancer Screening Can Help Save Lives!

To know about your risk score, speak to our Genetic Counsellor
call **18002665533** or SMS DIAGNOSTICS to **53456**

References :

1. Mathur P, Sathishkumar K, Chaturvedi M, Das P, Sudarshan KL, Santhappan S, Nallasamy V, John A, Narasimhan S, Roselind FS, ICMR-NCDIR-NCRP Investigator Group. Cancer statistics, 2020: report from national cancer registry programme, India. *JCO Global Oncology*. 2020 Jul;6:1063-75.
2. Breast Cancer Awareness Month 2019:National Health Portal.2019
3. Risch HA, McLaughlin JR, Cole DE, Rosen B, Bradley L, Kwan E, Jack E, Vesprini DJ, Kuperstein G, Abrahamson JL, Fan I, Wong B, Narod SA. Prevalence and penetrance of germline BRCA1 and BRCA2 mutations in a population series of 649 women with ovarian cancer. *Am J Hum Genet*. 2001 Mar;68(3):700-10.
4. Couch FJ, Shimelis H, Hu C, Hart SN, Polley EC, Na J, Hallberg E, Moore R, Thomas A, Lilyquist J, Feng B, McFarland R, Pesaran T, Huether R, LaDuca H, Chao EC, Goldgar DE, Dolinsky JS. Associations Between Cancer Predisposition Testing Panel Genes and Breast Cancer. *JAMA Oncol*. 2017 Sep 1;3(9):1190-1196.
5. LaDuca H, Stuenkel AJ, Dolinsky JS, Keiles S, Tandy S, Pesaran T, Chen E, Gau CL, Palmier E, Shoaepour K, Shah D, Speare V, Gandomi S, Chao E. Utilization of multigene panels in hereditary cancer predisposition testing: analysis of more than 2,000 patients. *Genet Med*. 2014 Nov;16(11):830-7.
6. Nathanson et al. "Other" breast cancer susceptibility genes: searching for the more holy grail. *Hum Mol Genet*. 2001 Apr;10(7):715-20. Review.
7. Weber et al. Low penetrance genes associated with increased risk for breast cancer. *Eur J Cancer*. 2000 Jun;36(10):1193-9.
8. Okobia et al. Molecular epidemiology of breast cancer: a review. *Afr J Reprod Health*. 2003 Dec;7(3):17-28.