



Laboratory Investigation Report

|              |                      |
|--------------|----------------------|
| Patient Name | Centre               |
| Age/Gender   | OP/IP No/UHID        |
| MaxID/Lab ID | Collection Date/Time |
| Ref Doctor   | Reporting Date/Time  |

| Test Name  | Outsourced Result | Unit | Bio Ref Interval |
|--|-------------------|------|------------------|
| <br>SIN No:MH11945089 |                   |      |                  |

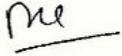
[PDF Attached](#)

**Canassist - Breast (Zydus)\*, Tissue**

Canassist - Breast

Kindly correlate with clinical findings

\*\*\* End Of Report \*\*\*



**Dr. Dilip Kumar M.D.**  
Associate Director &  
Manager Quality

## SAMPLE DESCRIPTION

Received 32 block/s bearing number B/3421/22 1 to 32 along with histopathology & IHC report. Clinico-pathologic parameters mentioned below have been extracted from patient's histopathology & IHC report.

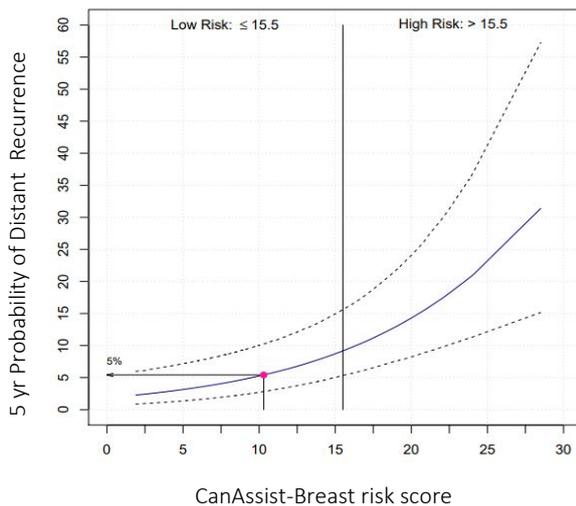
|   |                                    |                      |                            |
|---|------------------------------------|----------------------|----------------------------|
| <b>Diagnosis</b> : Invasive Carcinoma NST Left Breast |                                    |                      |                            |
| <b>Tumor Size</b> : 3.0 x 2.0 x 0.8 cms.              | <b>Pathological Stage</b> : T2N0M0 |                      | <b>Grade</b> : 2           |
| <b>Receptor Status</b>                                | <b>ER</b> : Positive               | <b>PR</b> : Positive | <b>HER2/neu</b> : Negative |

Patient referred for prognostic assessment by CanAssist Breast Test to aid treatment planning.

## TEST RESULT



## 5 YEAR PROBABILITY OF DISTANT RECURRENCE



**5 Year Probability of Distant Recurrence With Hormone Therapy Alone**

**5 %**

Probability of distant recurrence derived from 800+ samples validation study<sup>2</sup> is represented in the graph.

## TEST INFORMATION

CanAssist Breast test is a IHC based test comprising of a suite of 5 biomarkers and 3 clinico - pathologic parameters namely tumor size, node status and grade to derive the CanAssist Breast risk score using proprietary machine learning algorithm.<sup>4</sup> The test stratifies patients into low / high-risk for recurrence within 5 years from diagnosis based on risk score with cut off of 15.5 out of 100. The test has been analytically<sup>3</sup> and clinically<sup>2</sup> validated on 800 + samples in a retrospective study and provides prognostic information superior to traditional clinical risk assessment. As a group, low-risk patients have a 4.7% probability (95% CI: 3 – 6.4%) and high-risk patients have a 15.6% probability (95% CI: 10.5 – 20.7%) that their cancer will recur in a distant site within 5 years (not accounting for any covariates other than the patient's CanAssist Breast status).<sup>2</sup> CanAssist Breast test comparison with Oncotype Dx is published.<sup>1</sup>

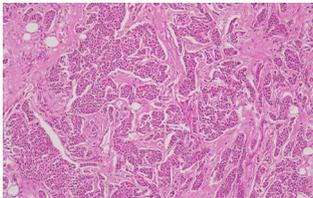
## MINIMUM PERFORMANCE CRITERIA

CanAssist Breast can be performed in patients with Stage I / II, HR+ & HER2- Invasive Breast Carcinoma. The FFPE block must have at least 30% tumor content and any deviation is subject to pathologist review and acceptance.

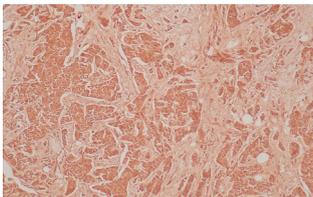
## HISTOPATHOLOGY & IHC FINDINGS

Tumor content : 60%

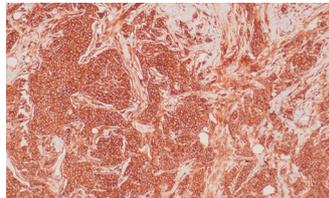
H&E



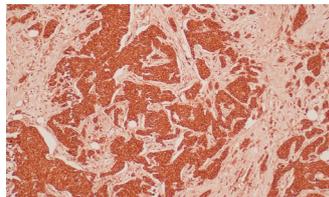
ABCC11



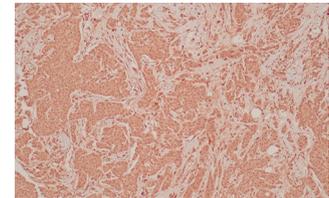
CD44



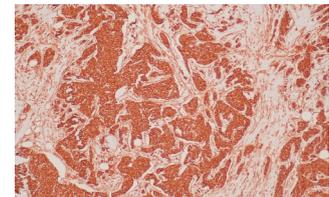
N-Cadherin



ABCC4



Pan-Cadherin



Representative IHC images from the CanAssist Breast test. All IHCs were assessed quantitatively to derive the CanAssist Breast risk score. The reported tumor cell percentage and pathology comments serves as a quality control for CanAssist Breast test and should not be viewed as a diagnosis of the malignancy.

## PATHOLOGY / ADDITIONAL COMMENTS

Cold ischemia time is indeterminate. Batch and internal controls show appropriate reactivity.



Dr.Naveen Krishnamoorthy, MD Pathology  
Pathologist

### Panel of Pathologists

Dr.B A Savitha  
DPB, DNB (Pathology),  
Laboratory Director  
Pathologist

Dr.Payal Shrivastava  
MD(Path), FRCPath  
(Histopathology)  
Pathologist

Dr.Naveen Krishnamoorthy  
MD Pathology  
Pathologist

Dr.Deepti K.S  
MD Pathology  
Pathologist

1. Sengupta, A.K., et al. Cancer Medicine (2020). <https://doi.org/10.1002/cam4.3495>
2. Bakre, M.M., et al. Cancer medicine (2019) 1-10. doi: 10.1002/cam4.2049
3. Attuluri, A.K., et al. BMC Cancer (2019) 19:249. doi: 10.1186/s12885-019-5443-5
4. Ramkumar, C., et al. Biomarker insights (2018) 13, 1177271918789100. doi: 10.1177/1177271918789100

All IHC tests were performed on Automated IHC staining platform at OncoStem Diagnostics Laboratory, Bengaluru. This IVD is restricted to sale on the order of a physician. CanAssist Breast is a Laboratory - developed test. CanAssist Breast is an aid in estimating risk of recurrence in patients with Breast Cancer. Decisions regarding treatment should not be based solely on CanAssist Breast results, but rather on the independent medical judgment of the treating physician taking all the clinicopathological variables in to account in accordance with accepted standard of care. More information can be found on [www.oncostem.com](http://www.oncostem.com), or email us on [helpdesk@oncostemdiagnostics.com](mailto:helpdesk@oncostemdiagnostics.com)

Specific Testing information: Cold ischemia time, fixative and processing: Specimen should be placed in neutral buffered formalin within 1 hour of removal from the patient and fixed for minimum of 6 hours but not in excess of 72 hours. Inappropriate fixation and processing may give erroneous results. Repeat testing may be considered on different tissue or block if available.