WE SEE WHAT OTHERS JUST CANNOT.

WORLD'S MOST ADVANCED 3D MAMMOGRAM IS HERE.

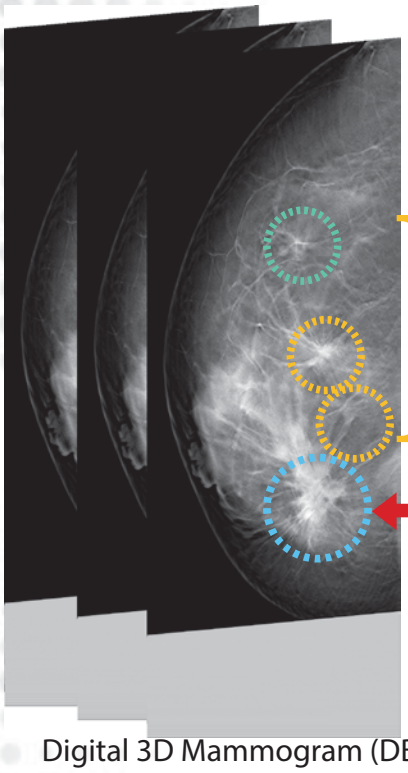
Fighting cancer the right way.

CYTECARE
CANCER HOSPITALS

Digital Breast Tomosynthesis (DBT)

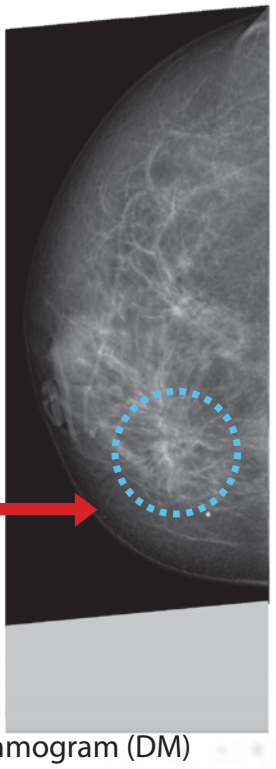
Adding 3rd dimension to mammography

DBT allows for 3D reconstruction of entire breast tissue volume viewed as sequential slices[1]



DBT reveals additional smaller multicentric foci of invasive ductal carcinoma (yellow) and a benign cyst (green) even in a breast with scattered density.

A palpable 1.4 cm dominant mass (blue) of invasive ductal carcinoma was demonstrated on both, DM and DBT.



Digital 3D Mammogram (DBT)

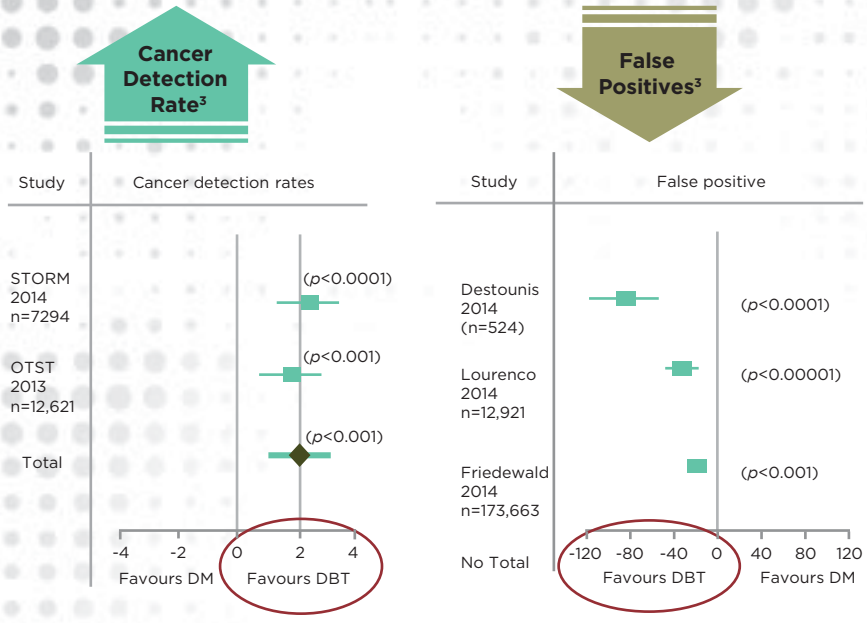
Digital 2D Mammogram (DM)

DBT offers superior diagnostic performance[2]

	DBT	DM
Sensitivity	90.77% (80.7–96.5%)	60.00% (47.1–72.0%)
Specificity	96.49% (96.0–96.9%)	95.55% (95.0–96.0%)

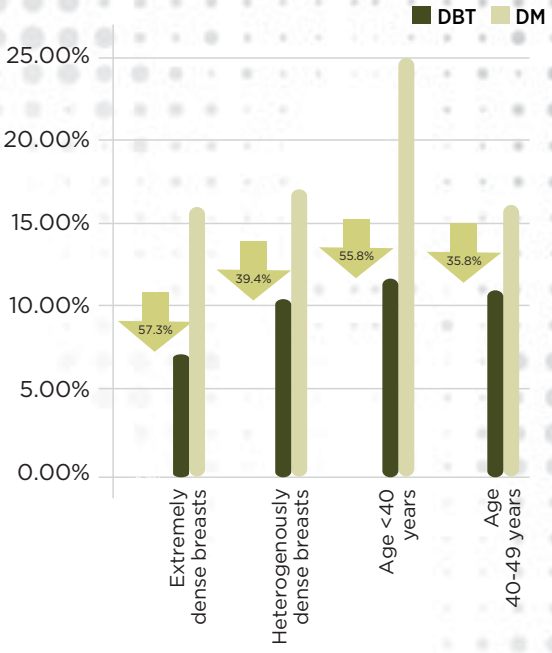
DBT has important role in screening as well as diagnostic breast cancer imaging[3]

Addition of DBT for breast cancer screening can help in early detection and ultimately reduce the associated morbidity and mortality.[4]



n = number of subjects, $p<0.05$ is statistically significant

Results of large American and European trials comparing addition of DBT versus DM alone



Results of a breast cancer screening study in 13,158 women

Percent reduction in recall rates with addition of DBT compared to DM alone

Maximum benefits for densely glandular breasts and for younger women[5]

DBT offers:

- Reduced interference from breast tissue overlap[6]
- Superior evaluation of masses, areas of architectural distortion, and asymmetries[7]
- Improved diagnostic accuracy ($p<0.001$), particularly for younger women, dense breasts[8], and smaller lesions[9]
- Decreased false-positive results directly translate into less patient anxiety[10,11]
- Decreased costs for additional diagnostic examinations (including ultrasound and biopsies) due to unnecessary recalls[10,11]
- Improved detection of multicentric and bilateral breast cancers[12]

CDR: Cancer Detection Rate; is expressed as number of women diagnosed with breast cancer per 1000 women screened women; **DBT:** Digital breast tomosynthesis; **DM:** Digital mammography

Meet the experts at Cytecare

Dr. Nagaraj K.R

Senior Consultant, Radiology
MBBS, DMRD, DNB
(Radio-Diagnosis)

Areas of special interest

- Head & Neck Oncology
- Hepato-biliary and Gastrointestinal Oncology
- Musculoskeletal Oncology

With over 15 years of experience in radiology, Dr. Nagaraj has the rare distinction of being the first radiologist to work with a PET CT hybrid imaging scanner and 3T MRI imaging systems in Bangalore.

He has over 9 years of experience in Onco-Radiology imaging, including interpretation of PET-CT, MRI, CT, performing image-guided biopsies, FNAC, and facilitating radiotherapy planning in complex anatomical regions.

He is credited with several international and national publications. His research work includes development of a new technique for image-guided percutaneous biopsy using fused PET/CT image for diagnosing isolated intramuscular metastasis from postcricoid cancer.

Dr. Nagaraj also supervises quality assurance programmers and is a Certified NABH assessor for Medical Imaging Services. He is also a member of IRIA (Indian Radiological and Imaging Association) and the IMA.

Dr. Mukta Mahajan

Consultant, Radiology
MBBS, DNB (Radio-Diagnosis),
Fellowship in Breast Imaging (Medical University of Vienna, Austria) &
(University of Ottawa, Canada)

Areas of special interest

- Breast Imaging and Intervention
- Interventional Radiology

Dr. Mukta has trained and practiced at Jaslok Hospital and Research Centre (Mumbai, India), Manipal Hospital (Bangalore, India), General Hospital Vienna (Vienna, Austria) and The Ottawa Hospital (Ottawa, Canada).

Her areas of expertise include screening mammography, high-risk screening MRI, multi-modal diagnostic work-up of breast abnormalities, core- and vacuum-assisted biopsies with ultrasound, stereotactic and MRI guidance, MRI surveillance of neoadjuvant therapies, pre-operative localizations with wires and radioactive seeds. Dr. Mukta is also trained in vascular and non-vascular interventional radiology procedures and percutaneous image-guided interventions.

Additionally, Dr. Mukta has certifications in clinical research, Good Clinical Practice (GCP), and research ethics to her credit. She has been involved in several research projects and has represented at international conferences and symposia.

Dr. Mukta's principal focus is patient safety and continuous improvement in quality of radiology services.

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