

## 2<sup>nd</sup> International Conference on Cancer Biology and Therapeutics

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### Innovations in diagnosis of cancer

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Breast cancer is the second most commonly diagnosed cancer among human population. It is the most common cancer in women. Incidence rates have been rising in traditionally low-incidence Asian countries. Cervical cancer is the fourth most, common cancer in women, (?5,27,000 new cases each year) India accounts for 25% of cervical cancer deaths in the world Innovative methods for diagnosis for both breast and cervix are discussed Breast cytology, particularly fine needle aspiration cytology (FNAC), has been an integral part in the management of women with breast lesions in the reproductive to menopausal age group. It is used for the initial management of breast lesions and is a safe and cost-effective technique for the diagnosis of breast lesions, especially when correlated with clinical and imaging studies. liquid-based cytology (LBC) is designed to improve conventional smears (CS) by avoiding limiting factors such as obscuring material, air-drying and smearing artifacts. in both breast and cervix Cell blocks of residual material in LBC can be used for increasing diagnostic accuracy and use of biomarkers like ER, PR HER2/NEU, KI67 on breast with P16IN4A, KI67 for cervix Other tests from residual material of LBC is HPV testing in cervical cancer diagnosis. factors like tumour budding are useful method for breast cancer prognosis.

**Methodology & Theoretical Orientation:** The cases of women between 20 years and 80 who underwent FNAC, the residual material was processed for LBC and cell block, biomarkers ER, PR, HER2, KI67 on cell block were studied. Biopsy wherever possible with tumour budding was studied Conventional pap smears with LBC, cell block and IHC p16, ki67 of residual samples wherever possible were done with histopathology correlation and studied over two-year period

**Conclusion:** The various methods for breast and cervix are innovative, cost-effective methods which help to improve diagnostic accuracy.

#### Biography

Nandini N. M, Professor, JSS Medical College, Mysore, is attached as a teaching faculty from the past 25 years in the department of pathology . She has worked in the field of cytology of cervix and breast. She has attended many national and international conferences in countries like U.K, USA, Singapore and Netherland. She has worked on liquid based cytology, cell block technique and has come up with indegenious methods. She has severael publications and books to her credit written on cervical and breast cancer.