Title- To Compare The Prognostic Estrogen Receptor, Progesterone Receptor And Her2-Neu With Nottingham Prognostic Index In Breast Cancer

Background: The Nottingham prognostic index (NPI) is a tool which takes into account the histological features of the tumor, which helps in the prediction of outcomes and supports clinical decision making while managing breast cancer patients. Hormonal receptors particularly estrogen, progesterone and HER2NEU receptors are present in the tumor tissue, considered as an important advancement in the evaluation of breast cancer.

Aim: To calculate Nottingham Prognostic Index in newly diagnosed patients of breast carcinoma and to compare prognostic efficacy of molecular markers ER, PR, HER2NEU expression with Nottingham prognostic index.

Material and Methods: A total 125 diagnosed cases of breast cancer were enrolled. Nottingham Prognostic Index was calculated from the histopathology report and molecular markers. Prognostic efficacy of molecular markers was compared with Nottingham prognostic index.

Results: After statistical analysis, ER expression was positive in 66 (53%) patients, PR expression in 55 (44%) patients and HER-2-neu expression was positive in 22 (18%) cases. Mean Nottingham Prognostic Index was found to be 4.99±1.23 SD. Molecular Markers were found to have an excellent prognosis and by Nottingham Prognostic Index, this group has moderate prognosis value. No significant difference was observed between the Nottingham Prognostic Index and molecular markers receptors cases (p>0.05).

Conclusion: The Nottingham Prognostic index is a better tool for prognosis determination than Immunohistochemistry markers in diagnosed cases of carcinoma breast.

Keywords: Nottingham prognostic index, Estrogen Progesterone receptor, HER2-Neu.