

4<sup>th</sup> World Congress on

# Breast Pathology and Cancer Diagnosis

August 23-24, 2017 Toronto, Canada

## Immunohistochemical analysis of *p53* protein expression in Indian female breast cancer cases: Correlation with clinico-pathological variables

Mohammad Zeeshan Najm<sup>1</sup>, Syed Akhtar Husain<sup>2</sup>, Sadaf<sup>2</sup>, Md Nasar Mallick<sup>2</sup> and Meenu Singh<sup>1</sup><sup>1</sup>Noida Institute of Engineering and Technology, India<sup>2</sup>Jamia Millia Islamia University, India

Breast cancer has been defined as the most common cancer in women worldwide, with nearly 1.7 million new cases diagnosed in 2012. We did *p53* protein expression study through immunohistochemistry in 105 cases breast cancer cases from India. The study was attempted to improve the prognostic and predictive value of *p53* in breast cancer. Prior informed consent and ethical approval was obtained from Rajiv Gandhi Cancer Hospital and Research Centre, New Delhi, India. All patients and normal controls were subjected immunohistochemistry using *p53* gene antibody to check the expression level of *p53* protein in paraffin embedded tissue slides of 4mm thickness. All non-neoplastic cases showed no expression for *p53*. In the tumor samples, immunohistochemical scoring was done as low or no expression (+), moderate expression (++) and high expression (+++). So, out of 105 cases studied, 26 cases (26/105, 24.80%) had low (+) or no expression of *p53* protein, 50 cases (50/105, 47.60%) had moderate (++) expression and 29 cases (29/105, 27.60%) had high (+++) expression of *p53* protein. In our study sample, we were not able to find any significant association between *p53* gene expression and the clinico pathological variables like age, nodal status, tumor stage, menopausal status, ER status, HER 2 status and histological grade. Our study did provide the information on the evaluation of *p53* significance in cancer cases from India and larger population based study will be needed to show the presence or absence of the biomarker property of *p53* in breast cancer.

biotechzeeshan@gmail.com