

# 12<sup>th</sup> World Cancer Congress

July 23-25, 2018 | Moscow, Russia



**Jamal Zidan<sup>1</sup>**  
**Maayan Galer<sup>2</sup>**  
**Sergio Shvalb<sup>3</sup>**

*Bar-Ilan University, Israel*

## Comparison between Ki-67 biomarker expression in primary Breast Cancer before and after neoadjuvant therapy

**Background:** Neoadjuvant treatment (NAT) followed by surgery has currently become a part of standard care for patients with locally advanced breast cancer. Postoperative treatment is generally established on the same detective biomarkers (estrogen receptor, progesterone receptor, HER2 and Ki67) evaluated in Core Needle Biopsy (CNB) before NAT. The aim of this study was to investigate whether NAT induces some selective changes in the breast biomarkers.

**Methods:** We collected the appropriate data for 52 patients that conform to the requirements from the personal hospital files, since 2007 until 2016. Formalin fixed paraffin embedded samples or fresh tissue samples were used from tumors before and after surgery. Ki67 was evaluated using immunohistochemically testing. The antibody-antigen interaction is observed using chromogenic detection, an enzyme (DAB) conjugated to the antibody to produce a colored precipitate at the location of the antigen.

**Results:** Mean age of patients was  $52.3 \pm 13.9$ . Ethnicity: 28 (53.8%) women were Jews and 24 (46.2%) were Arabs. 56%

of women were premenopausal, 44% postmenopausal. Lumpectomy was done in 39 (75%) of patients while the others (25%) had mastectomy. Mean level of Ki67 in the primary tumor was  $34.8 \pm 26.1$  %, after NAT was  $17.8 \pm 22.9$ % ( $P < 0.001$ ).

**Conclusions:** In this study we found significant changes in Ki67 expression between the pretreatment biopsy specimens and the resected specimens of breast cancer patients who underwent neoadjuvant therapy. This discordance in the expression of Ki67 may affect the choice of postoperative adjuvant treatment and may be used as a prognostic factor for response.

### Speaker Biography

Jamal Zidan earned his doctorate in medicine (MD) at the Semmelweis University in Budapest, Hungary. His speciality is Oncology. He is a full professor at the Faculty of Medicine in the Galilee, Safed, Bar-Ilan University, Israel. Head of Oncology Division at Ziv Medical center, Safed, Israel. Prof. Zidan has over 170 publications. He has received many honors as: "Eminent Scientist & Outstanding Scholar of the year 2001" International award of IRPC; International Research Promotion Council Asia-Pacific Chapter, World Scientists Forum International Award, Gold Medal. His main research interest is molecular biomarkers, targeting therapy, breast cancer and other issues in cancer.

e: [zidan.j@ziv.health.gov.il](mailto:zidan.j@ziv.health.gov.il)

 Notes: