

Ki67 a Potential Prognostic Biomarker in Triple Negative Breast Cancer

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Triple negative breast cancer (TNBC) is an aggressive subgroup of breast cancer, which lacks effective target therapy. There have been numbers of biomarkers in TNBC, but it was reported that the level of Ki67 is 80% in ductal TNBC in comparison to other cancers [1]. The Ki67 antigen is a nuclear protein expressed in the G1, S, G2 and M phase of the cell cycle, but not in resting cells in G0. Therefore, the nuclear expression of Ki67 can be evaluated to assess tumor proliferation. High expression of Ki67 also represents a direct co-relation to tumour size and an increased rate of death in TNBC patients [2-4].

There is very important role of expression of Ki67 and chemotherapy resistant/susceptible patients. On the basis of this the expression of chemotherapy in TNBC makes three groups of tumor [4]:

1. High Ki67 linked to poor outcome, when high proliferating tumors are therapy resistant.
2. In contrast, high Ki67 of linked to good outcomes, when high proliferating tumors are therapy sensitive.
3. Low expression of Ki67 linked to good outcomes, when low proliferating tumors are not responding to chemotherapy.

In conclusion, it might be stated that the level of Ki67 may be considered as a valuable biomarker and it might stratify TNBC into sub-type with different aggressiveness and prognosis.

Bibliography

1. Budhi SY, *et al.* "Biomarkers in triple negative breast cancer: A review". *World Journal of Clinical Oncology* 6.6 (2015): 252-263.
2. Yunbao P, *et al.* "P53 and Ki-67 as prognostic markers in triple negative breast cancer patients". *PLOS ONE* 12.2 (2017): e0172324-e0172337.
3. Nahed AS and Shaimaa MY. "Ki-67 as a prognostic marker according to breast cancer molecular subtype". *Cancer Biology and Medicine* 13.4 (2016): 496-504.
4. Carsten D, *et al.* "Strategies for developing Ki67 as a useful biomarker in breast cancer". *The Breast* 24.2 (2015): e1-e6.

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