

P297. Can increased expression of progesterone receptor membrane component 1 also indicate a worse prognosis in triple negative breast cancers?

Y Zhang (CN) [1], X Ruan (CN) [2], A O Mueck (DE) [3]

Context: Investigating ERpositive breast cancer tissues, we already have been able to demonstrate that the expression of progesterone receptor membrane component 1 (PGRMC1) is higher than in normal tissue and can predict the prognosis of these breast cancer types (Ruan X, Zhang Y, Mueck AO et al. Menopause 2017; 24: 203-209). However little information is available if the expression of PGRMC1 is also associated with worse prognosis for triple negative breast cancers (TNBCs). Objective: In this study, we investigated the clinicopathologic significance of PGRMC1 expression in TNBCs, and compared with ER positive breast cancer .Methods: Expression of PGRMC1 was analyzed by immunohistochemical staining of primary tumor tissues obtained from 120 breast cancer participants in China. A labeling score was developed, and results were correlated with tumor size, lymph node metastasis, and clinical outcome.Results: Among the 120 breast cancer samples, 18 (i.e.,15.0%) displayed the TNBC phenotype. Only 3 samples (16.7%) showed increased PGRMC1 expression in TNBC tissue which have been from patients with especially worse prognosis. ERpositive samples from luminal subtype A (which is known to have better prognosis than TNBC) showed 35.0% expression. Conclusion: The expression of PGRMC1 may be correlated also with the more worse prognosis of TNBCs, but it seems that the correlation is stronger in ERpositive cancer tissues. However, further research in larger sample sizes is needed to confirm this conclusion.

[1] Beijing Obstetrics and Gynecology Hospital , [2] Beijing Obstetrics and Gynecology Hospital , [3] Beijing Obstetrics and Gynecology Hospital, Capital Medical University ; Research Centre for Women's Health and University Women's Hospital of Tuebingen, University of Tuebingen