

The Predictive Significance of Metastasis Associated in Colon Cancer-1 (MACC1) in Primary Breast Cancer

Authors : Jasminka Mujic, Karin Milde-Langosch, Volkmar Mueller, Mirza Suljagic, Tea Becirevic, Jozo Coric, Daria Ler

Abstract : MACC1 (metastasis associated in colon cancer-1) is a prognostic biomarker for tumor progression, metastasis, and survival of a variety of solid cancers. MACC1 also causes tumor growth in xenograft models and acts as a master regulator of the HGF/MET signaling pathway. In breast cancer, the expression of MACC1 determined by immunohistochemistry was significantly associated with positive lymph node status and advanced clinical stage. The aim of the present study was to further investigate the prognostic or predictive value of MACC1 expression in breast cancer using western blot analysis and immunohistochemistry. The results of our study have shown that high MACC1 expression in breast cancer is associated with shorter disease-free survival, especially in node-negative tumors. The MACC1 might be a suitable biomarker to select patients with a higher probability of recurrence which might benefit from adjuvant chemotherapy. Our results support a biologic role and potentially open the perspective for the use of MACC1 as predictive biomarker for treatment decision in breast cancer patients.

Keywords : breast cancer, biomarker, HGF/MET, MACC1

Conference Title : ICMMD 2018 : International Conference on Molecular Medicine and Diagnostics

Conference Location : Dublin, Ireland

Conference Dates : February 15-16, 2018