DOI: 10.29289/259453942018V28S1068

M2-TYPE MACROPHAGES IN TUMOUR MICROENVIRONMENT AS PROGNOSTIC MARKERS IN WOMEN WITH BREAST CANCER

Luciana V Q Labre[1], Vera A Saddi[2,3,4], Megmar A S Carneiro[1], Aline C Batista[5], Diego A C Arantes[5], Jessica E P Ramos[2,3,4], Erika C Aquino[1], Silvia H Rabelo-Santos[1,6]

[1]Instituto de Patologia Tropical e Saúde Pública, Universidade Federal de Goiás – Goiânia (GO), Brazil.
[2]Programa de Pós-graduação em Ciências da Saúde, Universidade Federal de Goiás – Goiânia (GO), Brazil.
[3]Laboratório de Diversidade Genética, Pontifícia Universidade Católica de Goiás – Goiânia (GO), Brazil.
[4]Laboratório de Oncogenética e Radiobiologia, Hospital Araújo Jorge, Associação de Combate ao Câncer em Goiás – Goiânia (GO), Brazil.
[5]Faculdade de Odontologia, Universidade Federal de Goiás – Goiânia (GO), Brazil.
[6]Faculdade de Farmácia, Universidade Federal de Goiás – Goiânia (GO), Brazil.

The objective of this study was to assess the prognostic value of tumour-associated macrophages (TAMs) with a possible M2-type macrophage phenotype (CD163+) in women with breast cancer. Cases selected among the records of anatomo-pathological examinations carried out at a reference center for cancer treatment. Inclusion of confirmed cases of invasive ductal carcinoma with clinical follow-up for 5 years. The laminas were subjected to immunihistochemical analysis with monoclonal antibody TAMs like M2-type (CD163). For the statistical analyses, the cases were classified according to the mean value of cell tagging as low infiltration or high infiltration. High levels of TAMs (CD163+) were significantly correlated with distant metastases, lack of receptors estrogen (ER) or progesterone receptors (PR) and triple-negative breast cancer (TNBC). A high number of CD163+ cells was a strong independent prognostic factor. High infiltration of CD163+ emerged as a strong independent prognostic factor. Additional markers able to identify patients with more aggressive types of breast cancer may help predict a poorer prognosis.