

10th International Conference on

Clinical and Cellular Immunology

August 06-07, 2018 | Madrid, Spain

CD103+ tumor infiltrating lymphocytes as a prognostic factor in colon cancer patients

Shahd Talhouni

University of Nottingham, UK

Background: CD103 is expressed in several immune cell types such as dendritic cells, natural killer (NK) cells and different subset of T cells (CD8, CD4 and Treg). CD103 on tumour-specific infiltrating lymphocytes interact with E-cadherin on cancer cells which will locate and facilitate cytotoxic granule delivery into target cells. This integrin is considered as one of the main markers of non-recirculating tissue resident memory (TRM) T cells. A significant prognostic value of CD103+ TILs was shown in breast cancer, lung cancer and ovarian cancer. In this study we will investigate the association between CD103 TILs and the overall survival of colorectal patients.

Methods: IHC staining of 227 tissue microarray (TMA) of colorectal cancer patients using a monoclonal antibody to CD103 to examine the prognostic value of CD103 tumor infiltrating lymphocytes (TILs) in colorectal cancer patients.

Results: CD103 TILs were present in both colon and rectal cancer patients. However, intraepithelial CD103 was associated with better overall survival in right colon cancer patients ($p=0.01$) in comparison to left sided colon and rectal cancer patients ($p=0.665$ and 0.818 , respectively). The correlation of CD103 and other T cells biomarkers (CD3 and CD8) was not significantly indicating the possibility that CD103 is not uniquely expressed by T lymphocytes.

Conclusion: Intraepithelial CD103 TILs but not intrastromal are associated with better survival in colon cancer, especially right sided cancer patients.

msxsmta@nottingham.ac.uk