New monoclonal antibodies (mAbs) against B-cells antigens: immunohistochemical analysis of cryostat sections of primary cutaneous B lymphomas (PC-BL).

Fanoni D, Fiorani R., "Tavecchio S, Venegoni L, Crosti C, "Berti E.

Dept. of Dermatology Fondazione IRCCS Ca' Granda-Ospedale Maggiore Policlinico; "University of Milan-Bicocca. Milan, Italy.

To define specific reactivities of PC-BL (WHO/EORTC 2008 classification), we analyzed, by using an immunohistochemical method, the mAbs of the FACS panel of the 9th HLDA Workshop on tissue sections of the different cutaneous lymphomas entities: follicular centre B-cell lymphomas (FCL), marginal zone lymphomas (MZL) and diffuse large B-cells lymphomas (DLBL) leg-type. Cryostat sections of frozen tissues were dried for 12 hours, fixed 10" in aceton and stained by an avidin-biotin immunoalkaline phosphatase method (DAKO). Tissue reactivities of lymphocytes and/or other resident cells were detected by using all mAbs, except for n° 49-51-81-90-91-109. Specific lymphoma reactivities were detected on PC-BL: Group 1 mAbs stained all PC-BL: n° 88 (CD48). Group 2 mAbs stained PC-FCL: n°20(hFCRL1); 34(CD152); 35 (CD80), 36(CD126); 37(PD1-CD279); 38(B7-DC-CD273); 40 (CD200); 41(CD130); 46 (CD184-CXCR4); 47 (BTLA-CD272); 50(CD185-CXCR5); 56(CMKLR1); 57 (DR5); 77(Siglec-5/14); 83 (CRTAM); 86(CD229); 89 (CD84); 93(NTBA); 94(HVEM); 96(TWEAK); 97(TCL1); 100(LT-betaR); 106(CD150). Group 3 mAbs stained PC-MZL: n° 36(CD126); 47(BTLA); 50(CXCR5); 55(DR4); 77(Siglec-5/14); 83(CRTAM); 84(DCIR/CLEC4A); 86(CD229); 87(CD319); 93(NTBA). Group 4 mAbs stained PC-DLBL: n° 35(CD80); 36(CD126); 39(CD124); 50(CD185); 55(DR4); 56(CMKLR1); 57(DR5); 75(Dectin-1); 76-101(TREM-1); 82(Integrin alfaVbeta5); 83(CRTAM); 85-99(GITR); 86(CD229); 87(CD319); 89(CD84); 92(Dr3-TRAMP); 93(NTBA); 94(HVEM-CD258); 97(TCL-1); 100(Lymphotoxin betaR). Furthermore, variable mixed reactivities with infiltrating or neoplastic cells were observed by using several mAbs and other Mabs showed many tissue cross reactivities and were not easy to evaluate by IHC (further investigations may be done on "pure" infiltrates, cell suspensions of neoplastic cells or by using double labeling techniques-confocal laser microscopy). Finally, mAbs n° 21-22-23-30-31-32-33-42-44-45-48-49-51-52-53-54-58-74-78-79-80-81-82-84-90-91-98-109 were negative in all lymphoma cases. This study may be useful to better define specific profile of different PC-BL entities.