

A Study of CD180 Expression in Chronic Lymphocytic Leukaemia Cells

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B cell chronic lymphocytic leukaemia (B-CLL) is characterized by the clonal expansion of CD5+CD19+CD23+ B cells. B-CLL is a heterogeneous disease and it has been shown, that B-CLL cases can be sub-divided into two groups: with mutated IgVH genes (good prognosis, indolent clinical course) and unmutated IgVH genes (bad prognosis, aggressive clinical course). We have previously shown that the expression of an orphan receptor CD180, a member of Toll-like receptors family, is associated with mutational status of IgVH genes, being expressed mainly in cases with mutated IgVH genes.

The aim of our study was to investigate if there is any correlation between CD180 expression level and a) prognostic factors - CD38 expression, smudge cells number; b) B-CLL cells phenotyping profile (CD5, CD19, CD23). The study included PBMCs from 32 B-CLL patients. According our data smudge cells percentage positively correlates with CD180 expression level ($r=0.53$, $p=0.02$) and negatively with CD38 expression level ($r=-0.4$, $p=0.03$). As the expression of CD38 is assumed to be a marker of aggressive course of the disease, our data once more supports that high numbers of smudge cells are associated with favourable prognosis in B-CLL.