P3. **The role of immunophenotyping by flow cytometry in diagnosis of acute myeloid leukemias HLA-DR negative**

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Acute myeloid leukemia (AML) is diagnosed on the basis of cytomorphology, cytochemistry, flow cytometric immunophenotypic studies and the identification of recurrent cytogenetics and molecular genetics abnormalities. The purpose of the work was to assess the contribution of the flow cytometry to determine the subtype of acute myeloid leukemia at a number of patients hospitalized in Coltea Hematology between 2013-2014. The tests taken in question were carried out in the Laboratory of Coltea Hematology Departament with BD FACS CANTO II equipment. IVD optimized reagents were use. The immuno-phenotype has been identified to debut in bone marrow samples by means of marking, lyse, washing, acquisition, analysis.

Acute promyelocitic leukemia with t(15;17)(q22;q12) often has the following phenotype: CD34 negativ or only partially positive, HLA-DR negative or only partially positive, CD11b negative, CD13 heterogeneous, CD117+, CD33+, CD15 negative or only partially positive. Recently, a similar CD34- HLA-DR negative phenotype has been described in a subset of AML with myeloblasts, normal cytogenetics and FLT3 gene internal tandem duplication. Additional phenotype include aberrant expresion of CD56+ and Cd123+.

Conclusion: flow cytometric immunophenotyping is an important diagnosis tool, but is they lack specificity and sensitivity for the detection of somme cytogenetic and molecular genetics abnormalities in nonpromyelocytic leukemias.