

C/EBP α Expression in Egyptian patients with Acute Myeloid Leukemia

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Abstract

Purpose: The CCAAT/enhancer binding protein alpha (C/EBP α or CEBPA) transcription factor plays an important role in myeloid differentiation. Alterations in C/EBP α levels have been described in AML.

Patients and methods: We studied the C/EBP α expression level by real-time PCR in 49 newly diagnosed AML patients.

Results: Low C/EBP α expression was observed in 40/49 (81.7%, median 0.018) compared to normal subjects (median 1.26) ($p = 0.001$). We observed that low C/EBP α expression was associated with low hemoglobin level ($p = 0.001$), high HLA-DR expression ($p=0.013$) and poor disease free survival (DFS) and overall survival (OS).

Conclusion: low C/EBP α expression defined a subgroup of AML patients with poor DFS and OS, so can be used with other markers to assess prognosis of AML patients.