

## IV. ULUSLARARASI KATILIMLI DENEYSEL HEMATOLOJİ KONGRE BİLDİRİSİ

# Expression analysis of PTEN gene in acute myeloid leukemia

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#### GİRİŞ - AMAÇ

Acute myeloid leukemia (AML) is a molecularly and clinically heterogeneous disease and biologically complex, its incidence is increasing as the population ages.Large chromosomal translocations as well as defects in the genes involved in hematopoietic proliferation and differentiation result in the accumulation of poorly differentiated myeloid cells. Phosphatase and tensin homolog (PTEN) gene, act as a tumor suppressor, located on 10q23.31, that is defected in a large number of cancers at high frequency.The goal of this study was to measure the expression level of PTEN in AML patients.

#### METOD

The study included 18 cytogenetically normal AML cases and 15 controls, samples were grouped according to the clinical characteristics of patients which include gender and the mean age. The expression level was measured by quantitative real time polymerase chain reaction (qRT-PCR).

#### BULGULAR

The PTEN gene expression significantly reduced (down-regulated) in AML as compared to normal samples.

#### SONUC

As a result, we conclude that the aberrant expression in PTEN gene might be a risk factor for AML. However for confirming of this relation further studies should be done.



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### ANAHTAR KELİMELER

Acute myeloid leukemia, PTEN, Expression analysis, qRT-PCR.