

## t(1;12)(q25;p13)

### Clinics and Pathology

**Disease** acute non lymphocytic leukemia (ANLL)

Phenotype /  
cell stem M4Eo ANLL  
origin

Epidemiology only one case available

### Cytogenetics

Cytogenetics a cryptic [inv\(16\)](#) was present, ascertained by a CBFb/MYH11  
Morphological rearrangement; therefore, the t(1;12) may be a secondary anomaly

### Genes involved and Proteins

**Gene Name** [ABL2](#)

Location 1q25

Protein tyrosine kinase; closely related to [ABL1](#)

**Gene Name** [ETV6](#)

Location 12p13

Dna / Rna alternative transcripts

Protein belong to the ETS transcription factors family characterized by the ETS domain, domain which is responsible for the sequence specific DNA-binding activity

### Result of the chromosomal anomaly

**Hybrid gene** both reciprocal transcripts are detected  
Transcript

**Fusion Protein Description** the fusion protein is composed of the HLH oligomerization domain of ETV6 and the SH2, SH3, and protein tyrosine kinase domains of ABL2

### External links

Other database [t\(1;12\)\(q25;p13\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other database [t\(1;12\)\(q25;p13\)](#) [CancerChromosomes \(NCBI\)](#)

### To be noted

Additional cases are needed to delineate the epidemiology of this rare entity:

**you are welcome to submit a paper to our new [Case Report section](#).**

### Bibliography

**The tyrosine kinase ABL-related gene "ARG" is fused to ETV6 in an AML-M4Eo patient with a t(1;12)(q25;p13): molecular cloning of both reciprocal transcripts.**

Cazzaniga G, Tosi S, Aloisi A, Giudici G, Pioltelli P, Kearney L, Biondi A.  
Blood 1999; 94 Suppl 1: Abst 233.

**The tyrosine kinase abl-related gene ARG is fused to ETV6 in an AML-M4Eo patient with a t(1;12)(q25;p13): molecular cloning of both reciprocal transcripts.**

Cazzaniga G, Tosi S, Aloisi A, Giudici G, Daniotti M, Pioltelli P, Kearney L, Biondi A.  
Blood 1999; 94: 4370-4373.

Medline [20057691](#)

### Contributor(s)

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