

## t(3;6)(q25;q26)

### Clinics and Pathology

**Disease** Acute myeloid leukaemia (AML) and treatment related acute myeloid leukaemia (t-AML)

**Epidemiology** Only 2 cases to date, a 41 year old female patient with M1 AML, and a 70 year old male patient with t-AML

**Prognosis** No data

### Cytogenetics

**Cytogenetics** sole anomaly in the t-AML case, accompanied with [del\(7q\)](#) and a complex karyotype in Morphological the other case.

### Genes involved and Proteins

**Note** The partner of EVI1 is yet unknown.

**Gene Name** [EVI1](#)

**Location** 3q26.2

**Protein** Transcription factor; EVI1 targets include:GATA2, [ZBTB16 /PLZF](#), ZFPM2/FOG2, [JNK](#) and the PI3K/AKT pathway. Role in cell cycle progression, likely to be cell-type dependant; antiapoptotic factor; involved in neuronal development organogenesis; role in hematopoietic differsntiation

### External links

**Other database** [t\(3;6\)\(q25;q26\)](#) [Mitelman database \(CGAP - NCBI\)](#)

**Other database** [t\(3;6\)\(q25;q26\)](#) [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

#### Identification of cytogenetic subclasses and recurring chromosomal aberrations in AML and MDS with complex karyotypes using M-FISH.

Van Limbergen H, Poppe B, Michaux L, Herens C, Brown J, Noens L, Berneman Z, De Bock R, De Paepe A, Speleman F.

Genes Chromosomes Cancer 2002; 33: 60-72.

Medline [11746988](#)

#### EVI1 is consistently expressed as principal transcript in common and rare recurrent 3q26 rearrangements.

Poppe B, Dastugue N, Vandesomepele J, Cauwelier B, De Smet B, Yigit N, De Paepe A, Cervera J, Recher C, De Mas V, Hagemeyer A, Speleman F.

Genes Chromosomes Cancer 2006; 45: 349-356.

Medline [16342172](#)

#### The oncogene and developmental regulator EVI1: expression, biochemical properties, and biological functions.

Wieser R.

Gene 2007; 396: 346-357.

Medline [17507183](#)

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