

t(6;21)(p22;q22)

Clinics and Pathology

Disease	Treatment related myelodysplastic syndrome (refractory anemia with excess of blasts: RAEB)
Etiology	RAEB occurred 60 w after diagnosis of an acute lymphoblastic leukemia treated with topoisomerase II inhibitors
Epidemiology	only one case to date, a 4 yr old female patient
Prognosis	the patient died 10 mths after diagnosis

Cytogenetics

Cytogenetics a t(2;11)(p23;q23) with [MLL](#) involvement was also present in the same Morphological clone

Genes involved and Proteins

Note The gene in 6p22 is yet unknown, and, because cryptic [t\(12;21\) ETV6/AML1](#) are not rare, it is therefore uncertain whether this translocation involve a new AML1 partner

Gene Name [AML1](#)

Location 21q22

Dna / Rna transcription is from telomere to centromere

Protein contains a Runt domain and, in the C-term, a transactivation domain; forms heterodimers; widely expressed; nuclear localisation; transcription factor (activator) for various hematopoietic-specific genes

External links

Other database [t\(6;21\)\(p22;q22\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other database [t\(6;21\)\(p22;q22\)](#) [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

Concurrent translocations of MLL and CBFA2 (AML1) genes with new partner breakpoints in a child with secondary myelodysplastic syndrome after treatment of acute lymphoblastic leukemia.

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Medline [10825008](#)

Novel cryptic, complex rearrangements involving ETV6-CBFA2 (TEL-AML1) genes identified by fluorescence in situ hybridization in pediatric patients with acute lymphoblastic leukemia.

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Contributor(s)

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<http://www.infobiogen.fr/services/chromcancer/Anomalies/t0621p22q22ID1266.html>

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