Leukaemia Section
Short Communication

t(10;11)(p11.2;q23)
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Identity
Note: Must not be confused with the t(10;11)(p12;q23) involving AF10 in 10p12 and MLL, or the t(10;11)(p13;q14-21), also involving AF10, but with CALM on chromosome 11.

Clinics and pathology

Disease
Acute non lymphoblastic leukemia (ANLL).

Phenotype/cell stem origin
M4

Epidemiology
Poorly known: only 1 case.

Clinics
A boy aged 8 months; achieved complete remission, had bone marrow transplantation; alive 5 years+.

Genes involved and proteins

ABI-1
Location
10p11.2

DNA/RNA
Different splicings.

Protein
Possesses a SH3 domain; cell growth inhibitor.

MLL
Location
11q23

DNA/RNA
13-15 kb mRNA.

Protein
431 kDa; contains two DNA binding motifs (a AT hook, and Zinc fingers), a DNA methyl transferase motif, a bromodomain; transcriptional regulatory factor; nuclear localisation.

Result of the chromosomal anomaly

Hybrid gene
Description
5’ MLL - 3’ ABI1; fusion at MLL exon 7.

Fusion protein
Description
1727 amino acids (1406 from MLL and 321 from ABI-1); NH2- AT-hook, DNA methyltransferase, and transcriptional repression domain of MLL, fused to the homeodomain homologous region and the SH3 domain of ABI-1 in COOH.

References


This article should be referenced as such: