

Leukaemia Section

Short Communication

t(11;17)(q23;q25)

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Identity



t(11;17)(q23;q25) G-banding - Courtesy Jean Luc Lai.

Clinics and pathology

Disease

De novo and treatment related acute non lymphocytic leukemia (ANLL), myelodysplastic syndromes (MDS); acute lymphoblastic leukemia (ALL) at times.

Phenotype/cell stem origin

Various subtypes of ANLL may be found, M4 in particular, but also M1, M2, M5.

Epidemiology

At least 24 cases described; often found in children and young adults.

Prognosis

Poor.

Genes involved and proteins

MLL

Location

11q23

Protein

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

MSF

Location

17q25

Protein

Protein which belongs to the septin family.

Result of the chromosomal anomaly

Hybrid gene

Description

5' MLL - 3' MSF; fusion at MLL exon 5; the reciprocal MSF-MLL is also transcribed, but out of frame.

Fusion protein

Description

NH2 - AT hook and DNA methyltransferase from MLL fused to most of MSF in COOH.

References

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