Atlas of Genetics and Cytogenetics in Oncology and Haematology

OPEN ACCESS JOURNAL AT INIST-CNRS

Leukaemia Section
Short Communication

t(12;17)(p13;q11-21) in ALL

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Published in Atlas Database: April 2006

Online updated version: http://AtlasGeneticsOncology.org/Anomalies/t1217p13q21ALLID1072.html
DOI: 10.4267/2042/38356

Clinics and pathology

Disease

Acute lymphoblastic leukaemia (ALL).
Note: Identical or similar translocations have been reported rarely in acute myeloid leukemia (AML) and acute mixed lineage leukaemia (t(12;17)(p13;q11-21) in AML).

Phenotype / cell stem origin

Most reports indicate an early pre-B immunophenotype, frequently characterised by low CD10 and positivity of the myeloid marker CD33.

Epidemiology

Rare; non-random translocation that predominantly occurs in children and young adults. No definable sex bias.

Prognosis

Early reports suggested that prognosis may be poor, but there are currently too few reported cases to define a robust association.

Cytogenetics

Cytogenetics morphological

The chromosome 17q breakpoint has been defined in different reports to be between q11-q21. The chromosome 12 breakpoint has been confirmed to be located in 12p13 telomeric to the ETV6/TEL locus. The translocation occurs as the sole or primary event in approximately 50% of cases

Additional anomalies

No consistent picture and only +21 has been reported in more than one case.

Genes involved and Proteins

Note: Breakpoint on 12p13 telomeric to TEL. Currently the genes involved on both chromosome 12 and 17 are unidentified.

References

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This article should be referenced as such:
Betts D. t(12;17)(p13;q11-21) in ALL. Atlas Genet Cytogenet Oncol Haematol.2006;10(4):261.