

Leukaemia Section

Short Communication

t(1;7)(p36;q34)

Antonio Cuneo

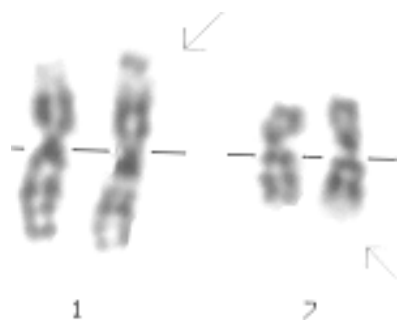
Hematology Section, Department of Biomedical Sciences, University of Ferrara, Corso Giovecca 203, Ferrara, Italy (AC)

Published in Atlas Database: November 1999

Online updated version : <http://AtlasGeneticsOncology.org/Anomalies/t0107ID1157.html>
DOI: 10.4267/2042/37560

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 2.0 France Licence.
© 1999 Atlas of Genetics and Cytogenetics in Oncology and Haematology

Identity



Partial karyotype (G-banding) showing the t(1;7)(p36;q34).

Clinics and pathology

Disease

Acute non lymphocytic leukemia (ANLL), presenting as a de novo condition or after preceding myelodysplastic syndrome or exposure to myelotoxic agents.

Phenotype/cell stem origin

M2/M4 by FAB criteria, frequently with trilineage myelodysplasia: positivity for myeloid markers (i.e. CD13, CD33) as well as for CD117, CD34 and TdT; lymphoid-associated markers tested negative in the reported cases.

Epidemiology

The frequency of this anomaly in ANLL is < 1%.

Prognosis

The cells may be susceptible to chemotherapy since all reported cases achieved complete remission, despite the presence of other unfavourable prognostic factors.

Cytogenetics

Note

This translocation may be related to a 1p;7q translocation described in myelodysplastic syndrome, whereas it must be distinguished from the T-ALL associated t(1;7)(p32;q34), involving the TCR gene and a more proximal breakpoint on 7q.

Cytogenetics morphological

The translocation is easy to visualize in G-banded preparations because the dark 7q35 band moves on top of the derivative 1p.

Probes

Partial chromosome paints for the 7q31-qter region.

Additional anomalies

Associated / additional anomalies may include +8 and the classical t(6;9)(p23;q34).

Genes involved and proteins

Note

The involved genes are unknown.

References

- Stefănescu DT, Colită D, Nicoară S, Călin G. t(1;7)(p36;q32): a new recurring abnormality in primary myelodysplastic syndrome. *Cancer Genet Cytogenet.* 1994 Jul 15;75(2):103-5
- Hwang LY, Baer RJ. The role of chromosome translocations in T cell acute leukemia. *Curr Opin Immunol.* 1995 Oct;7(5):659-64
- Specchia G, Cuneo A, Liso V, Contino R, Pastore D, Gentile E, Rocchi M, Castoldi GL. A novel translocation t(1;7)(p36;q34) in three patients with acute myeloid leukaemia. *Br J Haematol.* 1999 Apr;105(1):208-14

This article should be referenced as such:

Cuneo A. t(1;7)(p36;q34). *Atlas Genet Cytogenet Oncol Haematol.* 1999; 3(4):195.