

i(8)(q10) in acute myeloid leukaemia

Clinics and Pathology

Disease [Acute myeloid leukaemia](#) (AML)

Note The aberration has also been reported in many other neoplastic disorders, most notably [T-prolymphocytic leukaemia](#) (PLL) and acute lymphoblastic leukaemia (ALL). In the latter, it often occurs as a secondary event to the [t\(9;22\)](#).

Phenotype / cell stem origin Has been reported to occur in all AML FAB types, with FAB M2 representing the most common morphology.

Epidemiology A rare non-random event reported in over 50 cases of AML (below 0.5% of all cases) and occurs in both children and adults.

Prognosis As the aberration is rare and will frequently occur in complex karyotypes, whether an independent prognosis association can be determined is uncertain.

Cytogenetics

Cytogenetics Morphological In approximately 40% of cases the aberration is reported as a chromosome gain.

Probes Use of a centromere 8 probe combined with a [C-MYC](#) probe will help distinguish between gain of i(8)(q10) and simple chromosome 8 gain.

Additional anomalies Seldom occurs as a primary karyotype event. Most often found in complex karyotypes and/or arises in a sub-clone. The complex karyotypes will frequently contain [loss of chromosome 5\(q\)](#) and/or [loss of chromosome 7\(q\)](#).

External links

Other database [i\(8\)\(q10\) in acute myeloid leukaemia](#) [Mitelman database \(CGAP - NCBI\)](#)

Bibliography

Deletions of the long arm of chromosome 7 in myeloid disorders: loss of band 7q32 implies worst prognosis.

Rodrigues Pereira Velloso E, Michaux L, Ferrant A, Hernandez JM, Meeus P, Dierlamm J, Criel A, Louwagie A, Verhoef G, Boogaerts M, Michaux J-L, Bosly A, Mecucci C, Van den Berghe H. Br J Haematol 1996; 92: 574-581.

Medline [8616020](#)

Comparative genomic hybridization and conventional cytogenetic analyses in childhood acute myeloid leukemia.

Leuk Lymphoma 1999; 35: 311-315.

Medline [10706455](#)

Wong KF, Kwong YL.

Cancer Genet Cytogenet 2000; 120: 171-173.

Medline [10991616](#)

Cross-species color banding in ten cases of myeloid malignancies with complex karyotypes.

Harrison CJ, Yang F, Butler T, Cheung K-L, O'Brien PC, Hennessy BJ, Prentice HG, Ferguson-Smith M.

Genes Chromosomes Cancer 2001; 30: 15-24.

Medline [11107171](#)

Loss of i(8)(q10) at relapse in two cases of childhood acute myeloid leukaemia.

Seppa L, Hengartner H, Leibundgut K, Kuhne T, Niggli FK, Betts DR.
Leuk Lymphoma 2007 (in press).

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