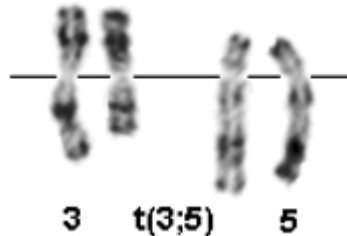


t(3;5)(q25;q34)

Identity



t(3;5)(q25;q34) (R-banding) - Courtesy Jacques Boyer

Clinics and Pathology

Disease myeloproliferative disorders (MPS), myelodysplastic syndromes (MDS), and acute non lymphocytic leukemia (ANLL)

Phenotype / cell stem origin M2, M4, M6 ANLL; trilineage involvement

Epidemiology median age: 35 yrs; balanced sex ratio

Prognosis CR: 8/12, but median survival is less than 1 yr

Cytogenetics

Cytogenetics Morphological The breakpoints (3q25 and 5q34) have been controversial for a long time.

Additional anomalies most often none; +8

Genes involved and Proteins

Gene Name [MLF1](#)

Location 3q25

Protein 31 KDa; widely expressed; cytoplasmic localisation; possible role in normal hematopoietic differentiation

Gene Name [NPM1](#)

Location 5q34

Protein nuclear localisation; binds to single and double strand nucleic acids; phosphoprotein that may transport ribonucleoproteins; may also have a role in DNA replication nuclear phosphoprotein; role in centrosome duplication and various relations with other proteins like [p53](#), [ARF](#), ... (numerous interactions are under study).

Result of the chromosomal anomaly

Hybrid gene 5' NPM-3' MLF1 on der(5)

Description

Fusion

Protein 54 kDa with the 175 N-term Amino acids from NPM

Description

External links

Other database [t\(3;5\)\(q25;q34\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other database [t\(3;5\)\(q25;q34\)](#) [CancerChromosomes \(NCBI\)](#)

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