t(3;12)(q27;p12) LRMP/BCL6

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Clinics and pathology

Disease
Non Hodgkin lymphoma

Clinics
The t(3;12)(q27;p12) was found in a case of follicular lymphoma transformed to diffuse aggressive lymphoma, from a study with no individual data (Akasaka et al., 2003).

Genes involved and proteins

LRMP
Location
12p12.1

Protein
LRMP is an integral membrane protein of the endoplasmic reticulum (ER), oriented on the ER membrane facing the cytosol. It is a lymphoid-restricted gene that is expressed in a developmentally regulated fashion (Behrens et al., 1994). It may be involved in diabetes susceptibility (Grimm et al., 2003). A V141L polymorphism of LRMP has been found associated with a higher mortality in patients with lung cancer (Manenti et al., 2006). LRMP has recently been found involved in a translocation t(8;12)(q24;p12) with a LRMP/MYC fusion gene in non Hodgkin lymphoma (Singh et al., 2012).

Result of the chromosomal anomaly

Hybrid gene
Description
Breakpoint in BCL6 first intron.

References

Grimm CH, Rogner UC, Avner P. Lrmp and Bcat1 are candidates for the type I diabetes susceptibility locus Idd6. Autoimmunity. 2003 Jun;36(4):241-6


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