Leukaemia Section
Mini Review

**der(9;18)(p10;q10)**

Ulrike Bacher, Claudia Haferlach

Department of Clinical Chemistry, Ludwig-Maximilians University of Munich, Marchioninistrasse 15, 81377 Munich, Germany (UB); MLL - Munich Leukemia Laboratory, Max-Lebsche-Platz 31, 81377 Munich, Germany (CH)

Published in Atlas Database: September 2006
Online updated version: http://AtlasGeneticsOncology.org/Anomalies/der918p10q10ID1418.html
DOI: 10.4267/2042/38384

This work is licensed under a Creative Commons Attribution-Non-commercial-No Derivative Works 2.0 France Licence. © 2007 Atlas of Genetics and Cytogenetics in Oncology and Haematology

**Identity**

![Image of chromosomes 9 and 18 with der(9;18)(p10;q10)]

+9,der(9;18)(p10;q10) (G-banding).

**Clinics and pathology**

**Disease**

BCR-ABL negative chronic myeloproliferative disorders (CMPD).

**Epidemiology**

Occasional occurrence: 5 cases of polycythemia vera (PV) and one case of therapy associated AML (t-AML) after ET were reported so far.

**Clinics**

2/5 PV cases showed conversion of PV to post-polycythemic myelofibrosis.

**Prognosis**

Probably associated with progression or leukemic transformation of the CMPD.

**Cytogenetics**

+9,der(9;18)(p10;q10) (chromosome painting, WCP#9 (red) + WCP#18 (green)).

**Cytogenetics morphological**

Unbalanced translocation between chromosomes 9 and 18 leading to trisomy of 9p and monosomy of 18p.

**Additional anomalies**

Sole abnormality in most cases; balanced translocations or complex aberrant karyotypes were reported as additional abnormalities.
Genes involved and Proteins

**Note:** Genes involved are unknown. Gain of 9p might play a role for gain of function of the JAK2 gene on 9p24 which codes for the JAK2 nonreceptor kinase.

References


This article should be referenced as such: