Leukaemia Section
Short Communication

\textbf{t}(3;8)(p25;q24)

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Published in Atlas Database: August 2018
Online updated version: http://AtlasGeneticsOncology.org/Anomalies/t0308p25q24ID1827.html
DOI: 10.4267/2042/70609

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**Abstract**
Review on \textit{t}(3;8)(p25;q24), with data on clinics

**Keywords**
Chromosome 3; chromosome 8; Blastic plasmacytoid dendritic cell neoplasm

**Disease and pathology**

**Disease**
Blastic plasmacytoid dendritic cell neoplasm (BPDCN)
BPDCN has been known with various names, including agranular CD4+ natural killer (NK) leukemia, CD4+/CD56+ hematodermic neoplasm, and blastic NK lymphoma. BPDCN malignant cells are derived from the precursors of plasmacytoid dendritic cells. It most commonly involves the skin. BPDCN is an aggressive neoplasm. BPDCN is often associated with a complex karyotype (review in Meloni-Ehrig 2017).

**Epidemiology**
In a series of 41 patients with BPDCN, five had a MYC rearrangement confirmed by FISH, one had a \textit{t}(X;8)(q24;q24), one had a \textit{t}(3;8)(p25;q24), two had a \textit{t}(6;8)(p21;q24) MYC/SUPT3H, and one had a \textit{t}(8;14)(q24.1;q32) (Boddu et al., 2018).

**Clinics**
The patient with a \textit{t}(3;8)(p25;q24) was a 66 year-old male patient with skin, lymph nodes and central nervous system involvement. He was alive and well 12 months+ after diagnosis.

**Cytogenetics**
The karyotype was complex.

**Genes involved and proteins**
The partner gene of MYC is unknown.

**MYC**

**Location** 8q24.21
**DNA/RNA**
MYC is composed of three exons spanning over 4 kb.

**Protein**
MYC is expressed in almost all proliferating cells. It is located predominantly in the nucleus. MYC is a transcriptional regulator, capable to induce or repress the expression of thousands genes. MYC is deregulated in cancer by several different mechanisms: chromosomal translocations, amplifications, point mutations, epigenetic reprogramming, enhanced translation and increased protein stability (review in Mohamed, 2017).

**References**
Meloni-Ehrig A. \textit{Blastic Plasmacytoid Dendritic Cell Neoplasm (BPDCN)} Atlas Genet Cytogenet Oncol Haematol. in press
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This article should be referenced as such: