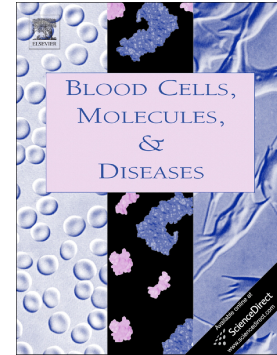


## Accepted Manuscript

Clinical characteristics of acute promyelocytic leukemia with the STAT5B-RARA fusion gene

Congxiao Zhang, Ying Wang, Bingcheng Liu, Benfa Gong, Xiaoyuan Gong, Yuntao Liu, Yingchang Mi, Jianxiang Wang



PII: S1079-9796(17)30362-5  
DOI: [doi:10.1016/j.bcmd.2017.09.007](https://doi.org/10.1016/j.bcmd.2017.09.007)  
Reference: YBCMD 2230

To appear in: *Blood Cells, Molecules and Diseases*

Received date: 17 September 2017

Accepted date: 23 September 2017

Please cite this article as: Congxiao Zhang, Ying Wang, Bingcheng Liu, Benfa Gong, Xiaoyuan Gong, Yuntao Liu, Yingchang Mi, Jianxiang Wang, Clinical characteristics of acute promyelocytic leukemia with the STAT5B-RARA fusion gene. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Ybcmd(2017), doi:[10.1016/j.bcmd.2017.09.007](https://doi.org/10.1016/j.bcmd.2017.09.007)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Clinical characteristics of acute promyelocytic leukemia with the STAT5B-RARA fusion gene

**Keywords:** acute promyelocytic leukemia; STAT5B-RARA; drug resistance; gene fusion

*To the editor:* Acute promyelocytic leukemia (APL) takes up 10-15% of all acute myeloblastic leukemia patients. It is accepted by us all, that the commonest gene fusion of APL is the t(15;17) rearrangement which accounts for approximately 98% of the total[1]. This rearrangement causes a retinoic acid receptor alpha (RARA) gene fuses with the promyelocytic leukemia (PML) gene, giving the retinoic acid a target domain to attach with, which leads to the differentiation and death of leukemia cells. However, while the study got further, some new fusion genes were discovered, and according to the sensitivity to all-trans-retinoic acid (ATRA) during the treatment, those fusion genes can be divided into ATRA-sensitive group, including RARA fuses with PML, NPM and NuMA; And ATRA-insensitive group, including ZBTB16-RARA, STAT5B-RARA and PLZF-RARA[2]. Among these fusion genes, STAT5B-RARA-positive APL is one of the rarest type, which also shows remarkably gender preference to male (only one in the ten reported cases was female). Here, we report a new female case of APL carrying the aberrant STAT5B-RARA fusion transcript.

A 28-year-old Chinese female patient was admitted to our hospital due to ecchymosis on both of her lower extremities for one and a half months, on 21th October 2015. Initial complete blood counts showed a white blood cell count (WBC) of  $1.95 \times 10^9/L$ , red blood cell count (RBC) of  $3.81 \times 10^{12}/L$ , hemoglobin (Hb) of 109g/L and platelet count (Plt) of  $196 \times 10^9/L$ . The coagulation test showed: thrombin time (TT) 33.8s, international normalized ratio (INR) 1.48, fibrinogen degradation product (FDP) 48.8ug/ml, fibrinogen, 0.27g/L, prothrombin time (PT) 17s, D-Dimer, 24.19mg/L. The bone marrow smear exposed marked hypercellularity of 84.1% abnormal promyelocytes. Flow cytometric analysis revealed APL cells positive for

Download English Version:

<https://daneshyari.com/en/article/8648059>

Download Persian Version:

<https://daneshyari.com/article/8648059>

[Daneshyari.com](https://daneshyari.com)