

**ACCESSION NUMBER: CP10-10298**

**PATIENT: Doe, John**

**Physician:** John Nice, M.D.

**D.O.B.** 11/25/1932 **AGE:** 77 yrs **SEX:** M

**Facility:** Best Clinic

**Specimen Type:** Bone Marrow

1212 Main St.

**Date Collected:** 04/06/2010

Good Town

IN

46321

**Date Received:** 04/07/2010

**Facility MR #** 1234567

**Date Reported:** 04/12/2010

**Clinical History:**

Leukopenia (288.50), Thrombocytopenia (287.5), R/O MDS

**SUMMARY REPORT**

**FINAL DIAGNOSIS:**

**BONE MARROW BIOPSY:**

- HYPERCELLULAR BONE MARROW WITH INCREASED MYELOBLASTS (~11-12%) AND DYSPHOIESIS
- ABNORMAL MALE KARYOTYPE WITH MULTIPLE COMPLEX ABNORMALITIES
- POSITIVE FOR 5q DELETION, TRISOMY 8 AND TRISOMY 13 BY FISH
- CONSISTENT WITH INVOLVEMENT BY A **HIGH GRADE MYELODYSPLASTIC SYNDROME BEST CLASSIFIED AS REFRACTORY ANEMIA WITH EXCESS BLASTS-2 (RAEB-2)**
- PLEASE SEE COMMENT

**Morphology:**

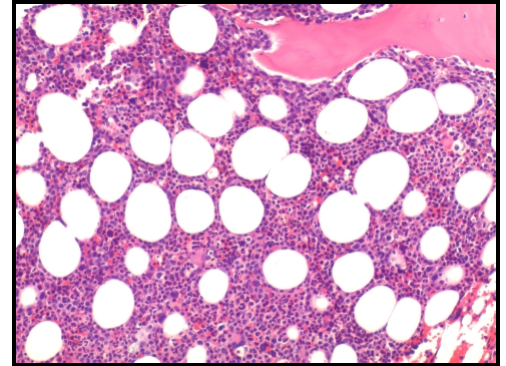
- Hypercellular bone marrow with increased blasts (~11-12%)
- Trilineal hematopoiesis with dyspoietic changes
- Increased storage iron with occasional ringed sideroblasts (<15%)

**Flow Cytometry:**

- Increased blast population with a myeloid phenotype

**Cytogenetics/FISH:**

- Abnormal male karyotype with multiple complex abnormalities (please refer to CG10-10298)
- Positive for 5q deletion, trisomy 8 and trisomy 13 by FISH (unfavorable prognostic indicators)



Hypercellular marrow

**Comment:**

The bone marrow is hypercellular for age with trilineal hematopoiesis and an increase in the number of blasts (~11-12%) based on CD34 stain of the core biopsy. The blasts have a myeloid phenotype by flow cytometry. In addition, dyserythropoiesis, dysgranulopoiesis and dysmegakaryopoiesis is noted with a slight increase in the number of monocytes in the bone marrow. Iron stains show increased storage iron with occasional ringed sideroblasts (<15%). Karyotypic analysis shows an abnormal male karyotype with multiple complex abnormalities and FISH studies are positive for 5q deletion, trisomy 8 and trisomy 13 which portend an unfavorable prognosis. These findings are consistent with involvement by a high grade myelodysplastic syndrome best classified as refractory anemia with excess blasts-2 (RAEB-2). Clinical correlation and close follow-up are recommended.

*Case discussed with Dr. Nice on 4-9-2010.*

Electronic Signature