

# PathMD™: Board Review Letter

Author: Philip Ferguson, M.D.

Hematopathology - Part 2

Volume 1, Number 35

Case #1 A 50 y/o male presents with nasal obstruction. A biopsy is performed and representative sections are shown. The cells of interest are positive for CD56 and EBV by in situ hybridization (EBER). Based on these findings, what is the best diagnosis?

- A. Wegner's granulomatosis
- B. T-cell lymphoma, unspecified
- C. T-cell ALL
- D. Extranodal NK/T-cell lymphoma
- E. Angio-immunoblastic T-cell lymphoma

Case #2 A cervical lymph node is biopsied from a 25 y/o man. Representative histology from the lymph node is shown. Based on the findings, what is the expected immunohistochemistry profile?

- A. CD15 +, CD20 +, CD 30 +, CD45 +
- B. CD15 +, CD20 +, CD 30 +, CD45 =
- C. CD15 +, CD20 +, CD 30 =, CD45 =
- D. CD15 +, CD20 =, CD 30 +, CD45 =
- E. CD15 +, CD20 =, CD 30 +, CD45 +

Case #3 A 40 y/o man presents with isolated inguinal lymphadenopathy. An excisional biopsy is performed. Representative sections and special stains are shown. Based on the findings, what is the best diagnosis?

- A. Follicular lymphoma
- B. Reactive follicular hyperplasia
- C. Mantle cell lymphoma
- D. Cat-scratch lymphadenitis
- E. Burkitt lymphoma

Case #4 A soft tissue mass is found in the breast of a 45 y/o female that was thought to probably represent breast carcinoma. Representative images are shown. The histiocytic cells are positive for S-100 and negative for CD1a. Based on the findings, what is the best diagnosis?

- A. Histiocytosis X
- B. Langerhan's cell histiocytosis
- C. Plasmacytoma
- D. Rosai-Dorfman disease
- E. Malignant melanoma

Case #5 Based on the morphologic findings of the peripheral blood smear for this question, which of the following is the best diagnosis?

- A. Hemoglobin SS
- B. Hemoglobin SC
- C. Liver Disease
- D. Alpha Thalassemia
- E. Hereditary Spherocytosis

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**Case #6** A 50-year-old male presents with mild splenomegaly and circulating atypical lymphocytes. Flow cytometry identifies a CD20 positive, CD5 and CD10 negative kappa restricted lymphoid population. Based on the morphologic and flow cytometry findings, which of the following is the best diagnosis?

- A. Extranodal marginal zone lymphoma
- B. Splenic marginal zone lymphoma
- C. Chronic lymphocytic leukemia/lymphoma
- D. Mantle cell lymphoma
- E. Circulating follicular lymphoma

**Question #1** Which of the following characteristics is the most important defining feature of AML-M0?

- A. >90% myeloblasts of non-erythroid cells
- B. 20-80% immature monocytes
- C. 20% of more promyelocytes
- D. < 3% myeloperoxidase positive myeloblasts
- E. 50% of more erythroid precursors

**Question #2** Which of the following characteristics is the most important defining feature of AML-M1?

- A. >90% myeloblasts of non-erythroid cells
- B. 20-80% immature monocytes
- C. 20% of more promyelocytes
- D. < 3% myeloperoxidase positive myeloblasts
- E. 50% of more erythroid precursors

**Question #3** Which of the following characteristics is the most important defining feature of AML-M2?

- A. <90% myeloblasts of non-erythroid cells
- B. 20-80% immature monocytes
- C. 20% of more promyelocytes
- D. < 3% myeloperoxidase positive myeloblasts
- E. 50% of more erythroid precursors

**Question #4** AML-M3 is characterized by which of the following?

- A. <90% myeloblasts of non-erythroid cells
- B. 20-80% immature monocytes
- C. 20% of more promyelocytes
- D. < 3% myeloperoxidase positive myeloblasts
- E. 50% of more erythroid precursors

**Notes for question set:**<sup>1</sup>

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<sup>1</sup> PathMD strives for the highest quality and accuracy. However, the *PathMD: Board Review Letter* is for review purposes and not meant for clinical decision making. It should not be used in place of review of primary reference texts and the current medical literature. If inaccuracies are identified, please notify us so that a correction may be published. (info@PathMD.com)