**September 10, 2024, AHD Learning Objectives**

**Multiple Myeloma:**

1. Describe the clinical symptoms and laboratory findings that should prompt a diagnostic evaluation for myeloma. What percentage of patients with multiple myeloma have each of these?
2. List the diagnostic tests required to establish the diagnosis of multiple myeloma.
3. Make a table differentiating between MGUS, smoldering myeloma, multiple myeloma, and plasmacytoma.
4. Discuss the treatment options for myeloma patients who are <65 years old and in otherwise good health as well as for elderly patients who have significant comorbidities.
5. Describe the side effects of the chemotherapy agents used in myeloma therapy.

**Myeloproliferative neoplasms:**

1. Define myeloproliferative neoplasms (MPNs). List the four MPNs and the gene mutations associated with each.
2. Make a table listing clinical syndrome, lab values, diagnosis, and treatment based on risk stratification of each of the following: chronic myelogenous leukemia, polycythemia vera, essential thrombocytosis, and primary myelofibrosis.

**Acute leukemia:**

1. List several risk factors for the development of acute myeloid leukemia.
2. Describe the clinical syndrome (including lab values) that should make an internist suspect AML, and specifically acute promyelocytic leukemia (APL)
3. Describe the tests that should be ordered UP FRONT by the hospitalist when a diagnosis of acute myeloid leukemia is suspected.
4. Describe the therapy that can be given by the hospitalist when a diagnosis of APL is suspected.