**Module 1: Questions / answers**

*1. Multiple myeloma is characterized by (please tick any/ all that apply):*

A. The presence of abnormal T cells in peripheral blood

B. Abnormal clonal plasma cell infiltration of the bone marrow - CORRECT

C. The presence of B cell infiltrates in the liver

D. The production of cytokines by natural killer cells

*2. True or false:*

In adaptive or acquired immunity, memory cells exist in a dormant state until a foreign substance is reintroduced in the body.

1. True - CORRECT
2. False

*3. Cell-mediated immunity provides protection through (please tick any/ all that apply):*

A. The production of colony-stimulating factors

B. The activation of antigen-specific cytotoxic T cells - CORRECT

C. The activation of macrophages and NK cells - CORRECT

D. The stimulation of cytokine production - CORRECT

*4. Following antigen exposure, B cells produce (please tick any/ all that apply):*

A. Cytokines

B. Pathogens

C. Antibodies - CORRECT

D. Immunoglobulins

*5. Accepted frisk factors for multiple myeloma include (please tick any/ all that apply):*

A. tobacco, alcohol, asbestos

B. allergic conditions, autoimmune disease, tobacco

C. pesticides, autoimmune diseases, radiation exposure

D. MGUS, increasing age, positive family history – CORRECT

*6. True or false:*

The discovery of genetic abnormalities in patients with multiple myeloma may facilitate the development of targeted treatment.

1. True - CORRECT
2. False

**Module II – Questions / answers**

*1. Common clinical manifestations of multiple myeloma at the time of diagnosis include (please tick any/ all that apply):*

A. Liver dysfunction

B. Anemia - CORRECT

C. Renal dysfunction - CORRECT

D. Hypercalcemia - CORRECT

*2. The clinical features of multiple myeloma can generally be attributed to the proliferation of plasma cells in the bone marrow*

A. True - CORRECT

B. False

*3. Factors associated with higher risk and poorer outcomes include (please tick any/ all that apply):*

A. Normal karyotype

B. Chromosomal abnormality - CORRECT

C. Stage I per ISS

D. High levels of serum β2-microglobulin - CORRECT

E. High levels of lactate dehydrogenase - CORRECT

*4. As a hematologic malignancy, multiple myeloma is unique due to the frequency of what symptom at the time of diagnosis (please tick any/ all that apply):*

A. Hypercalcemia

B. Renal dysfunction

C. Thrombocytopenia

D. Bone lesions - CORRECT

*5. Anemia, present in about 70% of newly diagnosed patients with myeloma, is characterized by which of the following three symptoms:*

A. Fatigue - CORRECT

B. Dizziness - CORRECT

C. Bleeding

D. Dyspnea – CORRECT

**Module III - Questions / answers**

1. The goals of initial therapy for myeloma are *(please tick any/ all that apply):*

A. To provide rapid disease control and reversal of disease-related complications - CORRECT

B. To be well tolerated with minimal and manageable toxicity - CORRECT

C. Decrease the risk of early death - CORRECT

D. Allow successful collection of stem cells when ASCT is a therapeutic option - CORRECT

2. The newly developed novel agents (thalidomide, lenalidomide and bortezomib) are more effective and less toxic than conventional chemotherapeutic agents.

A. True - CORRECT

B. False

3. Older and frail patients are particularly vulnerable to myeloma treatment due to *(please tick any/ all that apply):*

A. Advanced age alone

B. Presence of co-morbidities - CORRECT

C. More severe disease

D. Increased risk of toxicities - CORRECT

4. Commonly reported side effects of thalidomide treatment include *(please tick any/ all that apply):*

A. Peripheral neuropathy

B. Myelosuppression - CORRECT

C. GI complications - CORRECT

D. Secondary malignancies

**Module IV Questions / answers**

*1. Signs and symptoms of peripheral neuropathy include (please tick any/ all that apply):*

A. Paresthesia - CORRECT

B. Peripheral pain - CORRECT

C. Infection

D. Difficulty maintaining balance – CORRECT

*2. The risk of developing thromboembolic events appears to be increased when erythropoiesis-stimulating agents are given with some novel agents.*

Answer:

A. True - CORRECT

B. False

*3. Anemia, neutropenia, and thrombocytopenia are expected side effects of novel therapies; patients should be monitored closely and educated about the signs and symptoms of these side effects which include (please tick any/ all that apply):*

A. Fatigue - CORRECT

B. Fever, chills, malaise - CORRECT

C. Mucosal/gastrointestinal bleeding - CORRECT

D. Shortness of breath - CORRECT

*4. Patients should be made aware of potential changes in health-related quality of life including those caused by treatment or by the psychologic effects of myeloma*

Answers:

A. True - CORRECT

B. False

*5. Caregivers often experience stress related to their caregiving activities; interventions to support caregivers are (please tick any/ all that apply):*

A. Individualize education provided to caregivers - CORRECT

B. Encourage respite from caring activities - CORRECT

C. Suggest hospital and community resources to support coping - CORRECT

D. Encourage measures for stress reduction - CORRECT