Post-test Answer Rationale

Please use the patient case example below to answer questions 1-6.

Mr. RS is a 68-year-old male admitted with ST elevation myocardial infarction (STEMI) treated with Percutaneous Coronary Intervention (PCI) and deployment of a single bare-metal stent (BMS). Prior to admission his diagnoses were: history of TIA, hypertension and COPD. His left ventricular ejection fraction is 50% without evidence of diastolic dysfunction.

Social History
- Smokes 1/2 pack of cigarettes per day for past 50 years (refuses cessation counseling)
- No alcohol or illicit drug use

Allergies/Intolerances
- Lisinopril (cough)

Current Medications
- Hydrochlorothiazide 25 mg oral daily
- Aspirin 325 mg oral daily
- Amlodipine 5 mg oral daily
- Fluticasone/Salmeterol 250/50 mcg one inhalation twice daily
- Albuterol/ipratropium 90/18 mcg 2 inhalations every 4 hours as needed for shortness of breath

1) Which of the following would generally NOT be recommended for Mr. RS as an important therapy after placement of a BMS?

A. Dual antiplatelet therapy (DAPT)
B. Beta-blocker
C. Lipid lowering therapy
D. Warfarin

Answer Rationale: Warfarin is not the preferred therapy for prevention of re-thrombosis after stent placement. The other choices are recommended in the guidelines for patients with ACS.
2) What is the target LDL-C for Mr. RS?
   A. Less than 130 mg/dL
   B. Less than 100 mg/dL
   C. Less than 70 mg/dL
   D. Less than 40 mg/dL

Answer Rationale: The patient is considered ‘high-risk’ due to ACS and continued smoking.

3) Which of the following statements is true regarding renin-angiotensin-aldosterone system (RAAS) inhibitor therapy for Mr. RS?
   A. Mr. RS should begin an angiotensin-converting enzyme inhibitor (ACE-I)
   B. Mr. RS should not begin RAAS inhibitor therapy due to an absence of heart failure
   C. It would be reasonable to start Mr. RS on an angiotensin II receptor blocker (ARB)
   D. Mr. RS should begin an aldosterone blocker but not an ACE-I or ARB

Answer Rationale: The patient has had intolerance to an ACE-I in the past. It is still reasonable to use an ARB in this patient according to guidelines, regardless of whether or not heart failure is present.

4) Which of the following antiplatelet medications is NOT recommended for Mr. RS?
   A. Clopidogrel
   B. Aspirin
   C. Prasugrel
   D. Ticagrelor

Answer Rationale: The TRITON-TIMI trial found that patients with a history of stroke or TIA did not have favorable outcomes taking prasugrel compared to clopidogrel.
5) Which of the following recommendations regarding aspirin dosing for Mr. RS is correct?

A. Mr. RS should reduce his aspirin dose to 81 mg oral daily if starting ticagrelor
B. Mr. RS should discontinue aspirin six months after a bare metal stent
C. Mr. RS should discontinue aspirin when starting a P2Y$_{12}$ inhibitor
D. 325 mg of aspirin daily is more effective than 81 mg of aspirin daily

**Answer Rationale:** The prescribing information for ticagrelor specifically states to use only an aspirin dose of 81 mg daily. Aspirin should be continued indefinitely in a patient with ACS, with 81 mg and 325 mg displaying equal efficacy.

6) What is currently the recommended duration of treatment for DAPT in Mr. RS?

A. One month
B. Three months
C. Six months
D. 12 months

**Answer Rationale:** Guidelines recommend a duration of 12 months of DAPT whether the stent is drug-eluting or bare-metal.

7) In the United States, what percentage of patients discharged following an acute myocardial infarction are readmitted to the hospital within 30 days?

A. 10%
B. 20%
C. 30%
D. 40%
E. 50%

**Answer Rationale:** According to research on readmission rates, the rate for readmission after MI is 20%.
8) All of the following are associated with an increased risk of non-adherence, except:

A. Single marital status
B. Depression
C. CABG surgery
D. Older age

**Answer Rationale:** Depression was not identified by researchers as a condition that greatly increases the chance of non-adherence.

9) In which of the following timeframes is the largest decline in adherence observed after an Acute Coronary Event?

A. One month after discharge
B. Three months after discharge
C. Six months after discharge
D. One year after discharge

**Answer Rationale:** 30 days after discharge is the time frame with the largest decrease in adherence according to the results from the Premier Registry.

10) Results from the PILOT-EBM study revealed:

A. Patient-reported adherence was better in the intervention group
B. A higher rate of 75% or greater Proportion of Days Covered (PDC) for beta-blocker therapy in the intervention group
C. Medication Therapy Management (MTM) resulted in better lipid profiles for patients in the intervention group
D. Medication Therapy Management (MTM) resulted in better blood pressure control in the intervention group

**Answer Rationale:** Only adherence to refills of beta-blocker therapy was statistically significant. Patient reported adherence was the same between groups. MTM was not performed in the PILOT-EMB study.