

## **CARDIOLOGY I**

### **Learning Objectives for Hypertension: Evidence-Based Updates and Clinical Controversies**

1. Devise evidence-based treatment plans for managing hypertension.
2. Analyze the use of cardiovascular end points in outcome based trials and apply these analyses to selecting antihypertensive drugs to reduce the incidence of various cardiovascular (CV) outcomes.
3. Analyze the clinical trial findings from the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT) and the Anglo-Scandinavian Cardiac Outcomes Trial (ASCOT)-Blood Pressure Lowering Arm.
4. Judge the value and limitations of the data derived from the subgroup analyses of the ALLHAT data in the management of hypertension.
5. Justify pharmacotherapy regimens for treating hypertension in patients with a history of stroke, chronic stable angina, or chronic kidney disease based on evidence and Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7) recommendations.
6. Assess the relevant differences between hydrochlorothiazide and chlorthalidone in the management of hypertension.
7. Distinguish within class differences among  $\beta$ -blockers and their ability to reduce CV and other clinical outcomes in patients with hypertension.
8. Apply special considerations and analyze clinical controversies surrounding the treatment of hypertension in the elderly

### **Learning Objectives for Dyslipidemias: Therapeutic Advances**

1. Evaluate patient risk of coronary heart disease (CHD) based on updated National Cholesterol Education Program (NCEP) Adult Treatment Panel (ATP) III guidelines.
2. Assess the impact and measurement of non-traditional and emerging risk factors for CHD (C-reactive protein [CRP], homocysteine, and apolipoprotein [apo] B) and possible treatment strategies.
3. Design an appropriate treatment plan, including goals of therapy and integration of non-drug therapy, for hyperlipidemia based on CHD risk and concurrent disease states.
4. Analyze the role of niacin products and cholesterol ester transfer protein inhibitors as they relate to the pathophysiology of reverse cholesterol transport.
5. Develop treatment strategies to optimize outcomes for the needs of special populations (e.g., diabetes, elderly, and children).
6. Evaluate the potential role of peroxisome proliferator-activated receptor and antiobesity drugs in lowering cholesterol based on the pathophysiology of the metabolic syndrome.

### **Learning Objectives for Drug-Induced Cardiac Diseases**

1. Discover important aspects of drug-induced PR and corrected QT interval prolongation, implications for patients, drugs causing the phenomenon, and

pharmacokinetic and pharmacodynamic aspects of drugs that worsen the phenomenon.

2. Discern treatment modalities for drug-induced atrioventricular (AV) block and torsade de pointes.
3. Determine the impact of cocaine on cardiac risk and treatment modalities for cocaine-induced myocardial infarction.
4. Determine the implications of increased cardiovascular risk with drugs that block cyclooxygenase (COX)-2, including nonsteroidal anti-inflammatory drugs (NSAIDs) and aspirin.
5. Determine how to minimize the cardiovascular risks associated with drugs that block COX-2, including NSAIDs and aspirin.