CARDIOVASCULAR DISEASE Blueprint

For traditional, 10-year Maintenance of Certification (MOC) exam and Longitudinal Knowledge Assessment (LKA®)

ABIM invites diplomates to help develop the Cardiovascular Disease MOC exam blueprint

Based on feedback from physicians that MOC assessments should better reflect what they see in practice, in 2016 the American Board of Internal Medicine (ABIM) invited certified cardiovascular disease specialists to provide ratings of the relative frequency and importance of blueprint topics in practice.

This review process, which resulted in a new MOC exam blueprint, will be used on a periodic basis to inform and update all MOC assessments created by ABIM. No matter what form ABIM's assessments ultimately take, they will need to be informed by front-line clinicians sharing their perspective on what is important to know.

A sample of over 500 cardiovascular disease specialists, similar to the total invited population of cardiovascular disease specialists in age, gender, geographic region of practice, and time spent in direct patient care, provided the blueprint topic ratings. ABIM used this feedback to update the blueprint for MOC assessments (beginning with the Fall 2016 administration of the traditional, 10-year MOC exam).

To inform how assessment content should be distributed across the major blueprint content categories, ABIM considered the average respondent ratings of topic frequency and importance in each of the content categories. A second source of information was the relative frequency of patient conditions seen in these categories by certified cardiovascular disease specialists as documented by national health care data (described further under *Content distribution* below).

To determine prioritization of specific assessment content within each major medical content category, ABIM used the respondent ratings of topic frequency and importance to set thresholds for these parameters in the exam assembly process (described further under *Detailed content outline* below).

Purpose of the Cardiovascular Disease MOC Assessments

MOC assessments are designed to evaluate whether a certified cardiovascular disease specialist has maintained competence and currency in the knowledge and judgment required for practice. The MOC assessments emphasize diagnosis and management of prevalent conditions, particularly in areas where practice has changed in recent years. As a result of the blueprint review by ABIM diplomates, MOC assessments place less emphasis on rare conditions and focus more on situations in which physician intervention can have important consequences for patients. For conditions that are usually managed by other specialists, the focus is on recognition rather than on management.

Assessment format

The traditional, 10-year MOC exam is composed of 220 single-best-answer multiple-choice questions, of which approximately 50 are new questions that do not count in the examinee's score. Examinees taking the traditional, 10-year MOC exam will have access to an external resource (i.e., UpToDate®) for the entire exam.

The LKA for MOC, is a five-year cycle in which physicians answer questions on an ongoing basis and receive feedback on how they're performing along the way. More information on how assessments are developed can be found at abim.org/about/exam-information/exam-development.aspx.

Most questions describe patient scenarios and ask about the work done (that is, tasks performed) by physicians in the course of practice:

- **Diagnosis:** making a diagnosis or identifying an underlying condition
- **Testing:** ordering tests for diagnosis, staging, or follow-up
- **Treatment/Care Decisions**: recommending treatment or other patient care
- **Risk Assessment/Prognosis/Epidemiology:** assessing risk, determining prognosis, and applying principles from epidemiologic studies
- **Pathophysiology/Basic Science:** understanding the pathophysiology of disease and basic science knowledge applicable to patient care

ABIM is committed to working toward health equity and believes that board-certified physicians should have an understanding of health care disparities. Therefore, health equity content that is clinically important to each discipline will be included in assessments, and the use of gender, race, and ethnicity identifiers will be re-evaluated.

Clinical scenarios presented take place in outpatient or inpatient settings as appropriate to a typical cardiovascular disease practice. Some questions require interpretation of pictorial material including electrocardiograms, intracardiac electrograms, hemodynamic recordings, chest radiographs, photomicrographs, and imaging studies such as coronary angiograms, echocardiograms, ventriculograms, myocardial perfusion images, computed tomographs, magnetic resonance images, and intravascular ultrasound images. Some questions may also require recognition and interpretation of recorded heart sounds.

Exam tutorials, including examples of question formats, can be found at abim.org/maintenance-of-certification/exam-information/cardiovascular-disease/exam-tutorial.aspx.

Content distribution

Listed below are the major medical content categories that define the domain for the Cardiovascular Disease traditional, 10-year MOC exam and the LKA. The relative distribution of content is expressed as a percentage of the total assessment. To determine the content distribution, ABIM considered the average respondent ratings of topic frequency and importance. To cross-validate these self-reported ratings, ABIM also considered the relative frequency of conditions seen in Medicare patients by a cohort of certified cardiovascular disease specialists. Informed by these data, the Cardiovascular Disease Approval Committee and Cardiovascular Board have determined the medical content category targets shown below.

MEDICAL CONTENT CATEGORY	Target %
Arrhythmias	**15%**
Coronary Artery Disease	**21.5%**
Heart Failure and Cardiomyopathy	**19%**
Valvular Disease	**15%**
Pericardial Disease	**3%**
Congenital Heart Disease	**3%**
Vascular Diseases	**5%**
Systemic Hypertension and Hypotension	**8.5%**
Pulmonary Circulation Disorders	**3%**
Systemic Disorders Affecting the Circulatory System	**7%**
Total	**100%**

Assessment questions in the content areas above may also address clinical topics in:

- Preventive and rehabilitative cardiology
- Cardiovascular disease in women
- Geriatric cardiovascular disease
- Preoperative assessment for noncardiac surgery
- Postoperative cardiac care
- Critical care medicine, cardiovascular surgery, and general internal medicine as encountered in the practice of cardiology (including some general pediatrics with an emphasis on adolescent medicine)

How the blueprint ratings are used to assemble the MOC assessment

Blueprint reviewers provided ratings of relative frequency in practice for each of the detailed content topics in the blueprint and provided ratings of the relative importance of the topics for each of the tasks described in *Assessment format* above. In rating importance, reviewers were asked to consider factors such as the following:

- High risk of a significant adverse outcome
- Cost of care and stewardship of resources
- Common errors in diagnosis or management
- Effect on population health
- Effect on quality of life
- When failure to intervene by the physician deprives a patient of significant benefit

Frequency and importance were rated on a three-point scale corresponding to low, medium, or high. The median importance ratings are reflected in the *Detailed content outline* below. The Cardiovascular Disease Approval Committee and Cardiovascular Board, in partnership with the physician community, have set the following parameters for selecting MOC assessment questions according to the blueprint review ratings:

- At least 88% of questions will address high-importance content (indicated in green)
- No more than 12% of questions will address medium-importance content (indicated in yellow)
- No questions will address low-importance content (indicated in red).

Independent of the importance and task ratings, no more than 18% of questions will address low-frequency content (indicated by “LF” following the topic description).

The content selection priorities below are applicable beginning with the Fall 2016 traditional, 10-year MOC exam and are subject to change in response to future blueprint review.

Note: *The same topic may appear in more than one medical content category.*

Detailed content outline for the Cardiovascular Disease traditional, 10-year MOC exam and the LKA

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ARRHYTHMIAS *(15% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
ATRIOVENTRICULAR CONDUCTION DISEASE *(<2% of exam)*					
Atrioventricular block, 1st degree	✓	✓	⁄	⁄	⁄
Atrioventricular block, 2nd degree	✓	✓	✓	✓	⁄
Atrioventricular block, complete	✓	✓	✓	✓	⁄
Left bundle branch block	✓	✓	✓	✓	⁄
Right bundle branch block	✓	✓	✓	⁄	⁄
Left anterior fascicular block	⁄	⁄	⁄	⁄	⁄
Left posterior fascicular block LF	⁄	⁄	⁄	⁄	⁄
SINUS NODE DYSFUNCTION *(<2% of exam)*					
Sinus bradycardia	✓	✓	✓	✓	⁄
Sinus pauses	✓	✓	✓	⁄	⁄
Bradycardia-tachycardia syndrome	✓	✓	✓	✓	⁄
SUPRAVENTRICULAR ARRHYTHMIAS *(2% of exam)*					
Atrioventricular nodal reentrant tachycardia	✓	✓	✓	✓	⁄
Pre-excitation syndromes (including Wolff-Parkinson-White) LF	✓	✓	✓	✓	⁄
Atrioventricular reciprocating tachycardia LF	⁄	⁄	✓	⁄	⁄

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ARRHYTHMIAS *continued…* *(15% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
VENTRICULAR ARRHYTHMIAS *(2% of exam)*					
Ventricular tachycardia, monomorphic	✓	✓	✓	✓	✓
Ventricular tachycardia, polymorphic					
With prolonged Q-T interval	✓	✓	✓	✓	✓
Without prolonged Q-T interval	✓	✓	✓	✓	✓
Ventricular fibrillation (including idiopathic and non-idiopathic varieties) LF	✓	✓	✓	✓	✓
Premature ventricular complex	✓	✓	✓	✓	✓
ATRIAL ARRHYTHMIAS *(3.5% of exam)*					
Atrial fibrillation	✓	✓	✓	✓	✓
Atrial flutter	✓	✓	✓	✓	✓
Atrial tachycardia	✓	✓	✓	✓	✓
Ectopic atrial rhythms	✓	✓	✓	✓	✓
Premature atrial contraction LF	✓	✓	✓	✓	✗
CHANNELOPATHIES *(<2% of exam)*					
Long Q-T, congenital or acquired LF	✓	✓	✓	✓	✓
Brugada syndrome LF	✓	✓	✓	✓	✓
Early repolarization	✓	✓	✓	✓	✓
SUDDEN CARDIAC DEATH *(<2% of exam)*					
Sudden cardiac death	✓	✓	✓	✓	✓
SYNCOPE *(<2% of exam)*					
Syncope	✓	✓	✓	✓	✓
PACEMAKER AND ICD FUNCTION *(<2% of exam)*					
Pacemaker and ICD function	✓	✓	✓	✓	✓
ANTIARRHYTMIC DRUG EFFECTS *(<2% of exam)*					
Antiarrhytmic drug effects	✓	✓	✓	✓	✓

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CORONARY ARTERY DISEASE *(21.5% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
ANGINA PECTORIS *(5% of exam)*					
Unstable angina	✓	✓	✓	✓	✓
Vasospastic angina LF	✓	✓	✓	✓	⊘
Angina equivalent	✓	✓	✓	✓	⊘
Exertional angina	✓	✓	✓	✓	✓
Angina with microvascular disease	✓	✓	✓	✓	✓
CHRONIC ISCHEMIC HEART DISEASE *(5% of exam)*					
Coronary atherosclerosis	✓	✓	✓	✓	✓
Remote myocardial infarction	✓	✓	✓	✓	⊘
Aneurysm of the heart LF	✓	✓	✓	⊘	⊘
Coronary artery aneurysm LF	⊘	⊘	⊘	⊘	⊘
Silent myocardial ischemia	✓	✓	✓	✓	⊘
ACUTE MYOCARDIAL INFARCTION *(9.5% of exam)*					
STEMI of the anterior wall	✓	✓	✓	✓	✓
STEMI of the inferior wall					
Right ventricular involvement	✓	✓	✓	✓	✓
STEMI of the lateral wall	✓	✓	✓	✓	✓
STEMI of the posterior wall (including inferoposterior wall)	✓	✓	✓	✓	✓
Type I Non-STEMI	✓	✓	✓	✓	✓
Type II myocardial infarction	✓	✓	✓	✓	✓
Spontaneous coronary artery dissection LF	✓	✓	✓	✓	✓
STEMI, other	✓	✓	✓	✓	✓

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CORONARY ARTERY DISEASE *continued…* *(21.5% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
EARLY COMPLICATIONS FOLLOWING ACUTE MYOCARDIAL INFARCTION *(<2% of exam)*					
Ventricular septal rupture **LF**	✓	✓	✓	✓	⊘
Rupture of the cardiac wall **LF**	✓	✓	✓	✓	⊘
Rupture of papillary muscle **LF**	✓	✓	✓	✓	⊘
Postinfarction angina	✓	✓	✓	✓	⊘
Postinfarction arrhythmias	✓	✓	✓	✓	✓
Left ventricular pseudoaneurysm **LF**	✓	✓	✓	✓	⊘
Dynamic left ventricular outflow tract obstruction **LF**	✓	✓	✓	✓	⊘
Postinfarction systolic heart failure	✓	✓	✓	✓	✓
ATYPICAL ANGINA OR NONCARDIAC CHEST PAIN *(<2% of exam)*					
Atypical angina or noncardiac chest pain	✓	✓	✓	✓	⊘

HEART FAILURE AND CARDIOMYOPATHY *(19% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
HEART FAILURE *(9% of exam)*					
Acute decompensated ventricular failure	✓	✓	✓	✓	✓
Systolic heart failure (heart failure with reduced ejection fraction)	✓	✓	✓	✓	✓
Diastolic heart failure (heart failure with preserved ejection fraction)	✓	✓	✓	✓	⊘
Heart failure with improved ejection fraction	✓	✗	✓	✓	✗
Cardiogenic shock	✓	✓	✓	✓	✓

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HEART FAILURE AND CARDIOMYOPATHY *continued…* *(19% of exam)*	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
CARDIOMYOPATHIES *(8% of exam)*					
Dilated cardiomyopathies	✓	✓	✓	✓	⁄
Hypertrophic cardiomyopathies	✓	✓	✓	✓	⁄
Restrictive and infiltrative cardiomyopathies LF	✓	✓	✓	⁄	⁄
Chemotherapy-related cardiomyopathy LF	✓	✓	✓	⁄	⁄
Stress-induced cardiomyopathy (takotsubo syndrome)	✓	✓	✓	✓	⁄
Myocarditis LF	✓	✓	✓	✓	⁄
Noncompaction cardiomyopathy LF	⁄	⁄	⁄	⁄	⁄
Arrhythmogenic right ventricular dysplasia LF	✓	✓	✓	⁄	⁄
TRANSPLANTED HEART *(<2% of exam)*					
Transplanted heart LF	⁄	⁄	⁄	⁄	✗
MECHANICAL CIRCULATORY SUPPORT *(<2% of exam)*					
Mechanical circulatory support LF	✓	✗	⁄	✗	✗

VALVULAR DISEASE *(15% of exam)*	Diagnosis	Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
MITRAL VALVE DISORDERS *(5.5% of exam)*					
Mitral valve regurgitation, native	✓	✓	✓	✓	⁄
Mitral valve stenosis, native LF	✓	✓	✓	✓	⁄
Mitral valve prolapse, native	✓	✓	✓	✓	⁄
Prosthetic mitral valve	✓	✓	✓	✓	⁄
Systolic anterior motion LF	⁄	⁄	⁄	⁄	⁄
AORTIC VALVE DISORDERS *(4.5% of exam)*					
Aortic valve regurgitation, native	✓	✓	✓	✓	⁄
Aortic valve stenosis, native	✓	✓	✓	✓	⁄
Prosthetic aortic valve	✓	✓	✓	✓	⁄

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VALVULAR DISEASE *continued…* *(15% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
TRICUSPID VALVE DISORDERS *(<2% of exam)*					
Tricuspid valve regurgitation, native	✓	✓	/	/	/
Tricuspid valve stenosis, native LF	/	/	/	/	✗
Prosthetic tricuspid valve LF	/	/	/	/	✗
PULMONARY VALVE DISORDERS *(<2% of exam)*					
Pulmonary valve regurgitation, native LF	/	/	/	/	✗
Pulmonary valve stenosis, native LF	/	/	/	/	✗
Prosthetic pulmonary valve LF	/	/	/	✗	✗
ENDOCARDITIS *(2% of exam)*					
Endocarditis	✓	✓	✓	✓	/
CARDIAC MURMURS AND OTHER CARDIAC SOUNDS *(<2% of exam)*					
Cardiac murmurs and other cardiac sounds	✓	✓	✓	✓	/

PERICARDIAL DISEASE *(3% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
ACUTE PERICARDITIS *(<2% of exam)*					
Acute pericarditis	✓	✓	✓	✓	/
CHRONIC PERICARDITIS (INCLUDING RELAPSING) *(<2% of exam)*					
Chronic pericarditis (including relapsing) LF	/	/	✓	/	/
PERICARDIAL CONSTRICTION AND EFFUSION *(<2% of exam)*					
Pericardial effusion	✓	✓	✓	✓	/
Cardiac tamponade LF	✓	✓	✓	✓	✓
Constrictive pericarditis LF	✓	✓	✓	/	/
Effusive-constrictive pericarditis LF	✓	✓	/	/	/
ABNORMALITIES OF THE PERICARDIUM *(<2% of exam)*					
Abnormalities of the pericardium LF	✗	✗	✗	✗	✗

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CONGENITAL HEART DISEASE *(3% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
CONGENITAL MALFORMATIONS OF CARDIAC CHAMBERS AND CONNECTIONS *(<2% of exam)*					
Complete transposition of the great vessels LF	⊘	⊘	⊘	✗	✗
Corrected transposition of the great vessels LF	⊘	⊘	⊘	✗	✗
Tricuspid atresia LF	✗	✗	✗	✗	✗
Anomalous origin or course of coronary artery LF	✓	✓	✓	✓	⊘
Tetralogy of Fallot LF	⊘	⊘	⊘	⊘	✗
CONGENITAL MALFORMATIONS OF CARDIAC SEPTA *(<2% of exam)*					
Ventricular septal defect LF	✓	⊘	⊘	⊘	⊘
Atrial septal defect	✓	✓	✓	⊘	⊘
Patent foramen ovale	✓	✓	✓	⊘	⊘
Atrioventricular septal defect LF	⊘	⊘	⊘	⊘	✗
CONGENITAL MALFORMATIONS OF PULMONARY AND TRICUSPID VALVES *(<2% of exam)*					
Congenital pulmonary valve stenosis LF	⊘	⊘	⊘	✗	✗
Ebstein anomaly LF	⊘	⊘	⊘	⊘	✗
CONGENITAL MALFORMATIONS OF AORTIC AND MITRAL VALVES *(<2% of exam)*					
Congenital malformations of aortic and mitral valves	✓	✓	✓	✓	⊘
OTHER CONGENITAL MALFORMATIONS OF THE HEART *(<2% of exam)*					
Dextrocardia LF	✗	✗	✗	✗	✗
Congenital heart block LF	✗	✗	✗	✗	✗

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CONGENITAL HEART DISEASE *continued…* *(3% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
CONGENITAL MALFORMATIONS OF THE GREAT ARTERIES *(<2% of exam)*					
Patent ductus arteriosus **LF**	⊘	⊘	⊘	✗	✗
Coarctation of the aorta **LF**	⊘	⊘	⊘	⊘	✗
Aneurysm of the sinus of Valsalva **LF**	✗	✗	✗	✗	✗
Congenital malformation of the aortic arch **LF**	✗	✗	✗	✗	✗
Pulmonary artery malformation **LF**	✗	✗	✗	✗	✗
CONGENITAL MALFORMATIONS OF THE GREAT VEINS *(<2% of exam)*					
Persistent left superior vena cava **LF**	✗	✗	✗	✗	✗
Anomalous pulmonary venous connections **LF**	⊘	⊘	⊘	✗	✗
CONGENITAL DISORDERS WITH CARDIOVASCULAR IMPLICATIONS *(<2% of exam)*					
Congenital disorders with cardiovascular implications	✓	✓	✓	⊘	⊘
EISENMENGER SYNDROME *(<2% of exam)*					
Eisenmenger syndrome **LF**	⊘	⊘	⊘	⊘	⊘

VASCULAR DISEASES *(5% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
CEREBROVASCULAR DISEASES *(<2% of exam)*					
Cerebral infarction, including cardiovascular manifestations	✓	✓	✓	⊘	⊘
Extracranial cervical (carotid and vertebral)	✓	✓	✓	✓	⊘
Subclavian steal syndrome with vertebral artery steal **LF**	⊘	⊘	⊘	⊘	✗
Carotid artery dissection **LF**	⊘	⊘	⊘	⊘	✗

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VASCULAR DISEASES *continued…* *(5% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
DISEASES OF THE ARTERIES, ARTERIOLES AND CAPILLARIES *(3% of exam)*					
Peripheral atherosclerosis	✓	✓	✓	✓	⁄
Aortic aneurysm and dissection	✓	✓	✓	✓	⁄
Raynaud's phenomenon LF	⁄	⁄	⁄	⁄	✗
Thromboangiitis obliterans (Buerger's disease) LF	⁄	⁄	⁄	⁄	✗
Claudication	✓	✓	✓	✓	⁄
Acute limb ischemia LF	✓	✓	✓	✓	⁄
Critical limb ischemia LF	✓	✓	✓	✓	⁄
Atheroembolism LF	✓	✓	✓	⁄	⁄
Septic arterial embolism LF	⁄	⁄	⁄	⁄	✗
Polyarteritis nodosa LF	⁄	✗	✗	✗	✗
Mucocutaneous lymph node syndrome (Kawasaki disease) LF	⁄	✗	✗	✗	✗
Takayasu arteritis LF	⁄	⁄	⁄	✗	✗
Giant cell arteritis with polymyalgia rheumatica LF	⁄	⁄	⁄	⁄	✗
Mesenteric arterial insufficiency LF	⁄	⁄	⁄	⁄	✗
Subclavian steal syndrome with internal mammary artery steal LF	⁄	⁄	⁄	⁄	⁄
Fibromuscular dysplasia LF	✓	✓	✓	✗	✗
DISEASES OF THE VEINS, LYMPHATIC VESSELS, AND LYMPH NODES *(<2% of exam)*					
Deep vein thrombosis	✓	✓	✓	✓	⁄
Portal vein thrombosis LF	✗	✗	✗	✗	✗
Iliac vein compression syndrome (May-Thurner syndrome) LF	⁄	⁄	✗	✗	✗
Varicose veins of the lower extremities	⁄	⁄	⁄	✗	✗
Chronic venous insufficiency	⁄	⁄	⁄	⁄	⁄
Chronic idiopathic venous hypertension LF	✗	✗	✗	✗	✗
Lymphedema LF	⁄	⁄	⁄	✗	✗

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SYSTEMIC HYPERTENSION AND HYPOTENSION *(8.5% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
HYPERTENSIVE DISEASES *(8% of exam)*					
Essential (primary) hypertension	✓	✓	✓	✓	✓
Hypertensive heart disease	✓	✓	✓	✓	✓
Hypertensive chronic kidney disease	✓	✓	✓	⊘	⊘
Severe or resistant hypertension	✓	✓	✓	✓	⊘
Urgent/emergent hypertension	✓	✓	✓	✓	⊘
Secondary hypertension **LF**	✓	✓	✓	⊘	⊘
Hypertension in pregnancy **LF**	⊘	⊘	⊘	⊘	⊘
HYPOTENSIVE DISEASES *(<2% of exam)*					
Hypotensive syndromes	✓	✓	✓	✓	⊘
Drug-induced hypotension	✓	✓	✓	✓	⊘

PULMONARY CIRCULATION DISORDERS *(3% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
PULMONARY EMBOLISM *(<2% of exam)*					
Pulmonary embolism with acute cor pulmonale	✓	✓	✓	✓	⊘
Pulmonary embolism without acute cor pulmonale	✓	✓	✓	✓	⊘
Chronic pulmonary embolism **LF**	✓	✓	✓	⊘	⊘
PULMONARY HYPERTENSION *(<2% of exam)*					
Pulmonary arterial hypertension (WHO Group 1)	✓	✓	⊘	⊘	⊘
Pulmonary hypertension associated with other diseases (WHO Groups 2-5)	✓	✓	✓	⊘	⊘

✓ – ***High Importance***: *At least 88% of questions will address topics and tasks with this designation.*

⊘ – ***Medium Importance***: *No more than 12% of questions will address topics and tasks with this designation.*

✗ – ***Low Importance***: *No questions will address topics and tasks with this designation.*

LF – ***Low Frequency***: *No more than 18% of questions will address topics with this designation, regardless of task or importance.*

SYSTEMIC DISORDERS AFFECTING THE CIRCULATORY SYSTEM *(7% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
MUSCULOSKELETAL AND CONNECTIVE TISSUE *(<2% of exam)*					
Systemic lupus erythematosus LF	⊘	⊘	⊘	⊘	✗
Systemic sclerosis LF	⊘	⊘	⊘	⊘	✗
ENDOCRINE, NUTRITIONAL, METABOLIC, AND HEMATOLOGIC DISORDERS *(4% of exam)*					
Dyslipidemias	✓	✓	✓	✓	⊘
Diabetes	✓	✓	✓	✓	⊘
Obesity	✓	✓	✓	✓	⊘
Electrolyte and endocrine abnormalities	✓	✓	✓	✓	⊘
Hematologic disorders	⊘	⊘	⊘	⊘	⊘
RENAL DISORDERS *(<2% of exam)*					
Renal disorders	✓	⊘	⊘	⊘	⊘
INJURY AND POISONING *(<2% of exam)*					
Toxic effects of alcohol	⊘	⊘	⊘	⊘	✗
Toxic effects of drugs other than alcohol and tobacco LF	⊘	⊘	⊘	⊘	⊘
Toxic effects of tobacco and nicotine	✓	✓	✓	✓	⊘
Anaphylactic shock LF	✓	⊘	✓	⊘	⊘
Angioedema LF	✓	⊘	⊘	⊘	⊘
CARDIO-ONCOLOGY *(<2% of exam)*					
Cardiovascular effect of pharmacological cancer therapy LF	✓	✓	✓	⊘	⊘
Cardiovascular effect of radiation therapy LF	⊘	⊘	⊘	⊘	⊘
Neoplasms					
Malignant neoplasm of the heart and pericardium LF	⊘	⊘	⊘	⊘	✗
Benign neoplasms (including myxoma, fibroma, and fibroelastoma) LF	⊘	⊘	⊘	⊘	⊘