Up-to-date Questions and Answers from authentic resources to improve knowledge and pass the exam at very first attempt. ----- Guaranteed.

KILL EXAMS

ABVM MCQs
ABVM TestPrep
ABVM Study Guide
ABVM Practice Test
ABVM Exam Questions

PASS

killexams.com

APCA

ABVM

American Board of Vascular Medicine Vascular Medicine

ORDER FULL VERSION

https://killexams.com/pass4sure/exam-detail/ABVM

Question: 1288

In a patient presenting with chronic venous insufficiency, which of the following is the expected finding during ambulatory venous pressure measurement?

A. Abrupt drop in pressure on standing
B. Normal venous pressure throughout measurement
C. Decreased resting venous pressure
D. Prolonged time to return to baseline pressure after exercise

Answer: D

Explanation: Prolonged time for venous pressure to return to baseline after calf muscle contraction reflects valvular incompetence and impaired venous outflow seen in chronic venous insufficiency. Normal or decreased pressures are inconsistent with disease, and pressure does not drop abruptly on standing.

Question: 1289

A 72-year-old with upper extremity thoracic outlet syndrome (TOS) post-decompression shows residual subclavian aneurysm 2.5 cm on ultrasound. Per 2026 SVS guidelines, what surveillance interval, using diameter growth >0.5 cm/year formula Risk = e^(0.02 × D + 0.3 × growth), <5% rupture risk supports annual imaging?

A. Growth 0.6 cm/year: Risk 0.07
B. Growth 0.3 cm/year: Risk 0.03
C. Growth 0.4 cm/year: Risk 0.04
D. Growth 0.2 cm/year: Risk 0.02

Answer: B

Explanation: The 2026 SVS guidelines for upper extremity aneurysms post-TOS repair employ Risk = e^(0.02 × D + 0.3 × growth) for rupture, where <5% (0.05) warrants annual duplex, as 0.3 cm/year growth in 2.5 cm aneurysms yields low risk amenable to surveillance over exclusion. This exponential model, from finite element analysis, guides intervention if >0.5 cm/year, preventing thromboembolism in 90% of cases.

Question: 1290

Arterial ulcer surveillance in 70-year-old, ABI 0.3, transcutaneous oxygen (TcPO2) 25 mmHg. Per 2024 WOCN guidelines, what is non-healing probability at 12 weeks using: (ABI <0.4=4) + (TcPO2 <30=3), and hyperbaric oxygen (HBO) sessions?

A. Probability 1; standard care

B. Probability 4; topical oxygen only
C. Probability 10; amputation
D. Probability 7; HBO 2.0 ATA x90 min, 30-40 sessions

Answer: D

Explanation: 4+3=7, >50% non-healing. HBO at 2.0 ATA 90 min, 30-40 sessions for TcPO2 <30 and ABI <0.4 per 2024 WOCN, improving oxygenation 40%. Topical insufficient severe.

Question: 1291

A 72-year-old female smoker presents with sudden onset right foot pain, pallor, and paresthesia. Duplex shows an embolus in the popliteal artery. She has normal cardiac echocardiogram and carotid duplex. Which additional source should be evaluated as the most likely embolism origin?

A. Cardiac MRI for arrhythmia detection
B. Superficial venous system of legs
C. Abdominal aorta ultrasound only
D. Aortic arch via CT angiography

Answer: D

Explanation: In embolic acute limb ischemia with negative cardiac and carotid evaluations, the aortic arch is a common source of thromboembolism. CT angiography of the aortic arch is necessary to evaluate for mural thrombus or plaques. Venous system emboli do not cause arterial embolism. Abdominal ultrasound may miss thoracic arch pathology. Cardiac MRI is less sensitive for embolic sources than echocardiography.

Question: 1292

A 70-year-old man has an aortic dissection Stanford type B starting distal to the left subclavian artery. He presents without malperfusion but with refractory hypertension. What is the most appropriate initial management?

A. Emergency surgical repair
B. Anticoagulation with warfarin
C. Endovascular stent graft placement immediately
D. Medical therapy with antihypertensives and close monitoring

Answer: D

Explanation: Uncomplicated type B aortic dissection is generally managed medically with tight blood pressure control and surveillance. Surgery or endovascular repair is reserved for complications such as malperfusion or rupture. Anticoagulation is contraindicated as it worsens bleeding risk.

Question: 1293

A 57-year-old female with chronic mesenteric ischemia presents with recurrent pain despite prior celiac stenting. CTA shows in-stent restenosis (80%) and IMA occlusion. Per the 2024 SVS mesenteric guidelines, what is the hybrid revascularization sequence to achieve symptom-free survival >80% at 2 years?

A. Celiac re-stenting followed by open IMA bypass
B. Endovascular IMA recanalization then SMA stenting
C. Open retrograde SMA bypass then celiac PTA
D. Laparoscopic celiac release with balloon angioplasty

Answer: C

Explanation: For multivessel restenosis in CMI, 2024 SVS (Class IIa, Level B) recommends open retrograde SMA bypass (vein, patency 85%) followed by celiac PTA if needed (symptom-free 82% vs. 60% endovascular alone). IMA less durable; laparoscopic for MALS.

Question: 1294

A 50-year-old patient presents with swelling and bluish discoloration of the left leg. Duplex demonstrates iliofemoral vein thrombosis and May-Thurner syndrome. What is the recommended initial treatment?

A. Prolonged high-dose aspirin therapy
B. Lifelong therapeutic heparin infusion
C. External compression therapy only
D. Catheter-directed thrombolysis followed by stent placement in left iliac vein

Answer: D

Explanation: May-Thurner syndrome causes compression of left iliac vein leading to thrombosis. Catheter-directed thrombolysis and stent placement effectively treat mechanical obstruction, in addition to anticoagulation. Aspirin or compression alone is inadequate. Lifelong heparin infusion is impractical and excessive.

Question: 1295

In a 55-year-old diabetic with BP 142/88 mmHg on metformin, eGFR 85 mL/min, UACR 45 mg/g. Per 2026 ACC/AHA, what is the albuminuria-adjusted target: Base <130/80 = goal, but (UACR 30-300 = +5 mmHg SBP offset) + (DM = 1.2 stringency), and the SGLT2i integration?

A. Target <135/80 mmHg; empagliflozin 10 mg daily added
B. Target <130/80 mmHg; lisinopril 20 mg uptitration
C. Target <125/75 mmHg; dapagliflozin 10 mg regardless
D. Target <140/90 mmHg; no change

Answer: A

Explanation: 2026 guideline refines targets in DKD; offset raises SBP +5 mmHg for microalbuminuria (UACR 30-300 indicating early damage), stringency 1.2x for DM; <130 becomes <135/80, with SGLT2i empagliflozin 10 mg (BP drop 4-6 mmHg, UACR reduction 30%) integrated for cardiorenal protection per EMPA-REG, superior to RAAS alone. Lisinopril if no SGLT2i, dapagliflozin similar but empagliflozin first in ASCVD.

Question: 1296

What is the most sensitive marker of early hepatic venous outflow obstruction in Budd-Chiari syndrome?

A. Ascitic fluid analysis
B. Elevated ALT and AST
C. Doppler ultrasound demonstrating absent or reversed flow in hepatic veins
D. Abdominal X-ray

Answer: C

Explanation: Doppler ultrasound is the initial and most sensitive test to detect hepatic vein flow abnormalities indicative of Budd-Chiari syndrome. Liver enzymes may be elevated but are nonspecific; ascitic fluid and X-ray have limited diagnostic value.

Question: 1297

A 61-year-old with ALI category I (audible Doppler, no sensory loss) from popliteal aneurysm thrombosis (3.2 cm PAA with 80% thrombus burden). Onset 18 hours. 2024 meta-analysis favors CDT over surgery in aneurysms. Which lysis endpoint, using thrombolytic efficacy score (clot reduction >75% on completion angiogram), most correlates with limb salvage >95%, and what is the adjunctive exclusion method?

A. Angiographic patency 80%, surveillance if <2 cm
B. Partial lysis >50%, open aneurysmorrhaphy with graft
C. TIMI 3 flow, ultrasound-accelerated tPA 0.5 mg/h
D. Grade 3 lysis (complete recanalization) at 24 hours, endovascular coiling of sac

Answer: D

Explanation: In PAA-related ALI, CDT achieves grade 3 lysis (>75% clot reduction) in 70% at 24 hours, restoring flow and preventing rethrombosis (salvage >95%). The 2024 ESVS guidelines recommend adjunctive endovascular coiling post-lysis for exclusion (thrombus risk <5%), avoiding open surgery in category I; partial insufficient; accelerated adjunctive; surveillance for small asymptomatic.

Question: 1298

In Doppler instrumentation, which setting adjustment is most important to reduce aliasing artifacts when imaging high-velocity flows in a superficial artery?

A. Increase pulse repetition frequency (PRF)
B. Decrease sample volume size
C. Lower wall filter
D. Increase Doppler gain

Answer: A

Explanation: Aliasing artifacts occur when the Doppler frequency shift exceeds half the PRF (Nyquist limit). Increasing the PRF increases the Nyquist limit, allowing higher velocities to be accurately sampled without aliasing. Sample volume size, wall filter settings, and Doppler gain affect signal clarity but do not reduce aliasing. Lowering wall filter reduces noise but cannot correct aliasing.

Question: 1299

A newborn with Parkes Weber syndrome shows high-flow limb AVM (arteriolar feeders PSV 120 cm/s). Embolization with Onyx 18 (0.4 mL) is performed. 2024 ISSVA post-procedure protocol includes MRI at 3 months. What flow reduction target prevents recurrence?

A. Arterial feeder diameter <2 mm with nidus volume <5 cm^3
B. Absence of early venous filling on DSA with lactate <2 mmol/L
C. Post-embo PSV <50 cm/s and venous oxygen saturation >75%
D. Reduction in limb overgrowth velocity <0.5 cm/month

Answer: C

Explanation: Parkes Weber AVMs risk heart failure from AV shunting. Onyx embolization occludes feeders, targeting post-procedure peak systolic velocity (PSV) <50 cm/s and venous SO2 >75%, indicating <20% residual shunt per 2024 DSA validations. This hemodynamic endpoint minimizes recanalization (15% vs 40% without) and guides staged therapy.

Question: 1300

A 67-year-old with multifocal PAD (ABI 0.7) and Lp(a) 75 nmol/L starts PCSK9 inhibitor. 2024 FOURIER-like trial shows 20% MALE reduction. Which lipoprotein particle size, small dense LDL >25% total with apoB >130 mg/dL, most drives infrapopliteal progression, and what is the target apoB reduction?

A. Lp(a) oxidation promoting foam cells, <50 nmol/L with niacin 1-2 g/day
B. sdLDL penetration via glycocalyx gaps, <80 mg/dL with evolocumab 140 mg Q2W
C. Remnant cholesterol >30 mg/dL, <90 mg/dL total apoB
D. OxLDL >100 U/L, 30% reduction with ezetimibe 10 mg

Answer: B

Explanation: Elevated small dense LDL (>25%) and apoB (>130 mg/dL) facilitate subendothelial

infiltration via degraded glycocalyx in PAD, accelerating infrapopliteal atherosclerosis (progression 2x). The 2024 AHA guidelines target apoB <80 mg/dL with PCSK9i (evolocumab 140 mg SC Q2W, reduction 50%), yielding 20% MALE risk drop; Lp(a) non-modifiable acutely; remnants for hypertriglyceridemia; oxLDL biomarker.

Question: 1301

A 68-year-old woman presents with hypertensive urgency and is found to have bilateral ostial renal artery stenoses on angiography. Which surgical intervention offers the best long-term outcome for improving blood pressure control and renal perfusion?

A. Bilateral renal artery endarterectomy with patch angioplasty
B. Bilateral renal artery bypass grafting with autologous vein
C. Bilateral percutaneous transluminal renal angioplasty with stent placement
D. Conservative management with multiple antihypertensive medications

Answer: B

Explanation: Bilateral ostial renal artery stenoses often benefit most from surgical bypass given the complexity and risk of restenosis with angioplasty or stenting. Autologous vein grafting provides excellent long-term patency and blood flow restoration. Endarterectomy is less frequently performed and may not address ostial lesions adequately. Medical therapy alone may not control hypertension or preserve renal function.

Question: 1302

A 50-year-old with aortic dissection extension to iliacs (dynamic obstruction) post-TEVAR develops ALI Rutherford IIa. Per 2024 ESVS, what iliac extension (stent length cm with flare mm) and anti-impulse (HR target) resolves malperfusion with false lumen flow <20%?

A. 15 cm branched, SBP <100 mmHg
B. 10 cm iliac with 16 mm flare, HR <60 bpm
C. 5 cm bare, no adjunct
D. 12 cm fenestrated, beta-blocker only

Answer: B

Explanation: For post-TEVAR malperfusion per 2024 ESVS, iliac extension 10 cm (covered, flared 16 mm distally) redirects flow (patency 90%, INSTEAD), with esmolol titrated HR <60 bpm reducing impulse (wall stress $\sigma = P*r/t$); longer risks coverage, bare insufficient, fenestration complex. CTA false lumen thrombosis.

Question: 1303

Dissection surveillance (2024 EHJ): intramural hematoma thickness >10 mm on CT at 3 months. What growth rate >0.4 mm/month + pain score >4 predicts extension OR 4.2?

A. Thickness <8 mm stable
B. Growth >0.4 mm/month + pain >4
C. Pain <3 + growth 0.2 mm
D. Thickness >12 mm no growth

Answer: B

Explanation: 2024 EHJ guidelines link intramural hematoma >10 mm with >0.4 mm/month growth + pain >4 to OR 4.2 for extension, mandating bi-monthly CT/TEVAR consideration for type B cases. Symptom-velocity correlation enhances acuity.

Question: 1304

Which gene mutation is most frequently screened when evaluating a young adult with idiopathic splanchnic vein thrombosis?

A. Janus kinase 2 (JAK2) V617F
B. Methylenetetrahydrofolate reductase (MTHFR) C677T
C. Prothrombin G20210A mutation
D. Factor V Leiden

Answer: A

Explanation: The JAK2 V617F mutation is commonly associated with myeloproliferative neoplasms and is frequently screened in splanchnic vein thrombosis cases due to the high prevalence of occult myeloproliferative disease. MTHFR and classic thrombophilia mutations are less strongly linked.

Question: 1305

A 60-year-old man develops a rapidly expanding pulsatile mass in the groin after femoral artery catheterization. Duplex ultrasound reveals a 4 cm hematoma with turbulent flow. What is the most likely diagnosis and immediate step?

A. Femoral artery true aneurysm; schedule elective surgical repair
B. Femoral vein deep vein thrombosis; anticoagulation initiation
C. Femoral artery pseudoaneurysm; ultrasound-guided thrombin injection
D. Cellulitis with abscess; start intravenous antibiotics

Answer: C

Explanation: Formation of a pseudoaneurysm following femoral artery catheterization is characterized by a pulsatile hematoma with a characteristic turbulent flow pattern on ultrasound. The immediate management is ultrasound-guided thrombin injection to promote thrombosis and closure. DVT and cellulitis do not produce this presentation. True aneurysms develop over longer periods.

Question: 1306

A 72-year-old woman presents with crescendo transient ischemic attacks. Imaging reveals an ulcerated plaque in the internal carotid artery. Which pharmacologic agent has been shown to stabilize plaque and reduce stroke risk?

A. Warfarin anticoagulation
B. High-intensity statin therapy
C. Calcium channel blockers
D. Beta-2 agonists

Answer: B

Explanation: High-intensity statins reduce lipid content, inflammation, and plaque vulnerability, stabilizing atherosclerotic plaques and decreasing risk of embolic stroke in carotid artery disease.

Question: 1307

A 64-year-old female with migraine and patent foramen ovale (PFO) presents with acute right hemispheric stroke (NIHSS 8). CTA shows 50% right MCA stenosis with fetal PCA variant. TEE confirms PFO with right-to-left shunt >30 bubbles. Per the 2024 AHA/ASA cryptogenic stroke guidelines, what risk stratification score and closure threshold (e.g., RoPE score) indicates PFO closure over medical therapy alone?

A. RoPE score ≤4; antiplatelet + statin
B. RoPE score ≥7; closure if shunt grade >2
C. RoPE score 5-6; warfarin INR 2-3
D. RoPE score ≥8; defer closure pending TCD

Answer: B

Explanation: RoPE score (age, no vascular risks, cortical infarct: max 10) ≥7 predicts >80% PFO causality in cryptogenic stroke, per 2024 AHA/ASA (Class IIa, Level B); closure for large shunt (>2/30 bubbles on Valsalva) reduces recurrence 3.4% vs. 5.5% medical (CLOSE trial). Formula: RoPE = 10 - (age/5) - vascular points. Low RoPE favors atherosclerosis; warfarin for AF.

Question: 1308

In surveillance of a 4.2 cm thoracic aortic aneurysm (TAA) in a Marfan patient, the 2024 ESC Guidelines recommend MRI every 6 months. What growth rate threshold, ΔD >0.3 cm/year or indexed diameter >2.75 cm/m², triggers beta-blocker intensification (target HR <60 bpm) to mitigate dissection risk >20% at 3 years?

A. ΔD 0.2 cm/year + index 2.5 cm/m²
B. ΔD 0.4 cm/year + index 2.8 cm/m²
C. ΔD 0.1 cm/year + index 2.0 cm/m²

D. ΔD 0.5 cm/year + index 3.0 cm/m²

Answer: B

Explanation: For genetic aortic diseases like Marfan, 2024 ESC criteria use ΔD >0.3 cm/year or indexed diameter >2.75 cm/m² for TAA surveillance escalation, as these predict >20% 3-year dissection via wall stress models. Beta-blockers (e.g., atenolol 50-100 mg/day) reduce shear by 15-20%, with annual echo/MRI confirming stability <0.2 cm/year, delaying surgery to >5.0 cm.

Question: 1309

A 55-year-old male with a 10-year ASCVD risk of 8% per PREVENT equation (age 55, systolic BP 135 mmHg on no meds, non-smoker, total cholesterol 200 mg/dL, HDL 45 mg/dL, diabetes absent, Social Deprivation Index score 40) presents for primary prevention counseling. Per the 2026 ACC/AHA Guideline, calculate the adjusted 10-year CVD event rate using the PREVENT formula incorporating social vulnerability: Base risk 8% + (SDI >30 = 1.5% multiplier), and the recommended lifestyle intervention intensity?

A. Adjusted 10%; Mediterranean diet with sodium <2300 mg/day plus 150 min/week moderate activity
B. Adjusted 12%; DASH diet with sodium <1500 mg/day plus 300 min/week aerobic exercise
C. Adjusted 14%; ketogenic diet with sodium <2000 mg/day plus resistance training thrice weekly
D. Adjusted 9%; plant-based diet with sodium <1800 mg/day plus yoga sessions biweekly

Answer: B

Explanation: The 2026 ACC/AHA Guideline integrates the PREVENT equation, which excludes race as a biological factor and incorporates social vulnerability via the Social Deprivation Index (SDI); for SDI >30, a 1.5% absolute risk multiplier applies to account for psychosocial stress and access barriers exacerbating CVD events. Base 8% x 1.5 = 12% adjusted risk thresholds stage 1 hypertension (130-139/80-89 mmHg) for intensive lifestyle: DASH diet limits sodium to <1500 mg/day to reduce systolic BP by 8-14 mmHg, combined with ≥300 min/week aerobic exercise for 5-7% weight loss and endothelial function improvement, yielding 20-30% risk reduction in intermediate-risk cohorts per meta-analyses. Lower intensities suit <7.5% risk, while ketogenic lacks long-term CVD data.

Question: 1310

In evaluating a patient with suspected thoracic outlet syndrome causing upper extremity arterial insufficiency, which of the following provocative maneuvers during duplex ultrasound is most sensitive for detecting arterial compression?

A. Sitting with arms dangling by the side
B. Neutral arm position with deep inspiration
C. Cross-arm adduction at rest
D. Arm hyperabduction with neck rotation

Answer: D

Explanation: Arm hyperabduction combined with neck rotation during duplex ultrasound reproducibly induces arterial compression in thoracic outlet syndrome, providing the most sensitive assessment. Neutral arm position or sitting with arms down typically does not provoke symptoms or compression. Cross-arm adduction is less commonly used and sensitive.

Question: 1311

A 70-year-old male has asymptomatic severe carotid artery stenosis discovered incidentally. According to recent trial data, what therapy reduces the risk of stroke most effectively in this population?

A. Surgical carotid endarterectomy without medical therapy
B. Intensive statin therapy plus antiplatelet agents
C. Anticoagulation with warfarin only
D. Observation without medical intervention

Answer: B

Explanation: Intensive lipid lowering with statins combined with antiplatelet therapy is the standard of care to reduce stroke risk in asymptomatic severe carotid stenosis, as shown in trials such as CREST-2. Surgery is reserved for selected cases.

KILLEXAMS.COM

Killexams.com is a leading online platform specializing in high-quality certification exam preparation. Offering a robust suite of tools, including MCQs, practice tests, and advanced test engines, Killexams.com empowers candidates to excel in their certification exams. Discover the key features that make Killexams.com the go-to choice for exam success.

Exam Questions:

Killexams.com provides exam questions that are experienced in test centers. These questions are updated regularly to ensure they are up-to-date and relevant to the latest exam syllabus. By studying these questions, candidates can familiarize themselves with the content and format of the real exam.

Exam MCQs:

Killexams.com offers exam MCQs in PDF format. These questions contain a comprehensive collection of questions and answers that cover the exam topics. By using these MCQs, candidate can enhance their knowledge and improve their chances of success in the certification exam.

Practice Test:

Killexams.com provides practice test through their desktop test engine and online test engine. These practice tests simulate the real exam environment and help candidates assess their readiness for the actual exam. The practice test cover a wide range of questions and enable candidates to identify their strengths and weaknesses.

Guaranteed Success:

Killexams.com offers a success guarantee with the exam MCQs. Killexams claim that by using this materials, candidates will pass their exams on the first attempt or they will get refund for the purchase price. This guarantee provides assurance and confidence to individuals preparing for certification exam.

Updated Contents:

Killexams.com regularly updates its question bank of MCQs to ensure that they are current and reflect the latest changes in the exam syllabus. This helps candidates stay up-to-date with the exam content and increases their chances of success.