



An initiative of the ABIM Foundation

## Laboratory Related Recommendations

### American Academy of Allergy, Asthma & Immunology (AAAAI)

- Don't perform unproven diagnostic tests, such as immunoglobulin G (IgG) testing or an indiscriminate battery of immunoglobulin E (IgE) tests, in the evaluation of allergy.
- Don't routinely do diagnostic testing in patients with chronic urticaria.
- Don't perform food IgE testing without a history consistent with potential IgE-mediated food allergy.

### American Association of Blood Banks (AABB)

- Don't perform serial blood counts on clinically stable patients.
- Don't transfuse more units of blood than absolutely necessary.
- Don't routinely use blood products to reverse warfarin.
- Don't transfuse O negative blood except to O negative patients and in emergencies for women of child-bearing potential with unknown blood group.

### American Association of Clinical Endocrinologists (AACE)

- Don't routinely measure 1,25-dihydroxyvitamin D unless the patient has hypercalcemia or decreased kidney function.
- Don't order a total or free T3 level when assessing levothyroxine (T4) dose in hypothyroid patients.

### American Academy of Dermatology (AAD)

- Don't perform sentinel lymph node biopsy or other diagnostic tests for the evaluation of early, thin melanoma because they do not improve survival.
- Don't use skin prick tests or blood tests such as the radioallergosorbent test (RAST) for the routine evaluation of eczema.

### American Academy of Family Physicians (AAFP)

- Don't order annual electrocardiograms (EKGs) or any other cardiac screening for low-risk patients without symptoms.
- Don't perform Pap smears on women younger than 21 or who have had a hysterectomy for non-cancer disease.
- Don't screen women older than 65 years of age for cervical cancer who have had adequate prior screening and are not otherwise at high risk for cervical cancer.
- Don't screen women younger than 30 years of age for cervical cancer with HPV testing, alone or in combination with cytology.

- Don't routinely screen for prostate cancer using a prostate-specific antigen (PSA) test or digital rectal exam.

#### American Academy of Ophthalmology

- Don't perform preoperative medical tests for eye surgery unless there are specific medical indications.

#### American Academy of Pediatrics (AAP)

- Don't perform screening panels for food allergies without previous consideration of medical history.
- Avoid the use of surveillance cultures for the screening and treatment of asymptomatic bacteriuria.

#### American Association for the Study of Liver Diseases (AASLD)

- Don't repeat hepatitis C viral load testing outside of antiviral therapy.
- Don't routinely transfuse fresh frozen plasma and platelets prior to abdominal paracentesis or endoscopic variceal band ligation.

#### American College of Medical Genetics and Genomics (ACMG)

- Don't order a duplicate genetic test for an inherited condition unless there is uncertainty about the validity of the existing test result.
- Don't order APOE genetic testing as a predictive test for Alzheimer disease.
- Don't order HFE genetic testing for a patient without iron overload or a family history of HFE-associated hereditary hemochromatosis.
- Don't order MTHFR genetic testing for the risk assessment of hereditary thrombophilia.

#### American College of Obstetricians and Gynecologists

- Don't perform routine annual cervical cytology screening (Pap tests) in women 30–65 years of age.
- Don't screen for ovarian cancer in asymptomatic women at average risk.

#### American College of Medical Toxicology (ACMT)

- Don't order heavy metal screening tests to assess non-specific symptoms in the absence of excessive exposure to metals.
- Don't order tests to evaluate for or diagnose "idiopathic environmental intolerances," "electromagnetic hypersensitivity" or "mold toxicosis."
- Don't perform hair or nail testing for "metal poisoning" screening in patients with nonspecific symptoms.

#### American College of Physicians (ACP)

- In patients with low pretest probability of venous thromboembolism (VTE), obtain a high-sensitive D-dimer measurement as the initial diagnostic test; don't obtain imaging studies as the initial diagnostic test.

#### American College of Preventive Medicine (ACPM)

- Don't routinely perform PSA-based screening for prostate cancer.
- Don't perform screening for cervical cancer in low-risk women aged 65 years or older and in women who have had a total hysterectomy for benign disease.

#### American College of Rheumatology (ACR)

- Don't test ANA sub-serologies without a positive ANA and clinical suspicion of immune-mediated disease.
- Don't test for Lyme disease as a cause of musculoskeletal symptoms without an exposure history and appropriate exam findings.
- Don't order autoantibody panels unless positive antinuclear antibodies (ANA) and evidence of rheumatic disease.

#### ACR Pediatric Rheumatology

- Don't test for Lyme disease as a cause of musculoskeletal symptoms without an exposure history and appropriate exam findings.
- Don't perform methotrexate toxicity labs more often than every 12 weeks on stable doses.
- Don't repeat a confirmed positive ANA in patients with established JIA or systemic lupus erythematosus (SLE).

#### American College of Surgeons (ACS)

- Don't perform axillary lymph node dissection for clinical stages I and II breast cancer with clinically negative lymph nodes without attempting sentinel node biopsy.
- Avoid colorectal cancer screening tests on asymptomatic patients with a life expectancy of less than 10 years and no family or personal history of colorectal neoplasia.

#### American Geriatrics Society (AGS)

- Don't recommend screening for breast, colorectal, prostate or lung cancer without considering life expectancy and the risks of testing, overdiagnosis and overtreatment.

#### Society for Post -Acute and Long-Term Care Medicine

- Don't obtain a urine culture unless there are clear signs and symptoms that localize to the urinary tract.
- Don't recommend screening for breast, colorectal or prostate cancer if life expectancy is estimated to be less than 10 years.
- Don't obtain a C. difficile toxin test to confirm "cure" if symptoms have resolved.

#### American Society of Anesthesiologists (ASA)

- Don't obtain baseline laboratory studies in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery – specifically complete blood count, basic or comprehensive metabolic panel, coagulation studies when blood loss (or fluid shifts) is/are expected to be minimal.
- Don't administer packed red blood cells (PRBCs) in a young healthy patient without ongoing blood loss and hemoglobin of >6 g/dL unless symptomatic or hemodynamically unstable.

#### American Society of Clinical Oncology (ASCO)

- Don't perform surveillance testing (biomarkers) or imaging (PET, CT, and radionuclide bone scans) for asymptomatic individuals who have been treated for breast cancer with curative intent.
- Don't perform PSA testing for prostate cancer screening in men with no symptoms of the disease when they are expected to live less than 10 years.
- Don't use a targeted therapy intended for use against a specific genetic aberration unless a patient's tumor cells have a specific biomarker that predicts an effective response to the targeted therapy.

#### American Society for Clinical Pathology (ASCP)

- Don't perform population-based screening for 25-OH-Vitamin D deficiency.
- Don't perform low risk HPV testing.
- Avoid routine preoperative testing for low-risk surgeries without a clinical indication.
- Don't use bleeding time test to guide patient care.
- Don't order an erythrocyte sedimentation rate (ESR) to look for inflammation in patients with undiagnosed conditions. Order a C-reactive protein (CRP) to detect acute phase inflammation.
- Don't test for myoglobin or CK-MB in the diagnosis of acute myocardial infarction (AMI). Instead, use troponin I or T.
- Don't order multiple tests in the initial evaluation of a patient with suspected non-neoplastic thyroid disease. Order thyroid-stimulating hormone (TSH), and if abnormal, follow up with additional evaluation or treatment depending in the findings.

#### American Society of Hematology (ASH)

- Don't transfuse more than the minimum number of red blood cell (RBC) units necessary to relieve symptoms of anemia or to return a patient to a safe hemoglobin range (7 to 8 g/dL in stable, non-cardiac in-patients).
- Don't test for thrombophilia in adult patients with venous thromboembolism (VTE) occurring in the setting of major transient risk factors (surgery, trauma, or prolonged immobility)
- Don't administer plasma or prothrombin complex concentrates for non-emergent reversal of vitamin K antagonists (i.e. outside of the setting of major bleeding, intracranial hemorrhage or anticipated emergent surgery).
- Don't routinely transfuse patients with sickle cell disease (SCD) for chronic anemia or uncomplicated pain crisis without an appropriate clinical indication.
- Don't test or treat for suspected heparin-induced thrombocytopenia (HIT) in patients with a low pre-test probability of HIT.

#### American Society of Nephrology (ASN)

- Don't perform routine cancer screening for dialysis patients with limited life expectancies without signs or symptoms.

#### American Urological Association (AUA)

- Offer PSA screening for detecting prostate cancer only after engaging in shared decision making.
- Don't diagnose microhematuria solely on the results of a urine dipstick (macroscopic urinalysis).

#### Critical Care Societies Collaborative

- Don't order diagnostic tests at regular intervals (such as every day), but rather in response to specific clinical questions. (ABG, chemistry, blood counts)
- Don't transfuse red blood cells in hemodynamically stable, non-bleeding ICU patients with a hemoglobin concentration greater than 7 g/dL.

#### Endocrine Society

- Don't routinely measure 1,25-dihydroxyvitamin D unless the patient has hypercalcemia or decreased kidney function.
- Don't order a total or free T3 level when assessing levothyroxine (T4) dose in hypothyroid patients.

#### HIV Medicine Association

- Avoid unnecessary CD4 tests.
- Don't order complex lymphocyte panels when ordering CD4 counts.
- Don't routinely order testing for glucose-6-phosphate dehydrogenase (G6PD) deficiency for patients who are not predisposed due to race/ethnicity.
- Don't routinely test for CMV IgG in HIV-infected patients who have a high likelihood of being infected with CMV.

#### Infectious Diseases Society of America's (IDSA)

- Avoid testing for a Clostridium difficile infection in the absence of diarrhea.

#### Society of General Internal Medicine (SGIM)

- Don't perform routine general health checks for asymptomatic adults.
- Don't perform routine pre-operative testing before low-risk surgical procedures.
- Don't recommend cancer screening in adults with life expectancy of less than 10 years.

#### Society of Gynecologic Oncology (SGO)

- Don't screen low risk women with CA-125 or ultrasound for ovarian cancer.
- Don't perform Pap tests for surveillance of women with a history of endometrial cancer.

#### Society for Healthcare epidemiology of America

- Don't perform urinalysis, urine culture, blood culture or C. difficile testing unless patients have signs or symptoms of infection. Tests can be falsely positive leading to overdiagnosis and overtreatment.

#### Society of Hospital Medicine (SHM)

- Don't perform repetitive CBC and chemistry testing in the face of clinical and lab stability.
- Avoid transfusions of red blood cells for arbitrary hemoglobin or hematocrit thresholds and in the absence of symptoms of active coronary disease, heart failure or stroke

#### Society for maternal fetal medicine

- Don't do an inherited thrombophilia evaluation for women with histories of pregnancy loss, intrauterine growth restriction (IUGR), preeclampsia and abruption.
- Don't offer noninvasive prenatal testing (NIPT) to low-risk patients or make irreversible decisions based on the results of this screening test.
- Don't perform antenatal testing on women with the diagnosis of gestational diabetes who are well controlled by diet alone and without other indications for testing.
- Don't order serum aneuploidy screening after cfDNA aneuploidy screening has already been performed.
- Don't perform maternal serologic studies for cytomegalovirus and toxoplasma as part of routine prenatal laboratory studies.

#### Society for Vascular Medicine (SVM)

- Don't do work up for clotting disorder (order hypercoagulable testing) for patients who develop first episode of deep vein thrombosis (DVT) in the setting of a known cause.