



Choosing Wisely: Laboratory Tests

MetroPlus is committed to helping our providers deliver the best level of service and care to our members. Below are recommendations from the American Society for Clinical Pathology's *Choosing Wisely* Campaign that identified non-evidence based and overutilized laboratory tests in the general population. We highly recommend that you review and use this information. For more information, please visit: <https://www.choosingwisely.org>.

Amylase

Do not test for amylase in cases of suspected acute pancreatitis. Instead, test for lipase.

Current guidelines and recommendations indicate that lipase should be preferred over total and pancreatic amylase for the initial diagnosis of acute pancreatitis and that the assessment should not be repeated over time to monitor disease prognosis. Repeat testing should be considered only when the patient has signs and symptoms of persisting pancreatic or peripancreatic inflammation, blockage of the pancreatic duct or development of a pseudocyst. Testing both amylase and lipase is **unnecessary** because it increases costs while only marginally improving diagnostic efficiency.

Bottom Line: If you suspect, pancreatitis, order a serum lipase.

Folic acid, red blood cell or serum

Do not order red blood cell or serum folate levels at all.

In adults, consider folate supplementation instead of serum folate testing in patients with macrocytic anemia. With the mandatory fortification of foods (with processed grains) with folic acid incidence of folate deficiency has decline dramatically. In rare cases of folate deficiency, simply treating with folic acid is a more cost-effective approach than blood testing.

Helicobacter pylori antibody

Do not request serology for H. pylori. Use the stool antigen or breath tests instead.

Serologic evaluation of patients to determine the presence/absence of Helicobacter pylori (H. pylori) infection is no longer considered clinically useful. Alternative noninvasive testing methods (e.g., the urea breath test and stool antigen test) exist for detecting the presence of the bacteria

and have demonstrated higher clinical utility, sensitivity, and specificity. Finally, several laboratories have dropped the serological test from their menus, and many insurance providers are no longer reimbursing patients for serologic testing.

Erythrocyte Sedimentation Rate (ESR) in patients with undiagnosed conditions

Don't order an erythrocyte sedimentation rate (ESR) to look for inflammation in patients with undiaqnosed conditions.

Thyroxine, total; Thyroxine, free; Triiodothyronine T3 (TT-3) in the initial evaluation of a patient with suspected, non-neoplastic thyroid disease, and routine screening Thyroid Stimulating Hormone testing

Don't order a total or free T3 level when assessing levothyroxine (T4) dose in hypothyroid patients or when you are trying to determine if someone is hypothyroid or hyperthyroid. Don't order TSH for routine screening.

T4 is converted into T3 at the cellular level in virtually all organs. Intracellular T3 levels regulate pituitary secretion and blood levels of TSH, as well as the effects of thyroid hormone in multiple organs. However, T3 levels in blood are not reliable indicators of intracellular T3 concentration. Compared to patients with intact thyroid glands, patients taking T4 may have higher blood T4 and lower blood T3 levels. Therefore, in most patients all you need is a TSH to determine the correct dosing of levothyroxine.

Bottom Line: Order a TSH to monitor and adjust levothyroxine dosing. Don't order TSH for routine screening; only for someone in whom you clinically suspect hypothyroidism or hyperthyroidism.

Vitamin D, including fractions

Don't routinely measure 1,25-dihydroxyvitamin D unless the patient has hypercalcemia or decreased kidney function.

Many practitioners become confused when ordering a vitamin D test. Because 1,25-dihydroxyvitamin D is the active form of vitamin D, many practitioners think that measuring 1,25-dihydroxyvitamin D is an accurate means to estimate vitamin D stores and test for vitamin D deficiency, which is incorrect.

Prealbumin

Do not use prealbumin test to screen for or diagnose malnutrition.

Studies have shown that as a nutritional marker, prealbumin is not specific enough to show changes in nutritional status; additionally, it is not sensitive to detection of malnutrition at an early stage. Furthermore, improvement in nutritional intake have not resulted in notable change in prealbumin. Instead, consider a multidisciplinary approach that includes consulting with dieticians to better understand the patient's medical history and to ensure the selected metrics are used appropriately for diagnosis and documentation. [Click here for more information.](#)

Ammonia

Do not use an ammonia test, in patients with chronic liver disease, to measure blood ammonia level because normal levels do not rule out hepatic encephalopathy.

[Click here for more information.](#)