Laboratory Test Guide for Insurance Underwriting

Did your case start out great until the lab results came in?

Be more informed by accessing our helpful glossaries of terms for blood chemistry and urine. These terms will help you speak even more intelligently to your clients.

Blood Chemistry &Urine

Blood Chemistry

Albumin

Albumin is the largest portion of total serum protein. Decreased serum albumin can indicate many disorders, including advanced liver disease.

Alkaline Phosphatase

Alkaline Phosphatase is an enzyme found primarily in the liver and bones. Elevated levels may indicate the presence of bone disorders as well as a variety of lever and bile duct diseases.

Bilirubin Total

Total Bilirubin levels that are abnormally high may occur in individuals with liver and gallbladder disease, sometimes producing jaundice.

BUN

Blood Urea Nitrogen (BUN) is an end-product of metabolism. BUN levels are used to detect the presence of kidney diseases.

Cholesterol/HDL

Total Cholesterol/HDL Ratio is a predictor of coronary artery disease. A ratio of 4.5 or less is associated with lower risk of heart disease.

Creatinine

Creatinine is a waste product released from muscle tissue and is excreted from the kidneys. Like BUN, creatinine measurements also are used to screen for kidney disorders.

Fructosamine

Fructosamine measures 'glycated serum proteins'. Simply stated, Fructosamine measures a person's average blood sugar concentration over the past two to three weeks. These levels can help detect individuals with diabetes.

GGT

Gamma Glutamyl Transpeptidase (GGT, GGTP) is an enzyme commonly included in the group of results called the liver function tests. It may be elevated in a number of conditions affecting the liver including alcoholism, cirrhosis, hepatitis, carcinoma, cholestasis, obstructive jaundice, and hepatotoxicity.

Globulin

Globulin is a major component of serum proteins. It has many functions including maintenance of the immune system. Abnormal globulin levels, both elevated and decreased, may indicate infections, allergic states, immune disorders and other diseases.

Glucose

Glucose is the main source of energy for living organisms. The most important cause of elevated glucose is diabetes mellitus, but other impairments can also elevate glucose levels in the blood and urine.

HDL

High Density Lipoprotein (HDL) is associated with protection against coronary artery disease. The quantity of HDL as well as the ratio of HDL to total cholesterol is important in determining one's risk of coronary artery disease. Markedly elevated HDL also may indicate heavy alcohol intake.

LDL

Low-Density Lipoprotein (LDL) is associated with an increased risk of coronary artery disease. The level of LDL is important in determining a person's risk of coronary artery disease.

LDL/HDL

LDL/HDL Ratio is calculated using total cholesterol, HDL and triglycerides measurements. It is an accurate predictor of coronary artery disease. The lower the LDL/HDL ratio, the less risk of coronary problems.

SGOT (AST)

Aspartate aminotransferase (SGOT, AST) is an enzyme found in the liver and in cardiac and skeletal muscle. Elevated levels can indicate liver and muscle disorders.

SGPT (ALT)

Alanine Aminotransferase (SGPT, ALT) is an enzyme found in muscle, cardiac and liver cells. Elevated levels commonly occur with liver disease and are often proportional to the degree of disease.

Total Cholesterol

Total Cholesterol is a primary risk factor for coronary artery disease which can be controlled. Elevated cholesterol is associated with atherosclerosis and heart attacks. Abnormal cholesterol levels may also indicate other disorders in the body.

Total Protein

Total Protein in serum includes two major components albumin and globulin. Its measurement assesses the body's ability to maintain its chemical balance.

Triglycerides

Triglycerides are fats that provide a major reserve of energy for the body. Increases in triglycerides and other fats (lipids) are used to help predict the risk of coronary artery disease. Ideally, triglycerides should be measured after an overnight fast.

Urine

Cotinine

Cotinine is the major metabolite of nicotine. This test, which can be performed on both urine and serum, distinguishes tobacco users from non-tobacco users.

Creatinine

Creatinine is a product released from muscle tissue and is excreted from the kidneys. Creatinine measurements also are used to screen for kidney disorders.

Glucose

Glucose is the main source of energy for living organisms. The most important cause of elevated glucose is diabetes mellitus, but many other impairments can also elevate glucose levels in the blood and urine.

Granular Casts

Granular Casts are protein masses that form in the kidney and are excreted through the urine. Granular casts are used in detecting inflammation or hemorrhaging.

Hyaline Casts

Hyaline Casts are another form of protein mass that are important in detecting kidney or heart disease.

Protein

Protein is a combination of complex amino acids that make up our body cells. Abnormal cell levels may indicate the presence of kidney disease.

Protein/Creatinine Ratio

Protein/Creatinine Ratio is more specific than an isolated protein measurement. This ratio can help determine whether the protein is elevated due to possible disease or urine concentration.

Red Blood Cells

Red Blood Cells are not typically carried in urine. A higher than average reading could indicate the presence of kidney diseases. The exception is menstruating females.

Specific Gravity

Specific Gravity is used to check renal or kidney functions. Presence of glucose or protein may cause higher than expected readings.

White Blood Cells

White Blood Cells are sometimes present in urine samples. The importance of detecting white blood cells is to check the presence of a urinary tract infection or inflammation of the urinary tract.