

Performance of the vast majority of Hematology, Coagulation, Urinalysis, Clinical Chemistry and Toxicology testing procedures is conducted in the CORE LABORATORY - an advanced, highly automated area where whole blood, serum, plasma, urine and other biological fluid specimens are tested for a comprehensive menu of state-of-the-art laboratory procedures.

Significant testing procedures for Clinical Chemistry and Toxicology includes panels currently approved by the Centers for Medicare and Medicaid Services: Basic Metabolic Panel; Comprehensive Metabolic Panel; Liver Function Panel; Renal Function Panel; and Electrolyte Panel. Other key tests include the Lipid Profile (Cholesterol, Triglyceride, HDL-Cholesterol and LDL-Cholesterol), major markers of cardiovascular disease and risk [such as Troponin I, Myoglobin and Beta-type natriuretic peptide (commonly referred to as BNAT or BNP)], critical care analytes, beta-HCG, and significant therapeutic drug levels. Urinary toxicology screens for major drugs of abuse (and/or key metabolites) are also performed.

The cornerstones of Hematology testing are analyses of the complete blood count (CBC) and the differential (DIFF). These include evaluation of: (1) white blood cell count and differential with percentage and absolute value given for the leukocyte components; (2) circulating erythrocytes by means of hemoglobin, hematocrit, red blood cell count, and red blood cell indices; and (3) measurement of platelet concentration by count and/or estimation. Morphological variations and changes of cellular constituents are reported.

Alteration of any aspect of the hemostatic mechanism may cause abnormal bleeding in a wide variety of familial and acquired disorders. These defects may be differentiated by a profile of significant Coagulation laboratory tests that includes PT, PTT, Fibrinogen, FDP, and D-Dimer for monitoring anticoagulant therapy.

Urinalysis consists of several physiological measurements and microscopic examination of urinary sediment. Urinalysis may be performed to screen for the detection of various endocrine or metabolic abnormalities, to gain useful information concerning the presence or absence of renal and other diseases, or to pinpoint the cause of a disease as well as the efficacy of treatment.

Fluid Analysis is performed using approved sterile body fluids from selected body cavities under normal conditions. In diverse disorders and disease processes, the quantity of these fluids may increase significantly, along with occurrence of cells and other structures. Fluid specimens aspirated from different anatomical sights, i.e., lung, peritoneum, and pericardia, can be analyzed for gross physical examination, total cell count, microscopic examination and other special clinically relevant testing.