Blood Urea Nitrogen (BUN)

Test: In vitro test for the quantitative determination of urea/nitrogen (BUN).

Submission Criteria: Specimen: Serum (preferred) or Plasma: Li-heparin (Do not use ammonium heparin)
Minimum Volume: 2 mL
Container: Gold-top tube

Storage and Stability:

Unseparated from cells:	2 hours
Separated from cells:	7 days at 20-25ºC
	7 days at 4-8ºC
	365 days at -20ºC

Rejection Criteria: Rejection criteria include but are not limited to:

1. Specimen containing fibrin or clots.
2. Excessive platelet clumping
3. Leaking specimens
4. Substandard mixing or collection
5. Expired or improperly stored collection tubes
6. Improperly filled tubes based on collection tube manufacture's guidelines.
7. Contaminated specimens (IV fluid, foreign particles, etc.)
8. Specimens not analyzed within the appropriate time frame.
9. Samples not shipped at appropriate temperature. Samples without two proper identifiers or samples having identifiers that do not match the electronic or paper lab requisition.

Turnaround Time: 1 day

Clinical Significance: Determination of blood urea nitrogen is the most widely used screening test for renal function. Elevated blood urea nitrogen concentrations are seen in inadequate renal perfusion, shock, diminished blood volume, chronic nephritis, and urinary tract obstruction.

Reference Ranges:

Male		Female	
Age Range	BUN Levels	Age Range	BUN Levels
1-17 years	7-20 mg/dL	1-17 years	7-20 mg/dL
≥ 18 years	8-24 mg/dL	≥ 18 years	6-21 mg/dL

**Reference values have not been established for patients who are < 12 months.

Method: Kinetic test with urease and glutamate dehydrogenase.

Platform: Roche/Hitachi Cobas c502

CPT Code: 84520