STAT: Amino Acid Profile, Plasma

**Condition Description**

Plasma amino acid analysis will detect specific amino acid disorders such as phenylketonuria (PKU), maple syrup urine disease (MSUD), urea cycle defects, non-ketotic hyperglycinemia, and homocystinuria. Quantitative analysis of amino acids can also be performed to monitor established patients diagnosed with metabolic disorders. Plasma amino acid values are compared to age-matched normal values.

**Indications**

This test is indicated in the case of:

- Patients experiencing a metabolic crisis.
- Evaluation of patients with signs of a possible metabolic condition, such as lethargy, vomiting, and failure to thrive.
- Monitoring known metabolic patients who have been hospitalized and for which a rapid analysis is essential.
- Infants with a positive newborn screening result indicative of a metabolic disorder.

**Methodology**

Quantitative ion exchange chromatography, reported as micromoles/L.

**Detection**

This test is very sensitive for specific amino acid disorders, but detection can also be sensitive to the clinical and nutritional status of the patient.

**Specimen Requirements**

*Submit only 1 of the following specimen types*

**Type: Plasma**

**Specimen Requirements:**
- Sodium Heparin (Green Top)
- 1-2 ml

Sample should be collected while fasting or 2-4 hours post prandial. Centrifuge to separate plasma and freeze.

**Specimen Collection and Shipping:**
- Ship frozen sample on dry ice with overnight delivery.

**Special Instructions**

Please indicate any medications or dietary changes on the test requisition form.

**STAT TESTING MUST BE COORDINATED WITH AND PREAPPROVED BY ONE OF THE DIRECTORS IN THE BIOCHEMICAL GENETICS LABORATORY. Please call 855-831-7447.**

**Related Tests**

- STAT Organic Acids Quantitative Analysis (BOAST)
- STAT Acylcarnitine Profile (BARST)