

Notification Date: March 29, 2021 Effective Date: April 29, 2021

# Cyclic Adenosine Monophosphate (cAMP), Urinary Excretion, Serum and Urine

Test ID: CARU

# **Useful for:**

Differential diagnosis of hypercalcemia

Adjunct to serum parathyroid hormone measurements, especially in the diagnosis of parathyroid hormone resistance states, such as pseudohypoparathyroidism

### **Profile Information:**

| Test ID | Reporting Name                | Available Separately | Always Performed |
|---------|-------------------------------|----------------------|------------------|
| ACREA   | Creatinine, S                 | Yes (Order CRTS1)    | Yes              |
| CAMP    | Cyclic Amp, Urinary Excretion | No                   | Yes              |
| CRETR   | Creatinine, Random, U         | Yes (order RCTUR)    | Yes              |

# Methods:

ACREA, CRETR: Enzymatic Colorimetric Assay

CAMP: High-Performance Liquid Chromatography (HPLC)

## **Reference Values:**

CYCLIC AMP

1.3-3.7 nmol/dL of glomerular filtrate

CREATININE, SERUM

Males

0-11 months: 0.17-0.42 mg/dL 1-5 years: 0.19-0.49 mg/dL 6-10 years: 0.26-0.61 mg/dL 11-14 years: 0.35-0.86 mg/dL > or =15 years: 0.74-1.35 mg/dL

### **Females**

0-11 months: 0.17-0.42 mg/dL 1-5 years: 0.19-0.49 mg/dL 6-10 years: 0.26-0.61 mg/dL 11-15 years: 0.35-0.86 mg/dL > or =16 years: 0.59-1.04 mg/dL

# CREATININE, URINE

No reference values apply. Interpret with other clinical data.

# **Specimen Requirements:**

Both serum and urine are required. Serum must be obtained at time of urine collection.

Specimen Type: Serum

Container/Tube:
Preferred: Red top
Acceptable: Serum gel
Specimen Volume: 1 mL

Collection Instructions: Label specimen as serum.

Specimen Type: Urine

**Supplies:** Urine Container, 60 mL (T313) **Container/Tube:** Plastic urine container

**Specimen Volume:** 16 mL Collection Instructions:

1. Collect a random urine specimen.

2. Label specimen as urine.

# **Specimen Stability Information:**

| Specimen Type | Temperature              | Time    |
|---------------|--------------------------|---------|
| Serum         | Refrigerated (preferred) | 7 days  |
|               | Frozen                   | 90 days |
| Urine         | Refrigerated (preferred) | 28 days |
|               | Frozen                   | 28 days |

#### Cautions:

Parathyroid suppression (hypoparathyroidism) does not lower urinary adenosine cyclic 3',5'-monophosphate (c AMP) excretion to definitely subnormal values.

### **CPT Code:**

82030

82570

82565

**Day(s) Setup:** Wednesday **Analytic Time:** 2 days

# Questions

Contact Brandon DeBoom, Laboratory Technologist Resource Coordinator at 800-533-1710.