

HOTLINE: Effective May 20, 2019

0025037 **COBALT S** Cobalt, Serum or Plasma

Specimen Required: Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician).

Collect: Royal Blue (No Additive) or Royal Blue (K2 EDTA), or Royal Blue (Na2 EDTA).

Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 2 mL serum or plasma to an ARUP Trace Element-Free Transport Tube (ARUP supply #43116) available online through eSupply using ARUP Connect<sup>TM</sup> or contact ARUP Client Services at (800) 522-2787. (Min: 0.5 mL)

Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated or frozen.

Unacceptable Conditions: Specimens collected in containers other than specified. Specimens transported in containers other than specified.

Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Indefinitely

Interpretive Data: Elevated results may be due to skin or collection-related contamination, including the use of a noncertified metal-free collection/transport tube. If contamination concerns exist due to elevated levels of serum/plasma cobalt, confirmation with a second specimen collected in a certified metal-free tube is recommended.

Serum cobalt levels can be used in the assessment of occupational exposure or toxic ingestion. Symptoms associated with cobalt toxicity vary based on route of exposure, and may include cardiomyopathy, allergic dermatitis, pulmonary fibrosis, cough and dyspnea.

Whole blood is the preferred specimen type for evaluating metal ion release from metal-on-metal joint arthroplasty. Serum cobalt levels may be increased in asymptomatic patients with metal-on-metal prosthetics and should be considered in the context of the overall clinical scenario.

See Compliance Statement B: www.aruplab.com/CS

**HOTLINE NOTE:** Remove information found in the Note field.