TEST CHANGE

Cobalt, Serum or Plasma

0025037, COBALT S

Specimen Requirements:	
Patient Preparation:	Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential~~non-essential~~ over-the-counter medications (upon the advice of their physician).
Collect:	Royal blue (no additive), royal~~No Additive), Royal~~ blue (K2EDTA), or r~~R~~oyal blue (NaHep).
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(TM) or contact ARUP Client Services at ~~(~~800~~-~~) ~~522-2787.~~ (Min: 0.5 mL). Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube.~~)~~
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.
Remarks:	
Stability:	Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Indefinitely
Methodology:	Quantitative Inductively Coupled Plasma-Mass Spectrometry
Performed:	Sun-Sat
Reported:	1-3 days
Note:	
CPT Codes:	83018
New York DOH Approval Status:	This test is New York DOH approved.

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.

Serum cobalt levels can be significantly higher in patients with metal-on-metal total hip replacement implants than in control patients without metal implants. 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. Whole blood is the specimen type recommended by the U.S. Food and Drug Administration for assessing the risks of metal-on-metal hip implants in symptomatic patients.

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.~~

Reference Interval:

Less than or equal to 1.0 µg/L