



**PLATINUM, SERUM**  
**Test ID: PTSE**

**USEFUL FOR:** Monitoring platinum levels in patients receiving cisplatin or other platinum-containing drugs.

**METHODOLOGY:** Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)

**REFERENCE VALUES:**

Cisplatin Infusion, Peak: 0.6-1.8 mcg/mL  
Cisplatin Infusion, Trough: 0.1-0.4 mcg/mL  
Unexposed: <0.04 mcg/mL

**SPECIMEN REQUIREMENTS:**

**Collection Container/Tube:** Plain, royal blue-top Monoject trace element blood collection tube, product #8881-307006 (Supply T184)

**Submission Container/Tube:** 7-mL Mayo metal-free, screw-capped, polypropylene vial (Supply T173)

**Specimen Volume:** 1 mL

**Collection Instructions:**

1. Allow the specimen to clot for 30 minutes; then centrifuge the specimen to separate serum from the cellular fraction.
2. Remove the stopper. Carefully pour specimen into a Mayo metal-free, polypropylene vial, avoiding transfer of the cellular components of blood. Do not insert a pipet into the serum to accomplish transfer, and do not ream the specimen with a wooden stick to assist with serum transfer.
3. See Metals Analysis-Collection and Transport in Special Instructions for complete instructions.

**Additional Information:** High concentrations of gadolinium and iodine are known to interfere with most metals tests. If gadolinium- or iodine-containing contrast media has been administered, a specimen should not be collected for 96 hours.

**SPECIMEN STABILITY INFORMATION:**

Specimen Type	Temperature	Time
Serum	Refrigerated (preferred)	30 days
	Ambient	30 days
	Frozen	30 days

**CAUTIONS:** Platinum concentrations maintained  $>1.8$  mcg/mL can induce neutropenia, and renal failure if co-administered with nephrotoxic antibiotics. The dose-limiting toxicity of carboplatin in leukemia patients was prolonged neutropenia. Other toxicities include renal failure, particularly in the setting of nephrotoxic antibiotics and amphotericin. Interpretation requires knowledge of the time of serum collection relative to dosing. Peak platinum concentration is achieved within 30 minutes of the end of infusion, while the trough platinum concentration occurs just before the next dose.

**FEE:** Please contact your Regional Manager for your account's fee information.

**CPT CODE:** 83789

**DAY(S) SET UP:** Tuesdays; 3 p.m.

**ANALYTIC TIME:** 1 day

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager or  
Jim Nielsen, MML Laboratory Technologist Resource Coordinator  
Telephone: 800-533-1710