

OSMOLALITY
URINE/
SERUM/
PLASMA

Orderable - OSMU / OSMS

Turnaround Time: 2 hours

STAT: 1 hour

Specimen:

Serum/Plasma:
4.5 mL Green or 5 mL Gold top Vacutainer tube
Urine:
Random urine collected in a 10 mL yellow top urine tube with no additive
Pediatric:
0-2 years: 1 mL Red Microtainer 2-10 years: 2 mL Red top tube



Laboratory:
Core Lab



Requisition:
GENERAL LABORATORY
REQUISITION



Method of Analysis:
Freezing point
depression.



Test Schedule:
As required

Collection Information:

Collect urine sample in a 10 mL yellow top urine tube with no additive.

Collect blood aseptically in a Vacutainer tube.

A minimum volume of 1 mL is required for testing.

Reference Ranges:

Urine:	Serum/Plasma:
300-900 mOsm/Kg	275-295 mOsm/Kg

Interpretive Comments:

Useful in suspected poisoning with alcohol, methanol, ethylene glycol, acetone, isopropanol, diethyl ether or paraldehyde.

Comparing serum and urine osmolalities may help to determine the cause of polyuria, to diagnose SIADH and to distinguish 'pre-renal' from 'renal' causes of impaired renal function.