

OSMOLALITY
URINE/
SERUM/
PLASMA

Orderable - OSMU / OSMS

Turn Around Time: 2 hours

STAT: 1 hour

Specimen:

Random urine collected in a sterile container or 5 mL Gold or 4.5 mL Green top Vacutainer

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.
Advanced Micro
Osmometer 3320 (@SJH)
and Advanced
Instruments A20
Automated Osmometer
(@UH/VH).



Test Schedule:
As required

Collection Information:

Collect urine sample in a sterile container.

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.