Lab Dept:	**Microbiology/Virology**
Test Name:	**UREAPLASMA PCR**

General Information

Lab Order Codes:	UREP
Synonyms:	PCR, *Ureaplasma urealyticum: Ureaplasma* PCR
CPT Codes:	87798 x2– Infectious agent detection by nucleic acid (DNA or RNA), amplified probe technique
Test Includes:	Rapid, sensitive PCR analysis of submitted specimen for detection of *Ureaplasma urealyticum* and *Ureaplasma parvum* reported as positive or negative.

Logistics

Lab Testing Sections:	Microbiology – Sendouts
Referred to:	Mayo Medical Laboratories (Test# 60758/URRP)
Phone Numbers:	MIN Lab: 612-813-5866
	STP Lab: 651-220-6555
Test Availability:	Daily, 24 hours
Turnaround Time:	3 - 4 days
Special Instructions:	**Specimen site** and **date/time of collection** are required for specimen processing.

Specimen

Specimen Type:	**Urine, Kidney Stones** **Fluids:** Amniotic Fluid, Prostatic Secretions, Respiratory Specimens (<3 months old), Semen, Reproductive Drainage/fluid, Pelvic or Synovial Fluid **Swab Specimens:** Cervix, Urethra, Vagina, Urogenital **Tissue** (placenta, products of conception, genitourinary **Plasma:** EDTA derived **Whole blood:** EDTA See Collection for detailed information
Container:	Sterile container or transport swabs **Note:** Wooden shaft, cotton swabs are not acceptable. **Plasma or Whole Blood**: Lavender (EDTA) top tube
Draw Volume:	Urine: 10 mL (Minimum: 2 mL) Fluids: 2 mL (Minimum: 1 mL) Tissue: 5 mm fresh tissue **Plasma:** 3 mL blood in Lavender (EDTA) top tube **Whole blood:** 1 mL blood Lavender (EDTA) top tube Other specimen types are collected with transport swabs.
Collection:	**Swab specimens: Do not** collect specimens on wooden shaft swabs because the shaft is toxic to these organisms. **Cervical, Vagina, or Urethral Specimens:** **1.** Obtain specimen from infected site. **2.** Collect vaginal or throat specimen by swabbing back and forth over the mucosa to maximize recovery of cells. Collect urethra and cervical specimen by inserting swab 1 cm to 3 cm and rotating 360 degrees. **3.** Place the swab back into the swab cylinder. **4**. Deliver to Laboratory immediately. **Tissue:** **1.** Collect 5 mm fresh tissue. **2.** Place in sterile container/ **3.** Deliver to Laboratory immediately. **Lab Staff:** **1.** Write the specimen source on the label. **2.** Send specimen refrigerated. Maintain sterility and forward promptly.

Urine: Clean catch, Mid-stream specimen:

Males:
1. Clean glans with soap and water.
2. Rinse area with wet gauze pads.
3. While holding foreskin retracted, collect the first 2-10 mL from urine stream in a sterile container.
4. Send specimen to lab.

Lab Staff:
1. Maintain sterility, refrigerate specimen and forward promptly.

Females:
1. Thoroughly clean urethral area with soap and water.
2. Rinse area with wet gauze pads.
3. While holding labia apart, collect the first 2-10 mL from urine stream in a sterile container.
4. Send specimen to lab.

Lab Staff:
1. Maintain sterility, refrigerated specimen and forward promptly.

Amniotic Fluid, Prostatic Secretions, Respiratory Specimens (<3 months old), Semen, Reproductive Drainage/fluid or Synovial Fluid:

1. Collect 2 mL specimen in a sterile container and deliver to laboratory immediately.

Lab Staff:
1. Write the specimen source on the label.
2. Send specimen refrigerated. Maintain sterility and forward promptly.

Plasma: Routine venipuncture

Lab Staff:
1. Centrifuge specimen, maintain sterility and transfer a 1 mL aliquot to a sterile tube, refrigerate specimen and forward promptly.

Whole blood: Routine venipuncture

Lab Staff:
1. DO NOT centrifuge, specimen should remain in original collection container, refrigerate specimen and forward promptly.

Transport/Storage: Transport to the laboratory immediately at refrigerated temperature. Specimen source is required.

Note: Swabs and Fluids stored in M5 transport media will be accepted and tested, but the preferred specimen is the direct specimen without transport media.

Sample Rejection:	Specimen not submitted in appropriate transport container; improperly labeled specimen; insufficient volume; external contamination; warm specimens.Cotton or alginate-tipped swabs; transport swabs containing gel or charcoal; formalin-fixed and/or paraffin embedded tissues; E-Swab; Port-a-cul tube; anaerobic fluid vials; or dry swab. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

Interpretive

Reference Range:	Negative (reported as positive or negative) for *Ureaplasma urealyticum* Negative (reported as positive or negative) for *Ureaplasma parvum*
Limitations:	Interfering substances may affect the accuracy of this assay; results should always be interpreted in conjunction with clinical and epidemiological findings.
Methodology:	Real-time Polymerase Chain Reaction (PCR) Using LightCycler and Fluorescent Resonance Energy Transfer (FRET)
Additional Info:	Formally known as *Mycoplasma* T-stain, *Ureaplasma urealyticum* plays a role in some male and female genital tract disease and infertility problems. It can infect the lungs of infants because of the birth process and may be found in products of stillbirth and spontaneous abortion. *U. urealyticum* has been recovered from the bloodstream of women with postpartum fever. It may be associated with pneumonia in immunocompromised patients. This organism is also present in the upper respiratory tract and genital tract of healthy and sexually inactive individuals, which complicates the interpretation of its significance. Nevertheless, *Ureaplasma urealyticum* has been associated with cases of nongonococcal urethritis.
References:	Mayo Medical Laboratories Web Page November 2014
Updates:	3/25/2013: *Ureaplasma urealiticum* and *Ureaplasma parvum* not reported individually. 9/30/2015: Addition of Plasma and Whole Blood as acceptable specimen sources.