Lab Dept:	**Microbiology**
Test Name:	**UREAPLASMA PCR (NON-BLOOD)**

General Information

Lab Order Codes:	UREP
Synonyms:	PCR, *Ureaplasma urealyticum* and *Ureaplasma parvum:* Ureaplasma PCR; Ureaplasma species, Molecular Detection, Specimen Varies
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 Clinic Laboratories (MML Test: URRP)
Phone Numbers:	MIN Lab: 612-813-5866 STP Lab: 651-220-6555
Test Availability:	Daily, 24 hours
Turnaround Time:	3 - 4 days. Test performed Monday through Friday
Special Instructions:	**Specimen site** and **date/time of collection** are required for specimen processing.

Specimen

Specimen Type:	**Urine, Kidney Stones** **Fluids:** Amniotic, Bronch Washing/Lavage, Nasal Washings (only infants <3 months old), Pelvic, Pericardial, Peritoneal, Pleural, Prostatic Secretions, Semen, Sputum, Reproductive Drainage/fluid, Synovial Fluid, Tracheal Secretions **Swab Specimens:** Vaginal, cervix, urethra, urogenital, chest/mediastinal; bronchus or upper respiratory sources (only infants <3 months: nasopharynx, nose, throat)

Tissue: placenta, products of conception, urogenital, respiratory, bronchus, chest/mediastinal, bone, joint

See Collection for detailed information

Container:

Urine, Fluid, Tissue, Other: Sterile container

Swabs: Culture swab transport system (Dacron or rayon swab with aluminum or plastic shaft with either Stuart or Amies liquid medium)

Acceptable: Swab in transport media: M4, M4-RT, M5, M6, universal transport media, or ESwab. Note**:** Wooden shaft, cotton swabs are **not** acceptable.

Synovial fluid: 1 ml Lavender top (EDTA)

Draw Volume:

Urine: 10 mL (Minimum: 2 mL)

Fluids: 2 mL (Minimum: 1 mL)

Tissue: 5 mm fresh tissue

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. ESwabs are acceptable.

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. Do not add fluid to tissue.
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-first void specimen:
1. Specimen can be collected at any time during the day.
2. Patient should not have urinated for at least 1 hour prior to collection.
3. Collect the first 2-10 mL from urine stream in a sterile container, without cleaning the external urethra.
4. Send specimen to lab.

	Lab Staff: **1.** Maintain sterility, refrigerate 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.
Transport/Storage:	Transport to the laboratory immediately at refrigerated temperature. Specimen source is required. Note: Swabs stored in M5 transport media will be accepted and tested, but the preferred specimen is a culture swab transport system (Dacron or rayon swab with aluminum or plastic shaft with either Stuart or Amies liquid medium).
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; Port-a-Cul tube; anaerobic fluid vials; fluids in viral transport medium; decalcified bone; slides; 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 Clinic Laboratories October 2023
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. 1/24/2018: Blood is no longer acceptable for this test. Mayo has moved this to a separate orderable. 1/31/2023: Updated specimen types, collection, and containers. 10/26/2023: Updated acceptable media for swabs and fluids, updated rejection criteria.