

SUMMARY

As of 2/2/2016 *S. aureus* PCR (SAURP) can be ordered in EPIC.

Choose SAURP for pre-surgical screening of patient's nares.

Do NOT order SAURP on non-nares specimens.

Use the same swab you previously used for SAURC (the pre-surgical screening culture method)

SAURC will be discontinued on 2/2/2016

SAURP is NOT used for non-surgical admissions. MRSA PCR remains the test of choice for non-surgical high risk patients.

10X Essentials is a publication of Geisinger Medical Laboratories

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GML NEW TEST ANNOUNCEMENT: *S. aureus* PCR (SAURP) (*S. aureus* PCR rapidly identifies patients colonized with MRSA and MSSA) GO LIVE DATE: 2/2/2016

FAQ

- *S. aureus* PCR replaces bacterial culture for *Staphylococcus aureus* (SAURSC)
- Order *Staphylococcus aureus* PCR in EPIC, SunQuest test code is SAURP
- Use *S. aureus* PCR for pre-surgical screening (nares/nasal) specimens.
- MRSA is often present in mixed bacterial populations along with MSSA in the nasal biome. *S. aureus* PCR identifies BOTH MRSA and MSSA.
- *S. aureus* PCR has been shown to decrease the number of post-surgical infections for orthopedic and cardiac surgery patients when used in conjunction with stringent infection prevention policies.

Billing and Pricing

- The assay CPT codes are 87640 and 87641.
- Assay list fee cost may be discounted; please contact your sales provider.

Collecting Nares Specimens

- Use the same swab you use for MRSA PCR (SAURP does NOT replace MRSA PCR for high risk pre-admission patients); *S. aureus* PCR is only be performed for pre-surgical patients, not all admissions.
- Insert the paired swab approximately 1/2 inch into one nostril. Apply light pressure on the outside of the nose while rotating swab. Rotate swab against inside of nostril for 3 seconds.
- Repeat for other nostril with same paired swab.
- Return both swabs to same transport tube and submit to laboratory at room temperature (2-30°C is acceptable).



S. aureus PCR Test Characteristics

- During GML method verification, **SAURP accuracy was 100%** compared to culture.
- The SAURP consists of the Cepheid Xpert SA Nasal Complete assay, a qualitative, real-time PCR for the **detection of the three key *S. aureus* genetic targets**:
 - *Staphylococcal* protein (*spa*) gene, to identify *S. aureus*
 - methicillin resistance (*mecA*) gene, to identify the gene responsible for the PBP2a protein, rendering *S. aureus* resistant to β -lactam antibiotics.
 - *Staphylococcal* cassette chromosome *mec* (SCC*mec*) gene insertion into the SA chromosomal *attB* site to prevent the assay from reporting MRSA when the *mec* gene is present in coagulase negative *Staphylococcus* spp.
- **Limitation:** The SAURP assay was not FDA approved for patients < 22 yrs of age; however, GML validated the assay in a wide age range of patients. A comment will be placed in pediatric results to document the GML process.
- **Reporting examples for MSSA**
 1. **NEGATIVE.** NO METHICILLIN SENSITIVE STAPHYLOCOCCUS AUREUS DETECTED BY PCR (AMPLIFIED PROBE)."
 2. **POSITIVE.** METHICILLIN SENSITIVE STAPHYLOCOCCUS AUREUS DETECTED BY PCR (AMPLIFIED PROBE)."

"Make it the best." - A. Geisinger

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