



Xpert®
SA Nasal
Complete

Test. Inform. Manage.

Xpert® SA Nasal Complete

Detection of *S. aureus* and MRSA Colonization
In About an Hour.

 **Cepheid®**
A better way.



A rapid test for both SA and MRSA colonization has many applications, including assisting physicians in targeting appropriate prophylactic therapy and decolonization to reduce the risk of post-surgical site infections."

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THE NEED

Staphylococcus aureus infections are an increasingly serious public health issue.

Colonized patients at risk for serious complications include surgical, trauma, burn and dialysis patients:

- *S. aureus* colonized patients are up to 9 times more likely to develop surgical site infections than non-carriers¹
- *S. aureus* is the major cause of access infections and bacteremia in dialysis patients²
- Carriage is the major risk factor for infection with *S. aureus* in dialysis patients⁴
- Up to 93% of nosocomial *S. aureus* infections are caused by a patient's own flora^{3,4}
- SA and MRSA infections are associated with increases in length of hospital stay, costs, morbidity, and mortality^{6,7,11}
- Nasal carriage of *S. aureus* and self-infection of wounds in ICU/Burn patients is well documented^{9,10}



THE SOLUTION

Rapid and accurate detection of colonization facilitates targeted infection control practices:

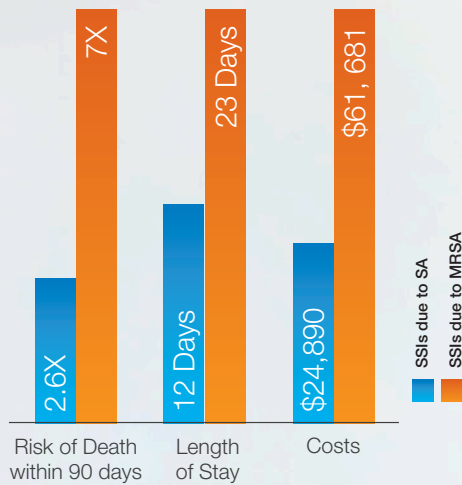
- Optimize pre-admission workflow and counseling
- Enables measures to reduce endogenous infection risk, including decolonization
- Supports measures to reduce exogenous infection risk, including barrier/contact precautions
- Aligns with infection control strategies as outlined by SCIP and SHEA/IDSA



THE IMPACT



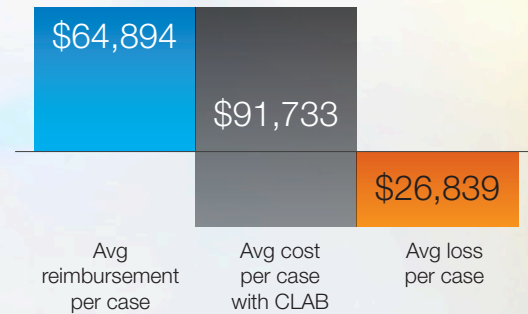
Surgical Site Infections (SSIs) due to SA & MRSA significantly increase risk of death, costs and hospitalization as compared to surgeries without SSIs.^{6,7}



Rapid detection and implementation of targeted control measures improves your bottom line by reducing adverse medical care events.

Hospitals absorb most of the costs for adverse medical care events, as in the example below.

Costs of Central Line Associated Bloodstream Infection (CLAB)⁵



THE PERFORMANCE

Performance Characteristics of Xpert[®] SA Nasal Complete Compared to MRSA and SA Direct Culture Method*

	MRSA+	SA+/MRSA-	Neg/No Growth	Total
Xpert MRSA+	159	24	25	208
Xpert SA+/MRSA-	9	393	152	554
Xpert SA-	5	37	1683	1725
Total	173	454	1860	2487

	Culture +	Culture -	Total
Xpert MRSA +	159	49	208
Xpert MRSA -	14	2265	2279
Total	173	2314	2487

Sensitivity: 91.9% **PPV:** 76.4%
Specificity: 97.9% **NPV:** 99.4%

	Culture +	Culture -	Total
Xpert SA +	585	177	762
Xpert SA -	42	1683	1725
Total	627	1860	2487

Sensitivity: 93.3% **PPV:** 76.8%
Specificity: 90.5% **NPV:** 97.6%

* Xpert SA Nasal Complete Package Insert



WORKFLOW:

3 EASY STEPS

Total hands-on time: <1 Minute

1

Insert swab into Sample Reagent vial and break



2

Vortex and dispense Sample into Port S



3

Insert Cartridge and start assay



Ordering Information

CATALOG INFORMATION

Xpert® SA Nasal Complete (10 tests)Catalog No. GXSACOMP-10

References:

1. Kluytmans, J., Clinical Microbiology Review, 1997, Vol 10, No. 3
2. Piraino, B., *Staphylococcus aureus* Infections in Dialysis Patients: Focus on Prevention, ASAIO Journal 2000; 46:S13-S17
3. Critchley et al, Drug Discovery Today, 2006, Vol. 3 No. 2
4. VL Yu et al., "Staphylococcus aureus nasal carriage and infection in patients on hemodialysis. Efficacy of antibiotic prophylaxis." NEJM July 1986
5. Murphy D., et al. "Dispelling the Myths: The True Cost of Healthcare-Associated Infections. An APIC Briefing", February 2007.
6. Engemann et al. "Adverse clinical and economic outcomes attributable to methicillin resistance among patients with *Staphylococcus aureus* surgical site infection, CID 36;2003.
7. Anderson et al. "Clinical and Financial Outcomes Due to Methicillin Resistant *Staphylococcus aureus* Surgical Site Infection: A Multi-Center Matched Outcomes Study", PLoS One; 2009
8. Bode et al, "Preventing Surgical-Site Infections in Nasal Carriers of *Staphylococcus aureus*", NEJM January 2010
9. Mackie et al, "Reduction in *Staphylococcus aureus* wound colonization ...", Burns 1994; 20, (1), S14-S18
10. Kooistra-Smid et al, "Molecular epidemiology of *Staphylococcus aureus* colonization in a burn center", Burns 2004, Feb; 30 (1), 27-33
11. Noskin et al, "The Burden of *Staphylococcus aureus* Infections on Hospitals in the United States", Arch Intern Medicine Vol 165, Aug 2005

For In Vitro Diagnostic Use.

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