

- Belgian hospitals, 1991 to 1995. *Infect Control Hosp Epidemiol* 1996;17:503-508.
17. Johnson Z, Fitzpatrick P, Hayes C, Sayers G, Pelly H, McDonnel B, et al. National survey of MRSA: Ireland, 1995. *J Hosp Infect* 1997;35:175-184.
 18. Richet H, Wiesel M, Le Gallou F, Andre-Richet B, Espaze E. Methicillin-resistant *Staphylococcus aureus* control in hospitals: the French experience. Association des Pays de la Loire pour l'Eviction des Infections Nosocomiales. *Infect Control Hosp Epidemiol* 1996;17:509-511.
 19. Le Coustumer A, Gueudet P, Lecaillon E, Bland S, Hanesse B, Collège de Bactériologie V, et Hygiène des Hôpitaux de France. Incidence de *Staphylococcus aureus* méticilline-résistant dans 95 hôpitaux non universitaires en France. *Medecine & Maladies Infectieuses (Paris)* 1996;26:634-643.
 20. Cailleaux V, Talon D, Thouverez M, Bailly P, Mulin B, Michel-Briand Y. *Staphylococcus aureus* méticillino-résistant: importance et transmission croisée dans l'Est de la France. *Medecine & Maladies Infectieuses (Paris)* 1996;26:475-481.
 21. Collège de Bactériologie-Virologie-Hygiène du CHU de Paris. Surveillance des staphylocoques dorés et klebsielles multirésistantes à l'Assistance Publique-Hôpitaux de Paris (1993-1996). *Bulletin Épidémiologique Hebdomadaire (Paris)* 1998;41:43.
 22. Garner JS, Jarvis WR, Emori TG, Horan TC, Hughes JM. CDC definitions for nosocomial infections, 1988. *Am J Infect Control* 1988;16:128-140.
 23. Aubry-Damon H, Legrand P, Brun-Buisson C, Astier A, Soussy CJ, Leclercq R. Reemergence of gentamicin-susceptible strains of methicillin-resistant *Staphylococcus aureus*: roles of an infection control program and changes in aminoglycoside use. *Clin Infect Dis* 1997;25:647-653.
 24. Lemaitre N, Sougakoff W, Masmoudi A, Fievet M-H, Bismuth R, Jarlier V. Characterization of nosocomial spread of methicillin-resistant *Staphylococcus aureus* involved in nosocomial spread. *J Clin Microbiol* 1998;36:81-85.
 25. Muder RR, Brennen C, Wagener MM, Vickers RM, Rihs JD, Hancock GA, et al. Methicillin-resistant staphylococcal colonization and infection in a long-term care facility. *Ann Intern Med* 1991;114:107-112.
 26. Kauffman CA, Bradley SF, Terpenning MS. Methicillin-resistant *Staphylococcus aureus* in long-term care facilities. *Infect Control Hosp Epidemiol* 1990;11:600-603.
 27. Hoefnagels-Schuermans A, Borremans A, Peetermans WE, Van Lierde S, Reybrouck G, Van Eldere J. Origin and transmission of methicillin-resistant *Staphylococcus aureus* in an endemic situation: differences between geriatric and intensive-care patients. *J Hosp Infect* 1997;36:209-222.
 28. Strausbaugh LJ, Jacobson C, Sewell DL, Potter S, Ward TT. Methicillin-resistant *Staphylococcus aureus* in extended-care facilities: experiences in a Veterans' Affairs nursing home and a review of the literature. *Infect Control Hosp Epidemiol* 1991;12:36-45.
 29. Thomas JC, Bridge J, Waterman S, Vogt J, Kilman L, Hancock G. Transmission and control of methicillin-resistant *Staphylococcus aureus* in a skilled nursing facility. *Infect Control Hosp Epidemiol* 1989;10:106-110.
 30. Coello R, Jiménez J, Garcia M, Arroyo P, Minguez D, Fernandez C, et al. Prospective study of infection, colonization and carriage of methicillin-resistant *Staphylococcus aureus* in an outbreak affecting 990 patients. *Eur J Clin Microbiol Infect Dis* 1994;13:74-81.
 31. Girou E, Pujade G, Legrand P, Cizeau F, Brun-Buisson C. Selective screening of carriers for control of methicillin-resistant *Staphylococcus aureus* (MRSA) in high-risk hospitals areas with a high-level of endemic MRSA. *Clin Infect Dis* 1998;27:543-550.
 32. Struelens MJ, Mertens R. The Groupement pour le Dépistage, l'Etude et la Prévention des Infections Hospitalières. National survey of methicillin-resistant *Staphylococcus aureus* in Belgian hospitals: detection methods, prevalence trends and infection control measures. *Eur J Clin Microbiol Infect Dis* 1994;13:56-63.

Rapid Identification of *Staphylococcus aureus*

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Langlet and coinvestigators from Service de Microbiologie, Centre hospitalier de Versailles, France, have reported a 2-hour method for identification of *Staphylococcus aureus* based on the detection of the staphylocoagulase, using human prothrombin and a chromogenic substrate. Two hundred forty-two staphylococcal strains (160

S. aureus, 82 coagulase-negative staphylococci [CNS]) were collected from four French hospitals. A strain of *Staphylococcus intermedius* was provided by the Collection of the Pasteur Institute (Paris).

With the substrate SQ149, all *S. aureus* strains gave a positive result: 94.7% of the methicillin-susceptible *S. aureus* were detected after 1 hour of incubation, but only 52.3% of the methicillin-resistant *S. aureus*. For methicillin-resistant *S. aureus*, 98.4%

were detected after 2 hours. No false-positive result was observed for the 82 CNS strains. The chromogenic method showed good within-run and day-to-day precision tests. The sensitivity and the specificity were 99.4% and 100%, respectively.

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