

Methicillin-resistant *Staphylococcus aureus* clones in Brazil

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To the Editor,

I read with interest the article by Campos *et al.* on the molecular characteristics of methicillin-resistant *Staphylococcus aureus* (MRSA) isolates from Brazil (Campos *et al.*, 2012). I would like to take this opportunity to analyze their results regarding the circulating SCCmec types in Brazil in parallel with ours.

All isolates studied by Campos *et al.* carried SCCmec type III. The Brazilian epidemic clone (BEC) carries a SCCmec type III and is, historically, the most common MRSA clone circulating in Brazilian hospitals. However, there is recent evidence that other clones may be, at least partially, replacing the BEC in some Brazilian hospitals. We previously reported MRSA carrying SCCmec type IV, mainly the pediatric clone, colonizing and infecting pediatric hospitalized patients and patients with cystic fibrosis. In our studies, nearly 50% of all isolates had SCCmec type IV, roughly the same frequency of SCCmec type III (mainly the Brazilian clone) isolates (Mimica *et al.*, 2009; Mimica *et al.*, 2011). Although MRSA is still not disseminated in Brazilian communities, nosocomial MRSA with molecular characteristics of community-associated MRSA (SCCmec type IV) was also described

as prevalent in Brazil by others (Trindade *et al.*, 2005). One interesting feature of these isolates is the absence of *lukS-PV* and *lukF-PV*, the genes encoding Panton-Valentine leukocidin (Mimica *et al.*, 2009; Mimica *et al.*, 2011).

These epidemiologic and molecular differences could be explained by regional variation, but their exact implications remain to be determined. A better understanding of the presence and the circulation of new MRSA clones in the community and in hospitals globally is paramount in order to implement appropriate control and prevention measures.

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