Letters to the Editor

Panton-Valentine Leukocidin Genes in a Laboratory Quality Control Strain of *Staphylococcus aureus*

Until rather recently, our total awareness of the *Staphylococcus aureus*-associated exotoxin known as Panton-Valentine leukocidin (PVL) was limited to a few historic publications (2). Interest in PVL was renewed in the 1990s with the recognition of two distinct yet soon-to-be-linked observations: infections caused by strains of methicillin-resistant *Staphylococcus aureus* (MRSA) were finding their way into the community (4), and strains of *S. aureus*-producing PVL were being found with increasing frequency in patients with localized soft tissue infections (1, 3) and hemorrhagic pneumonia (3). These initial reports were followed by a profusion of publications describing cases, outbreaks, and the epidemiology of infection caused by community-acquired MRSA (CA-MRSA), by PVL-producing *S. aureus*, and ultimately by PVL-producing CA-MRSA (for an excellent and succinct review, see the commentary of Jerome Etienne [2]). To keep up with the times, and to better understand the significance of PVL production by strains of *S. aureus* in our institution and community, an in-house PCR assay was evaluated based on the method of Lina et al. (3). It was soon obvious after running this assay with DNA extracted from a number of CA- and hospital-acquired (HA)-MRSA strains that the former generated a number of positive strains while the latter appeared to be uniformly negative for the appropriate amplicon. To formalize the protocol, a PVL-positive CA-MRSA strain was selected for routine use until an appropriate positive control (*S. aureus* ATCC 49775) (3) could be ordered. Rather than using one of the PCR-negative HA-MRSA strains evaluated initially, I opted to use DNA from a strain of *S. aureus* that is routinely used in the clinical microbiology laboratory for quality control of antimicrobial susceptibility testing (ATCC 25923). This strain had also been used in our labora-

tory for quality control of an in-house molecular typing assay. Much to my surprise, this putative negative control turned out to be PCR positive for the PVL genes *lukS-PV* and *lukF-PV*. Repeat extraction of DNA from a fresh isolate produced the same result. As a consequence, I was forced to return to my collection of HA-MRSA strains for the elusive PVL-negative control strain and was left to ponder how many other domesticated laboratory quality control strains are currently packing concealed weapons.

REFERENCES

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W. Michael Dunne, Jr.*
Department of Pathology and Immunology
Washington University School of Medicine
St. Louis, Missouri 63110

*Phone: (314) 362-1547
Fax: (314) 362-1461
E-mail: dunne@wustl.edu