used. This may lead clinicians to use less well-evidenced strategies in cases likely to respond to vancomycin.

AST can be performed by any of several methods, including broth microdilution (BMD), gradient diffusion (Etest), disc diffusion, and automated systems [2]. Several investigators have found that Etest methods consistently yield higher MICs than reference BMD [3–6]. Automated systems, used by most clinical laboratories, also vary in vancomycin MIC results, with VITEK 2 systems yielding lower MICs and Microscan systems higher MICs than reference BMD [4, 6]. Reports are conflicting for Phoenix systems [4, 6]. Therefore, a recommendation to change therapy on the basis of MIC testing alone leaves much in question, because the MIC result varies based on the method used. Furthermore, because clinicians are not frequently able to influence the type of testing available at their site, there is a risk of drug selection becoming more a function of laboratory testing than of clinical judgment.

The threshold MIC recommended for consideration of alternative therapies by Tunkel and colleagues [1] in the new guideline, ≥1 μg/mL, is more conservative than any previous guideline; the vancomycin monitoring guideline [7] advocated that therapy change be considered only with an MIC ≥2 μg/mL, and the more recent MRSA infection guideline [8] recommended change when the MIC indicates nonsusceptibility (>2 μg/mL) or in cases of clinical failure. Presumably, the new guideline for meningitis and ventriculitis advocates a lower MIC threshold owing to lower achievable vancomycin concentrations in the cerebrospinal fluid. Prior evidence predicts achievement of the pharmacodynamic target for vancomycin, an area under the curve (AUC)/MIC ratio of ≥400, for isolates with an MIC ≤1 μg/mL, when vancomycin troughs of 15–20 mg/L are maintained for a patient of average weight and normal

Vancomycin Minimum Inhibitory Concentration Is Not a Substitute for Clinical Judgment: Response to Healthcare-Associated Ventriculitis and Meningitis

To the Editor—We read with inter-est the new clinical practice guideline for healthcare-associated ventriculitis and meningitis published in *Clinical Infectious Diseases* [1]. The guideline recommends consideration of alterna-tive therapies for the treatment of me-thicillin-resistant *Staphylococcus aureus* (MRSA) meningitis and ventriculitis for isolates with a vancomycin minimum in-hibitory concentration (MIC) ≥1μg/mL. We believe this recommendation places inappropriate emphasis on a single deter-minant of antimicrobial therapy that has uncertain clinical relevance and variable

renal function [7]. This AUC/MIC target represents our best correlate of vancomycin clinical success in treating lower respiratory tract infections [9], but its application to meningitis and ventriculitis is unknown. There are conflicting data on the association of clinical failures with high but susceptible vancomycin MICs [10]; no specific studies for central nervous system infections are available.

We agree with the authors that nosocomial MRSA meningitis and ventriculitis are commonly encountered clinical situations for which few high-quality clinical studies are available; we look forward to more data to clarify the role of newer agents. We contend that AST is one of several important considerations in determining optimal therapy for MRSA infections, but as a sole criterion it glosses over considerable nuance and uncertainty in the evidence. Therefore, we suggest that the patient's clinical condition, response to initial therapy, and laboratory AST method should be considered along with the MIC to assess the appropriateness of an alternative therapy.

Note

Potential conflicts of interest. All authors: No reported conflicts of interest. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

Ashley Marx,[1] Lindsay Daniels,[2] Melissa B. Miller,[3] and David J. Weber[4]

[1]Department of Pharmacy, Division of Practice Advancement and Clinical Education, Eshelman School of Pharmacy, [2]Department of Pharmacy, University of North Carolina Medical Center, and Departments of [3]Pathology and Laboratory Medicine and [4]Medicine, Division of Infectious Diseases, University of North Carolina School of Medicine, Chapel Hill

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Correspondence: A. Marx, Department of Pharmacy, University of North Carolina Medical Center, 101 Manning Dr, Chapel Hill, NC 27514 (Ashley.marx@unchealth.unc.edu).

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