



**Figure 2.** Percent changes and 95% confidence intervals (CIs) for (1→3)-β-D-glucan levels (ng/ml) associated with flavor in a total of 129 e-cigarette products. Adjusted percent changes were estimated after adjusting for brand and product type (cartridge or e-liquid). \* $P < 0.05$  and \*\* $P < 0.0001$ . EC = e-cigarette.

findings are consistent with our previously reported finding that tobacco and menthol flavors were more contaminated with microbial toxins. The main limitation of the current study is that we did not evaluate contamination of aerosols inhaled by users. Further research is needed to assess microbial contamination in aerosol samples and to evaluate the health effects of microbial toxins in users of nicotine vaping products.

This study highlights the microbial contamination in nicotine vaping pod products sold in the United States. The contamination in tobacco-flavored vaping products is of particular concern because, as of this writing, tobacco flavors are excluded from the plan by the U.S. Food and Drug Administration to ban flavored e-cigarettes and pods from the market (6). ■

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## Multidisciplinary Authorship in Clinical Practice Guidelines: An Opportunity for Inclusion



To the Editor:

I read with great interest the long-anticipated updates to the clinical practice guidelines (CPG) for the management of community-acquired pneumonia (CAP) by the American

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Thoracic Society (ATS) and Infectious Diseases Society of America (IDSA) (1). It has been 12 years since the last ATS/IDSA CAP guidelines were updated, and clinicians have been anxiously waiting for more recent guidance to assist them in the management of patients presenting with this common and challenging infectious syndrome (2). The new CPG were produced by a multidisciplinary panel of 15 experts from Australia, Canada, and the United States, and incorporate new and relevant research published since 2007 (1). Although the new CPG were endorsed by the Society of Infectious Diseases Pharmacists, and the National Academy of Medicine recommended that guideline development committees should be composed of experts from a variety of disciplinary backgrounds, there was no pharmacist representation among the authors (1, 3). This is not the first time major CPGs that include numerous pharmacotherapy recommendations have been released without inclusion of a pharmacist on the authorship panel. In fact, the proportion of pharmacist authorship in national CPG published between 2010 and 2016 was 31% and the proportion of pharmacist authorship in current IDSA guidelines was 21% (4, 5). These numbers, albeit low, represent an improvement from the past, when the pharmacist authorship representation in retired IDSA guidelines was only 13% (5).

Calls to include pharmacists as authors on CPG are not new (6). Pharmacists are well trained in pharmacotherapy, pharmacokinetics, and pharmacodynamics (7). Many pharmacists complete accredited Postgraduate Year One general and Postgraduate Year Two infectious diseases specialty residencies and become board certified in infectious diseases pharmacy (8–10). Pharmacists offer a unique perspective on designing and monitoring antimicrobial regimens and play a leading role in antimicrobial stewardship (11). We call on the ATS and IDSA to further collaborate with pharmacy organizations and to demonstrate their commitment to inclusion by inviting a pharmacist to serve as an author on the next CAP guidelines. ■

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## Procalcitonin Is Useful for Evaluating Patients with Ambiguous Presentation and for Early Discontinuation of Antibiotics in Community-acquired Pneumonia



To the Editor:

The updated American Thoracic Society and Infectious Diseases Society of America guidelines for the diagnosis and treatment of adults with community-acquired pneumonia (CAP) conclude that procalcitonin (PCT) is not recommended to determine the need for initial antibacterial therapy in patients with clinically

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