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The authors reply.

In reading Dr. Muscarella's comments, we identified several points for response, corrections, or both. We did not report 18 patient infections, but rather 18 patients with imipenem-resistant *Pseudomonas aeruginosa* (IRPA) isolates from bronchoscopic lavage specimens. Only 3 of 18 had clinical and radiographic evidence of infection requiring specific anti-*Pseudomonas* therapy. One of 3 patients died 9 days following bronchoscopy.[1]

In the "Microbiology" and "Environmental Cultures" sections, we reported that multiple cultures from the water supply (including rinse water) and multiple STERIS (STERIS Corp., Mentor, OH) sites were negative for IRPA.[1] Foremost, Dr. Muscarella fails to recognize an important infection control principle regarding antibiotic-resistant *P. aeruginosa*. It is widely recognized that such antibiotic-resistant organisms are not found in the general water supply (and thus distinguished from the usual *P. aeruginosa* found in tap water). IRPA is an organism exclusively associated with the presence of nosocomial infection or colonization.[2] There are numerous reports in the literature of *P. aeruginosa* in the water supply leading to contamination or infection.[1] These are all antibiotic-susceptible strains. The author needs to substantiate scientifically his implication that IRPA may be found in the general water supply.

Flow studies were not performed. We based our conclusions on finding faulty connections for bronchoscopes to the STERIS automatic endoscope reprocessor; finding a nosocomial organism in bronchoscopic lavage specimens of noninfected outpatients; and finding that IRPA was not present in bronchoscopic lavage specimens prior to institution of STERIS or following correction of faulty connections. We did not change manual processing of our bronchoscopes or alcohol flush following the automatic endoscope reprocessor and could not explain the outbreak on this basis.

Although we have read Dr. Muscarella's publications, we limited our reference list in the interest of brevity. We apologize if we appeared to have overlooked Dr. Muscarella in not citing more than one of his articles.

Finally, we cannot comment on U.S. Food and Drug Administration (FDA) product labeling based on only our experience. Subsequent to our outbreak, we continue to use STERIS automatic endoscope reprocessors without further incident. We continue to perform frequent microbiologic surveillance of all of our bronchoscopes and have found no recurrence of processing failure. Our endoscopy personnel are vigilant when dealing with connection devices and all new personnel receive extensive education. We continue to adhere to recommendations of the FDA and the Centers for Disease Control and Prevention by following endoscope manufacturer instructions, resolving conflicts between endoscope manufacturer and automatic endoscope reprocessor recommendations, and providing intensive education to all involved in using the automatic endoscope reprocessor.[3,4]

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